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HEALTH *via* FOOD

— BY —
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DEDICATION

THIS effort to teach the public the things it should know about self-help in illness and health is most respectfully dedicated to one of nature's noblemen, Oliver Cabana, Jr., of Buffalo.

Realizing the benefits of a right understanding of the subject of food, he was not content to enjoy selfishly the fruits of this knowledge, but resolved that the general public should have the same opportunity, knowing too well the meagerness of the knowledge possessed by this uninformed public on this most vital question of foods and feeding.

Possessed of great wealth he has undertaken a nationwide education of the public relative to foods and nutrition, willing to bear the great financial risk for the sake of his convictions.

Through the Sun-Diet Health Service and the Sun-Diet Sanatorium, located at East Aurora, N. Y., he is attempting to educate the ailing public to a realization that health cannot be bought with money, neither can it be fully bequeathed, but must be earned by so living that the body will no longer manufacture and store the vast quantities of acid waste that result from wrong selection and combination of the daily foods.

He is thoroughly convinced that when this public fully realizes that all of its diseases are self-created, and to exactly the same extent self-controllable, the present fear of disease as a great and dangerous mystery will have passed, and health will be restored in the simple and effective ways taught through both these institutions backed by his wealth and experience, the whole motivated by his burning desire to help those who need this help.

May his tribe increase and his shadow never grow less!

INTRODUCTION

"Of the making of many books there is no end."

Surely Solomon was right, and for making another book at the present time, especially a book that is an addition to the increasing flood of health literature, there should be both reason and excuse that will satisfy the reader that the occasion is opportune for just one more book.

There is so much apparent disagreement among writers on the subject of health, particularly as this relates to foods, that the writer deems it timely to point the only *seeming* character of these discrepancies, and to draw particular attention to the fact that through all proposed systems that embrace the idea of foods as cause of disease and its cure, there is an unmistakable cable of truth that is nearly identical in all.

Certain fundamental hypotheses are recognizable in all, even though this author stresses this phase, that author that phase, for truth is unchangeable through all time and in every circumstance, and only confusion of terms or lack of perception on the part of the writer or reader will keep the great truths of food as a primary factor in disease and health from being easily discernible.

The writer himself was a physical bankrupt twenty-four years ago, suffering the very familiar trinity of troubles that now stands first in our mortality statistics as cause of death after forty years of age, the so-called cardio-vascular-renal condition, consisting of high blood pressure, kidney disease and dilated heart.

He had for years weighed 225 pounds in street clothing, and was unable to lower this figure through exercise and what he supposed was a proper modification of diet.

He was in a busy practice, chiefly surgical, and like most other physicians, he thought only of his work and not enough of his own physical equipment.

While at Arts and Science College he had gloried in his strength, and even years after his medical degree was attained he still considered himself a strong man, never dreaming that his very ordinary habits of life were laying the foundation for an early breakdown.

It was not till a hurried sprint for an incoming train dilated his heart that he really began to think that perhaps he was not the man he had believed himself to be.

At this point, where circulatory compensation was broken, his legs swelled to the capacity of the skin, he was unable to lie down and sleep for fear of drowning in his own fluids, yet he continued to work at the same rate, catching what sleep he could in a chair at night, or sitting upright in bed.

The same condition was very familiar to him in his daily practice, and he had always told those in a similar state to prepare for the final hop-off, which was never far in the future.

Remembering his own consistent failures in treatment of this condition, the future did not look over-long or very bright, and realizing the utter failure of medical treatment in this class of cases he did not take any medicine whatever,—for what was the use?

It was at this point that during many a long night, he made a careful analysis of his own previous habits—habits that might have led a strong man of splendid heredity to such a woeful pass—and finally developed the fact that since his graduation in medicine, sixteen years previous, he had eaten at hotels, boarding-houses, restaurants, and only the past five years had he lived as a married man in his own home, with controllable conditions at table.

This meant eleven years of public eating; surely a long enough period to form permanent habits that undoubtedly ruled the selection and combination of foods at his own table afterward, for each man's wife seeks to cook and serve the things that please her mate.

Analysis of the food situation at this time showed that he had been eating meat or other concentrated protein food at each meal, usually combined with white bread and generally potato in some form; the "plain food" of the American table.

He had been eating pastries freely as a top dressing for this incongruous mixture of incompatible foods, the whole washed down with two or three cups of coffee, sweetened thoroughly with white sugar and well *aulaited* with rich cream.

He had been smoking like a veritable chimney, and drinking stimulants freely—the usual man's idea of how a man should live—when he can afford it.

No effort was made to change the habits in regard to either stimulants or tobacco, but the table was changed all around, two meals a day being totally deleted and the third consisting of vegetarian food, wholly.

The coffee also was discontinued, and in a few weeks the stimulants cured themselves through loss of desire for them.

In a few months the tobacco was given up, and for four years there was no desire to smoke, even after many years of heavy smoking.

Then followed a period of rejuvenation that was truly remarkable, especially to a physician who had always looked on disease from the conventional professional standpoint as a great mystery, as the eminent ones have always described it.

In two weeks there was not a sign of dropsy anywhere in the body. In three months the weight had gone down to normal, 175 pounds in street clothing. At about the same time he discovered that he could again run as fast and as far as he desired without disturbing the rhythm of his heart, and there was surprising endurance and long-windedness.

This meant a complete come-back for a dilated heart, a thing not in the books, scarcely to be believed, and a test of the blood pressure showed 120 mm. systolic, the low, normal figure.

Then followed four years of study, questioning, and experimenting, ending in a period in a New York post-graduate medical course, to correlate these surprising facts, and it was not till after four full years that he was forced to the conclusion that man is an exact composite of what he eats daily, yearly, and as a life habit.

During these four years he read everything he could find on the subject of foods, health, exercise, natural cure of disease and everything formerly regarded as taboo reading, from the orthodox standpoint, and it was then that he discovered this great cable of truth running through many apparently contradictory treatises on

health, from the angle of correct diet, and was able to pick out this cable (not a thread) of truth from all systems, and to disregard the trivial differences in opinion, theory or viewpoint of the mass of writers, each of whom was seeking to put over his own peculiar view.

This experience so changed the character of the writer's practice that he dropped surgery entirely, and as completely also the administration of drugs, for if man is a composite of what goes into him daily in the form of nourishment, then what is the use of drugging him or cutting him for the results of wrong feeding habits? It is much more to the point to change the wrong habits and let Nature perform the cure, as Nature alone is able to do.

It is now twenty-four years since this breakdown and upbuilding occurred. After this long period, when the writer has already passed the average life-limit by many years, he has had the great pleasure of watching similar come-backs in many thousands of cases of apparently incurable conditions in every sort of individual and every sort of case, and now feels that the occasion is not strained when he presents a little book setting forth the theory of man's dependence on foods, their relation to the body in health and disease, and the discernible fact that in all the present successful systems of applying food to health there is always this great similarity that should far outweigh all seeming differences. This is the occasion and excuse.

CHAPTER I

THE WORLD AT ITS WORST

After all, it isn't such a bad old world, all things considered, for we are alive, we see the sun, feel the air, hear the sweet singing of the birds and enjoy the beautiful in everything.

The average citizen dresses well, enjoys the usual social functions, listens in on the music or the literature of the world over the radio, in fact, he is in a better position to enjoy life than ever before in the history of civilization.

He has all the foods of the world from which to choose, instead of being limited to those peculiar to his locality.

Food! Ay, there's the rub! For with all his blessings he has forgotten the true function of food, and he has made of his body a place unfit for the enjoyment of the glorious time in which he lives.

We in America are the sickest nation on the face of the whole earth, yet we have the largest food markets of any.

We have more physicians to the thousand population than has any other nation. We have the largest and best equipped hospitals, the best insane hospitals, and the most and best means for caring for epileptics, the feeble-minded, and the crippled. Our penal system is thoroughly organized and equipped for taking care of by far the most criminals of any other country on the globe. We need all these institutions.

These are not things over which to enthuse; but rather they are things to condone, to excuse, to explain.

Why should America, one of the most enlightened of all countries on this old ball of clay, supposedly the richest of any, the farthest advanced in science and manufacture, admittedly the most modern of all—why should she have this state of affairs?

When we were unceremoniously hurried into the late world war and faced the necessity of recruiting quickly a very large army, we found to our national chagrin and dismay that our young men of army age, the most vital period of life, were nearly half of them unfit for military duty.

They had poor teeth, poor eyesight, weak arches, varicocele, rupture, deficient chest expansion, rheumatism, various dyscrasic conditions, things that make a man unfit to carry the heavy equipment and stand the rigors of a campaign.

Nearly half of these young men, the pride of their country, unfit to serve her in an emergency!

The shock was so great that we did not then fully appreciate its significance, for we were in a hurry to raise an army, no one knowing how big it might have to be, and we took a great many of these young men that could not have passed under less urgent conditions; we made over others who did not have anything worse than weak arches, perhaps, and we got by this one time with a sizeable army of fairly good physique.

Now that the smoke has cleared away and we have had time to think this over, we are humiliated to think that we are as a nation in

such physical condition, for if this is true of the young man of military age, what of the older ones?

Every year at any given time two million of our people are off the pay roll, sick, with perhaps half as many more also restrained from productive pursuit to care for these.

What of those who are still carrying on? Are they enjoying life as they should? Are they fulfilling their full destinies? Are they cashing in fully on their opportunities, or are they in some degree handicapped by ill health that is causing them to fall far short of all that is coming to them?

If the young men of army age were found fifty per cent deficient, it is fair to suppose that those at home and of more advanced age were still more deficient.

With two million continually sick, all the rest come under suspicion of being only a little less sick, for it is not thinkable that these two million people are singled out of all the rest to bear the illnesses of the entire nation.

400,000 children never see the tenth year of age, 200,000 of these never see the second year. Our percentage of deficient children is increasing with each generation, not only the actual number of incompetents, but a percentage increase.

Our school reports show major or minor deficiencies in well over seventy-five per cent of American childhood.

This state of affairs is not confined to the urban part of our population, as it was once supposed to be, for the same deficiencies in nearly the same ratio show in the suburban and district schools, showing that it is something more than the restricted life of the cities that is at the root of our troubles.

Teeth have come to be looked on as a source of grave danger to any one, and tonsils are an admitted horror, while such a thing as a retained appendix in good working order is coming to be regarded as a sort of curiosity.

Surgical operations have multiplied till our hospital requirements for surgery alone have quadrupled in the past twenty-five years.

For a married woman to escape at least one surgical operation of major character is now considered remarkable, and the unfortunate sister who cannot show an abdominal scar is compelled to occupy a rear seat at the sewing societies and the afternoon teas, for she has nothing to talk about.

We hear more and more of the wonders of modern surgery, but can it develop as fast as the seeming need for it, or must we make more surgeons out of our young men?

It would seem to an inquiring mind as though the trouble is not so much in the rapid growth of surgical conditions as in the rapidly growing surgical equipment that must have more and more material.

This subject will be referred to again, but for the present it is pertinent to quote Dr. Charles Mayo, of Rochester, Minn., who said in open meeting of the American College of Surgeons a very few years ago: "Nine-tenths of the internal surgery that is done today never should have been done, and the seemingly necessary tenth part should be done by some one who has some further evidence of surgical ability than merely a diploma in medicine."

But leaving out surgery, there has been a tremendous increase in those diseases that we term degenerative, even though the

zymotic group has for some unaccountable reason been less prevalent than formerly.

What we seem to have gained in lowered mortality from tuberculosis is swallowed up by a far greater increase in cancer.

What we have seemed to gain in lowered prevalence and mortality from the ordinary diseases of childhood has been more than offset by the increase in such conditions as heart failure (whatever this may mean), Bright's disease or other kidney degenerations, diabetes, which is still on the percentage increase, or the nerve degenerations, including insanity.

Statistics show an average lengthening of life, but this is chiefly due to better infant conservation, better housing conditions, better environment, more appreciation of the outdoors, of exercise, and perhaps also to the great interest recently aroused in foods.

All of this is offset by the far greater increase in degenerative diseases, more unfit living to greater ages than formerly, for which medicine takes credit, but it is a moot question whether this credit (if there be such) should go to medicine or whether it should be taken as evidence that the race is developing a tolerance for the destructive agencies of both medicine and surgery, for neither can by any stretch of the wildest imagination be considered constructive in character.

With all our declining health rate, which none can doubt, we still take Olympic contests quite regularly, though not so regularly as formerly, showing that while the mass may be degenerating slowly, yet the individual young man can succeed in so developing athletic efficiency that we send abroad a set of athletes that any country may be proud to claim.

The trouble is wholly with Mr. Plain Citizen, the man who stays at home and is satisfied with conditions as they are, or perhaps not wholly satisfied, but believing his circumstances prevent any effort at change.

His father, his grandfather, lived as he does, at least in compliance with environment, for the average citizen is a well-meaning man, not inclined to kick unless stepped on ruthlessly, patient to the nth degree, uncomplaining even though he feels many times that he is somehow getting the short end of the stick.

He was raised to accept what is offered at the table, perhaps quoting St. Paul's advice to one of his pupils: "Eat what is set before you, asking no questions for conscience sake."

Too many people have quoted this same suggestion of St. Paul without reading what immediately preceded it, for he was asked for advice when eating at tables on which was served meat that had been offered to idols, and his reference to conscience shows that it was merely this phase to which he referred.

When the average citizen realizes that he has the control of his almost entire destiny he will wake up to the fact that he is himself largely to blame for his state, whether this has been to his liking or not, for he *is* just what he *eats* daily.

Perhaps his father ate all wrong and lived to a good old age, but did he transmit to this son as good a heredity as would have been the case had he known how to live?

Look over the average family records and you will find that but few marriages ever result in anything beyond the fourth generation.

Anthropologists tell us this, as relates to American families, and while there are many instances of many more generations in certain families, yet if we strike an average with those that are either wholly unproductive of progeny or whose family tree disappears after the first or the second generation, it is no doubt true as stated that the average lies between the third and the fourth generation before the tree becomes extinct.

We do not believe in transmitted or inherited disease, for there is too much evidence that disease is not directly inherited; but surely parents do transmit to their children no better physical equipment than they themselves enjoy, else the stock breeder is all wrong in his reasoning, and there is nothing in eugenics.

So while I may have sufficient vitality to carry on to a good old age in spite of wrong habits of life, yet my son will never be able to do as much or carry on as far, for I will have robbed him of a part of his birthright by my own habits of living. Is it then any wonder that the average American family falls a little short of the fourth generation?

Experiments carried out in the laboratories of nutrition on the various small animals show either total inability to generate progeny or a failure of each succeeding generation, if there is the slightest deficiency in certain of the essentials of diet.

May this not be the cause of so much unfertility in the average human family? May it not be a large cause of the shortening family trees that are the rule?

Many are inclined to blame on the jazzy habits of the times the lowering efficiency of the younger generation.

Night life is enervating, of course; the excitement that scarcely knows bounds takes its toll of nerve force without question; the use of tobacco, whiskey, tea, coffee, the excitement of sports, the dance, jazzy parties, all are causes of the national enervation, but are a mere detail of the enervating causes of the present state of declining vitality, and are of but minor importance as compared with the national food habits. This means that if one were fed entirely as one should be, he could then indulge in a certain amount of these enervating pleasures without perceptible effect.

We cannot by any process of reasoning make something out of nothing, even if successful promoters, and even so we cannot get into the body the wrong foods and expect them to build a correct physique.

What is food, anyway? Food is nothing more or less than replacement material. We use up energy supplied by the oxidation or burning up of foods within the system, not in the digestive tract, for there it is only prepared for use in the body, but in the blood stream itself, in the intimate tissues of the body, in the muscles, the glands, the brain itself.

This is how the body is replenished daily, and without food we would die, as we still cannot make something out of nothing.

Nature foreseeing possible food shortages has given us the ability to store up in the body vast quantities of this prepared pabulum, or fuel, with which to make good our needs, and in this way we can subsist without foods of any kind till the stored supplies are used, as in the protracted fast, which will be referred to later.

Thus the bear feeds well during spring, summer and autumn, accumulates stores in the form of fats, glycogens and proteins, or

albumens, and then goes into winter quarters, where he sleeps for two to three months, entirely without nourishment of any kind, and comes out in the spring, still all there, but minus a large amount of these fuels with which he was provided when he began his hibernation.

He is all right, has everything belonging to him, but has expended a large part of his capital with which he retired last December, or possibly November.

There are others of the animals that hibernate, as the common groundhog, partially so, the squirrels.

Man can do the same thing, and he can even keep up his usual activities and still take no nourishment for rather long intervals, as so many do for thirty days or more.

In spite of this well-known fact men are stricken with terror at the thought of missing a meal, expecting dire calamity if the body is so insulted.

The sick are fed religiously every day, three times a day, nay, oftener, six times a day, with the idea that the strength must not be allowed to fail, when if *no* nourishment were given there would be far more strength, for food that is not needed (and it is never needed during illness of any kind) is nothing but a handicap; no animal except man being so utterly foolish as to eat anything at any time without desire for the thing eaten, possibly excepting the hog, who seems to have the impression that he should eat whenever he sees food.

Some time we shall look back on the misunderstanding of the present time on this question of foods, and particularly the feeding of the sick, and then the dark ages will not look so dark by comparison with this very epoch.

If the feeding of the sick is not evidence of insanity on the part of the feeder, then it is only charity that makes us see it in a less disagreeable light.

The really ill never crave food; if they do, it is either because of feeding habits so deep that even illness will not interfere with them, or else it is an imaginary desire born of an atavistic fear of starvation, a fear fostered always by the medical idea that we must keep up the strength at all costs.

It has now been twenty-four years since the writer allowed any feeding of any kind during acute illness, even prolonged cases of typhoid fever taking absolutely nothing except water, with possibly a little lemon juice in this, and from the time he began this plan he lost only two typhoids: one at the last end of a desperate attack of delirium tremens, the other an old lady who was slipping into the grave when he was called in on the case.

The rest all recovered. To prove that they were not injured by this experience, they never had a complication in a single case; the usual serious complications that are the chief cause of death in typhoid fever being all conspicuous by their absence. Instead of four weeks of fever, as is usually anticipated, this was shortened to two, or possibly three weeks, and the patient was usually at work within one to two weeks after getting up, instead of the two or three months of tedious convalescence that is expected.

Not a single one of these patients desired food in any form, so why in the name of Nature should food have been given? Yet there

is little doubt that if feeding had been continued a semblance of appetite also would have continued.

These cases included many of highly nervous type, the very ones in which we look for serious complications with, quite probably, death at the end.

Did these patients need food? They did not think so, and their recovery in a short time, their quick return to normal after getting out of bed, would seem to indicate that they were better treated than is the average well-fed typhoid patient.

The writer contends that if the normal food habits intended for man were fully understood and practiced in every case, this would be a very much better world than it is, for disease would practically disappear, crime would subside, insanity would be scarcely if at all in evidence, and there would be less, very much less, imbecility and physical and mental imperfection in our wonderful country. He expects so nearly to prove these things within the small confines of this little book that if you are a reasoning being you will apply the teachings here set forth, and he is willing to abide by the result, and you, the reader, will be immensely impressed with the result. You will bless the day when you first took up study and experimentation with foods as the motive and object.

If every one were to make a faithful study of foods, instead of waiting and pursuing the usual faulty habits of eating (then going to the doctor when sickness develops) anyone capable of thinking would be surprised that no more illness develops; that there is a feeling of well-being that was not before present; that fatigue has disappeared; ambition surges continually within; tasks that formerly looked impossible begin to look easy, and there are no more blues or discouragements; and all because you will have stopped the continual fouling of your life stream with the usual mistaken foods— foods that taste good, that we have learned to like and perhaps the very ones on which we were largely fed in early life; therefore, our customary foods.

We must learn to apply certain rules to our foods, to measure them by certain standards, to assure ourselves that they really are foods before we take them; then by combining them in such fashion that no incompatibility occurs in the digestive tract, we can be assured that we have replaced our food shortages without harm to ourselves.

When we have learned to look on food as replacement material, not something to tickle the palate, then this old world, from our individual viewpoint, will not be such a very bad place in which to spend a very long life, and the world from our own viewpoint is all that really matters to us at best, for each makes his own world daily, and can make it just about what he wishes it to be.

CHAPTER II

WHAT DOES IT COST?

As remarked in first chapter, there are at any given time in these glorious United States of America two million people sick, which means the same thing as if these two million were continuously sick, for as fast as some of the two million recover there are as many more waiting to take the vacated beds.

Not all of these are wage-earners, of course, but figuring the average income for every one at so much per capita, we shall get a total in lost wages of over one billion dollars every year, saying nothing at all about the expense of the care, which is many times more than this.

Take a hundred dollars to the hospital to begin a stay there as a patient and how long will this last you? Two weeks? Hardly, unless you are a ward case, when you might stay there two months, if you were to depend on the care of the staff and the perfunctory routine nursing. Even then the cost of maintenance of each patient far exceeds this figure, and the state pays the difference—you, in other words, if you are a taxpayer.

So, if wages unearned amount to a billion dollars a year, the care will equal not less than three billion, making a total loss of four billion dollars yearly in this country through illness.

And even this is a mere bagatelle, for the greater loss is through unaccomplished tasks, an army restrained from productive pursuit being necessary to care for these who are on the shelf.

Six billion dollars would not reimburse this country for her losses through illness every year, a loss that is wholly preventable, therefore inexcusable.

Most people understand any proposition better in figures, but not when we reach billions, for these are beyond human comprehension, as a rule; we understand a loss of a few hundred dollars a good deal better.

It is becoming a fearsome thing to the average wage-earner to call in a doctor, for it is no longer the good old family physician who will give out useful advice and a little medicine (that never does any good); but now to be sick is to fall into the maw of the scientific medical machine, with its diagnostic clinic, its various specialties, its operations; and the wage-earner, after experiencing a slight indisposition, perhaps, finds himself the center of a great scientific interest. He is sent here and there, he is x-rayed, his blood is analysed, his stomach contents, his urine, his stool are all examined, even his spine is punctured in the frantic search to connect his illness with syphilis, and when he gets even half way through with his preliminary examination he is deeply impressed with the extreme gravity of his case.

A writer a few years ago, living in New York, tells the following story of his experience in trying to get relief from a common cold. He noticed a doctor's sign in his block, and thinking it noble to patronise a neighbor he dropped into the doctor's office during hours and stated his complaint.

The doctor told him promptly that he was not an ordinary physician, but a specialist, and that he should go for this trouble to the famous Dr. So-and-so, who specialised in throat affections. There was a charge of ten dollars for this information, and the doctor's card was to be presented to the great Dr. So-and-so in order that this great man should know that this was a referred case from the doctor in this particular block.

A visit to the great Dr. So-and-so developed the fact that the great man was too busy operating at the time to see any one, but the assistant volunteered to make an examination of the throat, nothing but the throat, as this office was limited to throats only. This disclosed a very serious condition of the throat that demanded immediate operation, not so very immediate, for the great man was too busy to do any more operations today, but the patient was to come tomorrow at ten o'clock in the morning, when he would have his operation.

Meantime the cold persisted. Next morning the patient presented himself for his operation, the great man examined the throat, complimented his assistant on the diagnosis, and proceeded with the operation, whatever this was.

The patient paid two hundred and fifty dollars for the operation, but was refused information as to its nature.

However, the great man had noticed evidences of acidosis in the mouth and recommended the patient to go to the eminent Dr. Somethingelse, who was a specialist in nutritional troubles, and who would give him a diet that would correct this phase, also accompanying his direction with his personal card so that his friend, the nutritionist, would know that he, the great operator, had remembered him with a referred case.

The nutritionist prescribed a diet for which he made the nominal charge of twenty-five dollars, making a total of two hundred and eighty-five dollars paid to these three men for treatment of a cold for which nothing had as yet been done, and it still persisted.

Disgusted, the patient hied him to his house, drank a copious libation of Epsom salts, followed by much hot lemonade, took a hot bath till the perspiration started, wrapped himself up warmly in blankets and slept, and awoke without his cold.

What does it cost? Whatever the traffic will bear.

This is not an isolated case, nor yet a greatly exaggerated one, for medicine has become a business, and the successful man is the one who can create the most business.

Not only does illness cost plenty, inexcusably too much, but too often the wages have stopped, there is more expense than normal at home, and the result is a depleted exchequer; perhaps a heavy encumbrance of debt as a drag on future earnings.

It is not greatly to be wondered that the plain average citizen is becoming afraid to consult the doctor, for this is too often but the entering wedge for unusual expense that may persist for a long time.

When we reflect that this expense is all the result of preventable illness, does this not give us pause in our thinking, if the connection is made between habit and sickness?

The common people of moderate income are being driven away from medicine by the thought that it is too expensive, and so they must go cither to the free clinics, where they are too often

subject to the whims of an inquisitive amateur staff, or they must patronize the chiropractor or the osteopath or some other cultist, for they cannot stand the expense of modern scientific medicine.

If one realises that all acute disease is but the reaction of a sick body against its intolerable contamination with debris, he will not take his little illnesses so seriously, and will not then be faced with the expense of medical advice that does not recognize this simple fact.

If this were not true, then the unfortunate patient who found himself ill at a great distance from the blessings of civilized medical advice would die of his illness, but we know that in the north woods and other remote settlements illnesses do occur, run their natural course and subside. Why? Only because each such illness is but this very reaction of the body to its internal contamination, and when a little time has elapsed, when the body has through absence of the usual appetite been really allowed to catch up temporarily with its task of elimination, the health is readjusted and function proceeds at the old rate.

These are called spontaneous recoveries, and are supposed to be the exception rather than the rule, but only because such illnesses are not allowed generally to run their course and end in spontaneous recovery.

Typhoid fever treated in this natural way should always recover, as also pneumonia, for when the body displays sufficient vitality to get up so violent a reaction against its internal pollution it signifies sufficient vitality to carry through the house cleaning necessary to accomplish this task.

Keep in mind that all our illnesses are self-created, and to exactly the same extent are self-controllable, which means that if our manner of living has caused these illnesses, so will a corrected manner of living cure them.

If they have come from self-created toxins retained in the body, they will leave when these toxins are no longer manufactured, given time to eliminate the great overplus of these which has always been the cause and motive and modus operandi of the thing we call by the name of some acute disease.

If it is surely true (and it is demonstrably true) that each illness is this very thing, this passing of the toleration point for internal intoxication, then each acute illness is naturally a self-limited affair, and will disappear when intoxication has disappeared, or when intoxication has subsided to a point that will allow of a resumption of function along nearly normal lines.

If we allowed each acute illness to run its course unmolested we would find that spontaneous recoveries are not the exception but the rule, and that to recover from any disease of acute character is but to cease causing it.

Viewed from this standpoint of self-creation, self-cure, and spontaneous cure, it is not difficult to look at disease as merely a penalty, a penance for the mistakes preceding its appearance, and a self-limited affair that will surely subside when this penance is fully paid, therefore, nothing to be alarmed about or to consult the doctor about, but something to be endured till the price is paid and function has opportunity to resume.

When the patient presents himself to the physician for treatment, search is made for the immediate causes: local foci of

infection, perhaps, chilling suddenly, unusual occurrences of the immediate past, but limited to these, while the true cause lies much farther back in the history than these more recent happenings.

Too often the teeth are extracted, the tonsils extirpated, the appendix removed, all without going back far enough to find a reason for the predisposition that permitted this occurrence, yet the true field of search should always be the mode of life that has resulted in such accumulation of debris as will permit or cause this present disease to occur, and if found and removed, this remote cause is all that bears any relation whatever to the present illness, so we will have done all we can to correct the recognised illness when we have corrected this background from which alone it grew.

Such a view of illness and its treatment would do away with the diagnostic clinic. Naturally it is not to be boosted by the diagnostician or the surgeon, and will never be popular with either of these classes of physicians, as it takes away from disease its mystery and its seeming necessity for expert diagnosis.

Sickness is an expense that gives nothing in return, so is wholly evil; a total loss, and if we can eradicate this one unmitigated evil we will have done much to restore humanity to a place in the sun, to clear the way for a realization of ambitions and enjoyment of life as it should be enjoyed, without the haunting fear of disease with its deadly effects and its paralysing expense.

We have been noting chiefly the money costs of illness, while this is and should be the very lowest consideration of the subject.

What does it cost in achievement, in enjoyment, to those directly concerned? What does it cost in thwarted ambitions, unfulfilled desires? What does it cost in broken homes, uneducated children, want that depends on earning power to be dispelled?

These are and should be the greater considerations.

Imagine for a moment the condition of a free and highly civilized country, blessed with every natural advantage, peopled by an ambitious and supposedly cultured people of more than ordinary intelligence and initiative, and without illness or anything but the most ebullient health! What could not be accomplished by such a nation of healthful subjects? To what heights in achievement could such a people ascend?

The idea is not Utopian but highly practical if we could as a nation realize the simplicity of the causes of disease and correct these, not after adult life is reached, but during the vital first seven years of life when habit is formed for all time.

The writer will stand pat on his former statement that all disease is unnecessary, because always self-created from certain well-defined food causes, therefore self-controllable for this same reason.

For nearly twenty-four years the wrecks of humanity from all over the United States and much of Canada, not to mention several foreign countries, have been coming here for treatment for all sorts of supposedly incurable states, usually after having "suffered much at the hands of many physicians," yet a vast majority get rid of their troubles, often enjoying the best health they have ever experienced, after ceasing to cause their troubles or their diseases,' for this is all that is done for them.

They are fairly well cleaned out, detoxicated, and taught why they were sick and just how to prevent a return of their illnesses in

future. That is all—no medication, no drugs, no surgery, no local treatment of any kind whatever—but it is enough, for old Mother Nature is after all the very best nurse, if we will for all time cease interfering with her normal and established processes, and when she sets out to right a wrong bodily condition she will succeed if left severely alone.

To interfere with Nature's efforts to heal disease costs too much in money, too much in time, too much in suffering and prolongation of illness, far too much on the whole, for Nature knows how to cure disease but man does not, and Sir William Osier was right when he said that anything that could not be cured by Nature must forever remain uncured.

If a patient with an enteric fever will clean house, stop all intake of food till digestion returns, keep the colon clear daily till normal activity returns, drink plenty of water as the fever makes this seem desirable to him, and, if he does nothing else, he will recover in a few days or a very few weeks, where under the usual feeding and drugging plan in typhoid or other enteric forms of fever he would be ill for four to six weeks, and away from the pay window for twice as long.

From the standpoint of dollars and cents (or sense) he will be a great gainer, from the shorter time required and the earlier return to work. The increased health resulting from such an illness properly managed leaves scarcely any comparison with the usual treatment.

Sickness costs too much, far, far too much, and it should never occur, which makes of its incidental expense a total loss.

When we can regard every acute illness as merely the effort of the body to clean house and right its internal discord, then we can forget the doctor and let things go on as Nature has outlined them.

Humanity has been taught for thousands of years that sickness is an unavoidable evil, and when it occurs the doctor is the one to be consulted, yet the doctor says that the cause of disease is a great mystery, and it is hard to eradicate the effect of these thousands of years of training and to view acute disease as a blessing to a body unable to proceed at its normal rate in the face of accumulating debris of all sorts.

Every acute disease without exception is the effort of the body to readjust to a more normal condition, and should be encouraged, not contended against, as we are taught to believe, and the occurrence of the crisis in each case is full evidence that the body has sufficient vitality to accomplish the program undertaken.

Authorities who have adopted this view in all time aver, or have averred, that no case of acute illness ever occurs on any other basis, and that if such were left to itself recovery would always be the rule, not the exception.

The writer has in mind a little town not far from his early field of practice where formerly physicians lived and seemingly flourished, but where there had been no physician for a number of years. After a time the people there, who had at first bemoaned their sad fate, felt lese and less necessity for the presence of a physician, till in time there was seldom a necessity felt for the doctor, except for accident cases or the death of the aged or the birth of a new arrival, and yet the health of this community was far above the average, with no doubt the usual amount of acute illness that was wholly unattended.

The writer considers that the first sixteen years of his medical life were totally wasted, nay, worse than this, for he now knows that not only did his surgery do much harm (except the repair of wounds and the correction of deformities), but also his prescription of remedies for the symptoms of disease as he recognized these was harmful and suppressive of Nature's efforts to right the internal wrongs in her own way.

He can look back on many a case of pneumonia or typhoid fever that failed to come through, surely on this very account, for he persisted in reading each symptom as evidence of disease, an evidence that he sought promptly to destroy by suppressive treatment.

Now, after twenty-four years of treatment of disease wholly without drugs or surgery he would think it a crime to lose any case of pneumonia that was not already semimoribund when treatment was begun, and his treatment is a let-alone plan, letting feeding alone, letting medicine alone, letting everything alone that the patient does not crave. Nature never fails to restore to health the body thus let alone, usually far better health than before the illness.

Why should not this always be true, if acute disease is really Nature's method of cure? She has cleaned out the offending material and the last state is sure to be better than before the illness, otherwise our reasoning is wrong and we will have to find something that will square with the facts of spontaneous recovery from acute illnesses with a higher health state than before.

Whatever our theory we cannot quarrel with cold facts, which all point in one direction, that of certain recovery with high level of health when the acute troubles are treated in this natural way.

There are many schools of treatment, not only the Allopathic or old school, but the Homeopathic, the Eclectic, the Osteopath, the Chiropractor, the Naprapath, the Neuropath, the Spondylotherapist, the Christian Science school, all of them, with the exception of the last named, trying to do something for the disease, when as a matter of fact there is nothing that can be done about the disease or for it but to stop doing the things that have culminated in the body's desire to rid itself of this accumulating waste that is the occasion for all disease of every character.

The Christian Scientist seems to be the only one who does not rely on some remedy for the cure of disease, and may this not account for the fact of so many recoveries under their ministrations, with so very few deaths?

We know there are few deaths, for each time such a death has occurred Heaven and Earth were moved to have the practitioner punished for this, under the impression that the death occurred because of the practitioner's failure to do something "curative".

The Scientist ignores the existence of the body, and takes the ground that it exists only as the mind gives it existence, therefore it is wholly amenable to the mind.

Even this is better than to try to undo all the efforts of Nature to repair her own work, as is generally done by all forms of treatment.

If the Scientist could couple with his implicit faith in the ability of the soul, the higher self, to heal, an understanding also of the body's complete ability to heal, with or without faith and understanding, by the simple process of refraining from doing the things

that have occasioned the necessity for this crisis that we call disease, then indeed would his work be praiseworthy.

Now let us return again to the question of cost, and to the staggering total of six billions of dollars let us add all the heartaches caused by illness, all the missed opportunities, all the crushed hopes, all the deferred plans, the discomfort, the suffering, the grief, occasioned in two millions of people and their immediate families or close friends, and let us reflect again that this is all unnecessary, wholly so, if we will but study and put into practice the present common knowledge possessed on the subject of competent foods, and we will say that we are chumps to go on thus wasting time, money, energy on anything so silly and inexcusable as sickness.

You will think it too broad a statement to say that all disease is preventable, but this is exactly so, as we will hope to prove to you before you have reached the end of this little book, and we are willing to let you be the judge.

The causes of disease are now so well defined that we know what causes disease, no matter if Sir William Osier did say not long before he died: "The cause of disease is still a great mystery." No matter that thousands of other teachers have said and are still saying that same thing. It is true so far as they are concerned, but in many quarters now the cause of all disease is so well known that he who runs may read the thing, and the proof is that chronic disease does get well when these now known causes are discontinued.

If well-seated disease will leave the body under the application of what is now known about the causes of disease, surely it must be evident that the same thing would have been prevented far more easily by application of the same principles before it occurred.

We can stand the six billion dollars loss every year, for we are rich, richer than was ever any nation in the world to this very time, but in health we are the poorest of all, and what is our money worth if we have not the health to enjoy it?

You have all seen a man who had amassed great riches by his own efforts, seeking all over the world for the health he lost in his frantic search for wealth.

He would pay millions of dollars for the lost zest of youth, perhaps even for relief from positive suffering, yet he travels every where in vain, for health is not to be found here or there; like the kingdom of Heaven it is within you.

Years ago John D. Rockefeller was doing this very same thing, traveling everywhere, consulting the very best specialists in the world for relief from the pangs of indigestion, yet he found no one who could earn the million dollars he promised to the one who could cure him.

Cure lay all the time within himself, and was distant but a few weeks at any time, and he discovered this in time and wasted no more money on travel fees or doctor bills in trying to get rid of something that only he could possibly get rid of.

When he learned to eat a little more carefully, more scientifically, to chew his food better, and to avoid certain incompatible mixtures of his foods, he had no further trouble, and is today over ninety years of age, in good condition for one of his years.

Expense meant nothing to him, for he could afford it, but he had to learn the lesson that we cannot buy immunity to pain or

suffering with money; we earn this by keeping within the law in our manner of living.

The laws by which we keep always well are so very simple that they have been overlooked too long, and you cannot blame the medical man for refusing to become interested in their promulgation when their general acceptance would eliminate him almost wholly from the picture.

One is never greatly interested in what robs him of income or makes him unnecessary in the scheme of living, and you would no doubt take the very same view.

CHAPTER III

THE LAW OF COMPENSATION

The universe is governed by law, infallible, immutable law, and if not, what sort of universe would it be?

We accept this fact knowing it to be such, and through our studies in astronomy we are able to foretell to the very minute any happening in the future.

Eclipses occur at computable periods, and we know these to the minute.

Everything happens on time, on exact schedule, and we accept this fact because we know that it requires law to operate anything in other than haphazard fashion.

The seed is planted in the ground, it requires the materials of the earth, the light of the sun, warmth and moisture, the things that we recognise as elements necessary to the growth of the seed into a plant or tree, and while we may wonder at this unchangeable arrangement, yet we are more apt to accept the fact as demonstrated by Nature and let it go at that.

But have you ever stopped to think of this arrangement by which Nature perpetuates herself?

Congress of animals produces progeny, if the basic essentials to this are present; not otherwise.

Nature again reproduces herself according to immutable law.

Growth is part of this law, depending on the conditions that must be present for growth.

Animal life develops to a certain standard of size for each species, then stops growing, but does not the same process continue? When the animal has reached the average size designed by Nature, is the law of growth then suspended?

So far as increase of stature is concerned there is no further operation of the law in evidence, but it goes on according to the same conditions as obtained for increase in stature, for the body dies daily and is daily replaced with new material, and still this law of growth applies as repairs have to be made, as new material has to be elaborated and built into the body for repairs.

All this goes on without our conscious knowledge, yet we know somewhere in the depth of our consciousness that it does go on, for we see the visible parts of the body change, as the hair, the nails, the skin, and we realize that we are never really through growing, except as relates to stature.

Even the soil, from which comes all life, is subject to law, for when we extract from the soil certain ingredients, as by raising crops, we know that if we do not replace these elements in kind we impoverish the soil, and just so does the soil decline in many localities till it will scarcely support the life of the region.

An ingenious scientist has figured out that just as the soils of a country decline even so does its supported flora and fauna decline, and traces the downfall of previous civilizations to this fact.

Recently many experiments have been performed on soils, by complete fertilization of certain parts and the usual partial

fertilization of other parts by means of the barnyard humus or the ordinary, three-part fertilizer of commerce, and the results charted.

For the complete fertilization certain volcanic rocks that contain all the usual sixteen elements of the normal soil were used. A row of common garden vegetables was fertilized in this way, six feet distant was a row of the same vegetables fertilized with the ordinary barnyard humus, and still six feet distant was a row fertilized with the three-part fertilizer of the market.

What happened was in obedience to this great law of compensation, and just what is always bound to happen in any similar test.

The completely fertilized row did not at first grow any faster than did the other two, scarcely as fast, but it grew steadily, it continued to grow till it outgrew the other two rows; it grew sturdy stalks that stood up in the storm, while the other two sagged down, lay largely along the ground for lack of silicon or other of the minerals that had been previously cropped out.

When seed time came around the completely fertilized row showed three times the fertility of the other two.

But the thing that particularly interested the writer was the behavior of these plants to parasites.

The completely fertilized row resisted the invasion of these almost wholly, while the other two rows were fairly eaten up by the pests.

This is the law, but surprisingly worked out in this case, for we have always supposed the parasites outlaws who preyed on all vegetation, irrespective of its state, while this experiment would indicate that plants of sufficient vitality will resist the encroachments of these garden pests almost wholly.

Now is it possible that man alone is outside the great law by which the entire universe is run?

There is nothing farther from the truth than this supposition, for man is amenable to all the laws of the universe just as are all flora and fauna of the earth.

You cannot continually subtract without replacement of the extracted ingredients without eventually running into bankruptcy, neither can man continually use up his body chemicals without replenishment of these daily, yearly, every year of his life, and it is trying to live as if we were immune to the law of the universe that has brought us to the pass in which we now find ourselved lodged.

Just as surely as two and two make four, just so surely will two subtracted from four leave but two, a part of the great law of the universe that has never changed nor will ever change.

We are dimly recognizing diseases that we call deficiency diseases, and as we extend our studies in feeding we find that all disease is made up of deficiencies plus plethoras, that is, while we may be at one and the same time suffering from too much and not enough, it is too much of certain things and not enough of other things.

This imbalance goes to make up disease of all kinds, and as surely as the law says that we cannot continually subtract without addition, just so surely can we not go shy on certain necessary chemical salts without running into a bankruptcy that will show in what we recognize as deficiency disease.

All law is good, though it may not always seem so to us, and law is for the breaker of the law, not the doer.

The law of momentum is good, so is the law of resistance, but once let these laws conflict and there is a collision, yet neither phase of the law is to blame for this.

We recognize the working of the law of momentum when we see the train hurtling along the tracks at terrific speed, and so long as the law of resistance does not interfere all goes well, but when we look forward and see on the track an immense rock, that is expressing the law of resistance, then we know there will be a collision of these two mighty forces.

Yet the law is good in its every tenet, and all that is wrong is that this resistance rolled down on the track at the wrong time.

There is but one way for us to keep as well as we should be at all times, and that is by a recognition of the law and by obedience to its demands, and when we have done this there is no harm that we can do to ourselves.

Certain drugs are violent poisons, and if we take into our bodies one of these we know the result will be destruction for us, so to avoid collision with this law we refrain from the taking of this drug.

Now food, in order to replenish the body, must be food, so in selecting food make sure first that it is really food.

Never forget that food is replenishment material for the body itself or for its stored fuels, and this only.

So the law must be applied and our deficiencies made good each day, if we would avoid bankruptcy.

Having decided that the things we have selected are food, not merely a manufactured taste of some kind, then we are under the further obligation to see to it that we do not create in taking these foods together any adverse chemical action, as by eating at the same time two foods of diametrically opposite digestive requirements, which will be referred to again.

We must avoid eating too much of even the right foods, as we must be sure to take enough for our needs daily.

We must chew our food thoroughly in order to allow the law of digestion to work, for as each division of the tract has some definite action to perform on every particle of food that enters the digestive tract, we must allow the saliva time to perform its share of this.

If the law says that plants thoroughly fertilized, therefore more robust and resistant, will resist the attacks of parasites, have we any grounds for a belief that the body also will not be subject to the very same law?

We do know that not everybody is equally susceptible to germ invasions, and may not this be the reason?

Dr. Percy R. Howe, of Boston University, a man who has done most fundamental work in nutrition on monkeys, says that for every known deficiency in feeding of the monkeys he can predict with absolute certainty what deficiency condition will show up.

He also, says that where it sometimes takes many weeks for these deficiencies to show, after the beginning of the deficient feeding, yet this same deficiency can be completely cleared up in a very few days after the food deficiency is restored.

Here the law works so distinctly that he can recognize the deficiency as always of the same character from withholding the same necessary chemical.

Dr. Elmer V. McCollum, of Johns Hopkins University, Baltimore, has taken sixteen different groups of small laboratory animals and allowed each different group to represent one of the sixteen body chemicals or salts, each group a different chemical, and by withholding from the first group lime, the second group iron, the third group potassium, the fourth sodium, and so on through the entire sixteen groups, he could predict the sort of deficiency that would develop in each group. The law, working out in body nutrition; and can we dodge it? Our misunderstanding of the law has gotten us into serious trouble individually and as a nation, and it is high time that we wake up and learn what has all this time been at the bottom of our starvation in the midst of plenty.

The law of compensation shows again in the subject of work or exercise and rest.

We cannot work all the time, nor can we rest all the time, if we would be well.

The pendulum swings this way so far, it then swings the other way just as far, and thus it keeps on moving.

We work so long, so hard, accomplish so much, and then we have to rest, else we would bankrupt our energies entirely.

It is when we sleep that we re-energize ourselves, when we recharge our run down batteries, when we oxidize and build up into the body the various replenishment materials taken in through the day.

Even our constantly working heart has two-fifths of its cycle devoted to rest.

Respiration is active only during inspiration, the following expiration being a period of rest, when the resiliency and weight of the chest assists expiration without muscular effort.

So every part rests at times, else it could not go on.

Nature seems to have divided man's day most conveniently into thirds: one-third for work, one-third for recreation or amusement or pleasure, and one-third for rest and sleep.

Maybe Nature did not do this, but at any rate man has grown into about this division of his day, and it represents a very good balance usually for the average man.

While we sleep we inspire, respire, twice as much air per minute as when awake, as you will easily note by watching the deep breathing of the sleeper.

Twice as much oxygen enters the lungs during these eight hours as during the eight hours of recreation, unless this be composed largely of exercise, or if one is quiet, or engaged at sedentary occupation, and if he takes little exercise, then he uses as much oxygen while sleeping as during the sixteen waking hours.

This fact should emphasize the importance of fresh air in the sleeping quarters.

It is during sleep that all of the oxidation processes are carried on at an advanced rate, as the activities of the day are over and there is nothing to do but to work over the materials taken in during the day, building the broken defenses of the tissues and elaborating into fuels those substances whose whole function is this one thing of supplying material for oxidation when needed.

Thus we eat starches or sugars; these are converted by the digestive organs into lower and lower forms of sugar till reaching in the small intestine the lowest form, a primary sugar, or glucose, in which form they are absorbed.

But we do not use glucose as fuel; rather in the tissues and the bloom stream this must undergo final conversion into glycogen, the ultimate fuel, and in this form it is stored for immediate use when required, stored in the liver, the other tissues, the blood itself, and when we exert muscular power we use this glycogen as the immediate source of this.

So when we sleep this final conversion takes place, the sugars being converted to glycogen and stored for the next day.

While we sleep we are in a sense still working, though the chemical and oxidation processes do not consume energy, and we can still recharge our batteries while we carry on this chemical or Zymotic action.

We think when we eat a hearty breakfast that we have fortified ourselves with energy for the forenoon's work, but we have not even digested this, and how can it give us energy?

Rather it detracts from our energy for the morning because digestion consumes vitality, energy, and this necessary energy is diverted from the activities of the forenoon's work.

No matter what we eat during the day we still must wait for the night to elaborate this for our use; so we are clearly wrong in thinking that we energize ourselves when we eat; rather we feel better only because we have satisfied a habit in this respect.

This is the law, and we cannot change it in any particular, but we still may eat our three squares a day, if we will make sure that we do not make mistakes in our selection or our combination of the foods that enter into the stores that we are laying up for the night's work of metabolism.

The writer has, for most of the twenty-four years since he changed his habits of eating, taken but one meal a day, and this for convenience was taken after the activities of the day were over; digestion still has time to complete itself before midnight, so that the hours of sleep may still be devoted to preparing this mass of nourishment for use next day.

Hours of eating are so much habit that he does not grow hungry till shortly before the hour for eating, so there is no suffering for food during the day, no after dinner period of inefficiency while Nature struggles with a mass of recently introduced food, and he finds this arrangement a great help toward both mental and physical efficiency.

The army of Caesar was supposed to be the most efficient fighting organization the world has ever seen, at least Julius says it was, and these men fed but once a day, a simple meal of grains and whatever green stuff or fruit they could forage from the countries through which they marched.

The Roman soldiers of that time carried an amount of equipment that would stagger the average modern soldier, yet without shedding this they would run into battle fully equipped, and they were all but irresistible.

The average feeding habits comprise three times the amount of food required for complete daily replenishment. Why may not this third be taken all at one time, and preferably after the activities of

the day are over, when nothing remains to interfere with digestion or assimilation?

It has been said that one-third of what we eat keeps us alive, the other two-thirds keeps the doctor alive, and there is more than a grain of common sense in this saying.

It is the law that anything unused in the system is in the way, so must be eliminated in order to restore harmony.

If we wished to build a house that required two hundred thousand brick we would not think of buying and placing on the lot six hundred thousand brick.

The excess would merely be in the way of the builders, and so when we digest and absorb three times as much nourishment as we have need for, this excess must seriously cripple the engineering forces of our system while we sleep.

Nature has designed us with a view to this very overfeeding, no doubt, or else a large capacity for over-plus has developed in response to need created by eating too much, for we still may remain in fairly correct balance when taking entirely too much food, if we are careful in selection and combination.

For instance, the kidneys are capable of taking care of practically ten times the amount of excretion that the body waste alone would represent.

Either we have created this over-development of kidney function or else Nature foreseeing our weakness in the matter of a high protein consumption has designed kidneys capable of an extreme amount of overwork.

Yet, even so, we develop Bright's disease from overworked kidneys, showing that we have very far surpassed our needs in protein consumption.

This does not mean that we should not eat meat, or eggs, or other of the concentrated forms of protein, though it is a fact now well established that we do not need any of these things, our foods practically all containing a modicum of protein sufficient for all needs without the introduction of any of this in concentrated form.

Our needs in the matter of protein do not change with our work as do our fuel needs, for we need the protein only for replenishment of body protein, and this is wasted at an even rate, whether we work or sleep or rest.

Russell H. Chittenden, of Yale, proved this twenty-five years ago, and further proved that our standards of protein feeding were three and one-half times too high, not the average habit, which is ten times too high, but the standard of minimal protein consumption set by Carl Voit many years ago, and usually followed ever since.

The law says we need so much protein for tissue replacement every day, and more than this is in the way of perfect nutrition, yet we use habitually ten times this amount, thus again violating the law.

This will be mentioned again in connection with the directions for correct feeding.

CHAPTER IV

WHAT IS DISEASE?

Disease has always been a complete mystery in all ages and among all peoples.

Always there has been that feeling of misunderstanding, heavily mixed with superstition and fear.

Always it has been considered and treated as an extrinsic affair, something that attacks us from without.

It has generally been considered a ministration of some higher power as a punishment for sins committed against this higher power, but always with the feeling of helplessness and fear.

This attitude easily lent itself to the plundering of the fearful by those in authority, the priests, later physicians, or magicians, augurs, workers of charms and miracles, so that humanity, through this fear of disease, has been plundered incessantly from the beginning of conscious time to the very present moment.

One fears only what he does not understand, even as the animal, and when a thing is understood there is nothing to fear, for knowing the nature of this we can easily devise means to avoid its supposed dangers.

Thousands of years ago there existed in Egypt, the home of medicine, two different schools, the one official, recognised by the Egyptian government, the other and more recent school considered a sort of experimental idea without the sanction of government.

If one died under the ministrations of a member of the recognised school of medicine no blame attached officially to the one who administered the treatment, as it was considered then, as now, that everything had been done that science could devise, and if the patient died under this sort of treatment it was his own fault, or he was out of luck.

If one died under the newer school of treatment, the one administering this was held responsible for the death, and paid with his life for the life of the patient; surely a most deterring penalty. Now the strange part of this historical fact is that the recognized, official school at that time was the one that believed that disease was a self-created, intrinsic affair, and that all that could be done to relieve was to discontinue its causes, assisted by such means as the enema, fast, baths, massages, sunlight, diet, the so-called natural means, while the other and non-official school believed disease an extrinsic affair, something that attacked the victim from without, and so to be treated with means to counteract this thing, whatever it was.

This led the newer school to the use of various drugs, in an effort to counteract this outside influence, also to much surgical interference, as we have today many records of operations performed thousands of years ago showing trephining operations, sections of the body (our present day internal operations) and a surprising amount of operative lore that we used to think originated with this present civilization.

It would seem that unless the physicians of the new school at that time were much more successful with their operations and their drugging than are our present crop, the ranks of their adherents must have been rapidly thinned by the number of vicarious deaths claimed as forfeit for surgical and medical losses.

Hippocrates, the so-called father of medicine, was educated in Alexandria, under perhaps both schools of treatment, and his practice and teaching show much of both sides.

He believed in the potency of drugs to assist Nature, as also in operations, yet he evidenced all through his teachings a profound respect for Nature as expressed in the human body, and many of his suggestions for treatment would fit well with the practice of the so-called naturopathic school of today.

He still retained the idea of allowing Nature free rein in the management of the case, but believed much could be done through the agency of baths or massages or drugs to relieve the condition and so assist the body in regaining a normal state.

It is easy to see how the new school, exploiting all sorts of remedies that consistently failed to relieve, was led farther and farther into the field of research and experiment in their hunt for something that would cure, so that by the Middle Ages everything imaginable had been used: toad's toenails, bat's tongues, the entrails of various animals, the more disgusting the better suited to the case, and always with this idea that something not yet discovered would cure disease.

The fountain of youth was ever the chief incentive, and perhaps more ingenuity was expended in search for something that would promote eternal youth than for anything else.

Yet always the search went on, and never did it arrive, for when disease is understood it will be easily seen that there can be no remedy for it except the discontinuance of its causes.

From the time of Hippocrates to the very present this same search is going on, and it will go on unavailingly till humanity realizes that its troubles are always intrinsic, as is also the only remedy.

Our prescriptions today do not include such strange things as toad's toenails or bat's tongues, but they are no more availing in the relief or cure of disease than were these ancient nosodes.

We are still treating disease as if it were something, an entity, blaming it on germs or other extraneous influences, and of course this holds us to the idea of extraneous cure.

Here and there for the past hundred years and more has arisen a voice protesting that we were on the wrong track on both our understanding of disease and our means for its relief, yet these were always regarded as the protests of idle dreamers who did not understand, and their voices were drowned in the tumult of those who were exploiting panaceas or special treatments guaranteed to cure this or that ailment. Even now, with the present awakening on the subject, the number of those who understand what disease is and what to do for it is inconsiderable as compared with the great majority who still believe and teach that disease is something that we do not know anything about and that all we can do about it is to wait till it develops and then do something for the symptoms, just as the cry at present is for early diagnosis and early operation in

cancer, when the very earliest possible diagnosis is too late, much too late, for effective treatment.

Only those who know what disease is are in a position to administer effective treatment, not waiting till the pathology develops, but doing something now to get the body back into the ways of health before definite pathology develops.

Now, what is disease, anyway, where does it come from, what is its occasion, and what the object?

What we call disease is definite pathology, disease in full operation; but this is a late manifestation of diseased states of the body.

Every acute disease is merely the evidence that the body gives of its desire and intention to keep its internal affairs in normal working order.

It is the evidence put out by a body struggling to keep itself clean inside.

Every eruption is but this evidence as the body throws out through the skin various toxins or poisons created internally, just as every catarrhal condition is this same evidence as pertains to the mucous membranes.

Every fever is but the evidence of a heightened oxidation necessary to elaborate unusual internal waste matters, the body struggling in this way to burn up its wastes.

The medical interpretation of the phenomena is that these evidences are the disease, and must be suppressed or obliterated, hence drugs of suppressive character, operations to remove the foci that the body has established to assist in elimination of debris, all suppressive, subversive of Nature's outlined efforts to unload something not wanted within.

If we could see disease as just this, just Nature's efforts to clean house, what a change it would make in our practice!

Instead of trying to obliterate symptoms we would foster these or assist by any harmless means that would not tend to interfere with Nature's indicated efforts, and, as remarked before, there is no doubt that any task in elimination that Nature undertakes she is able to go through with, if let strictly alone, and if the accumulation of debris is checked at once.

The proof that this view is correct is the successful practice of those who have adopted this view, and whose patients represent almost wholly those who have failed everywhere to secure relief by the usual methods.

Cases of chronic disease of deep type regenerate when freed from continual toxin formation, not occasionally, but as a rule.

Surely the same means that will restore the sufferer from chronic organic disease would much more easily prevent this same condition.

The idea will never be popular with the present medical profession, just as it never was popular with the organised profession since its promulgation over a hundred years ago, by such men as Jennings, Trail, Walter, Page, Tilden, for the simple reason that to adopt such a view, generally, would mean the near extinction of medicine, and leave surgery but the correction of deformities and the repair of wounds.

No profession seeks to eliminate itself, nor does it view gladly efforts to teach its adherents the things that would make them

independent. This is but natural, as human nature is natural, whether right or wrong.

All we can do about disease after all is to stop creating it daily, as we do by our customary habits of living.

There is no money for medicine in this idea, much less for the undertaker or the druggist, so this class will never be found among those in the front rank of the boosters for such an idea.

Disease is not what we have always been taught to believe it, but is merely the evidence Nature puts forth in her struggle to keep her own internal affairs in good working order.

No Naturopath ever expects to lose a single case of acute disease of any kind whatever, unless before he gets possession of the case some suppressive form of treatment has been administered, and usually it has been, only the complete failure of the accepted treatment opening the way for him to come in at the last.

The writer is not a Naturopath, but an M. D. of forty years' experience, but who has seen the hopelessness of the medical plan of treatment from the very first, and who, while retaining his connection with the regular societies, is not afraid to speak against their viewpoint on disease and their means for correcting disease.

As long as people can be kept believing that something can be done vicariously for their illnesses they will never accept the view that the only effective treatment for disease is what the body itself can do, and it is only after much failure that they are willing to undertake a self-applied form of treatment, and this usually with much misgiving and little faith. The many recoveries due to self-applied treatment cannot be attributed to a faith that usually does not exist, but to the discontinuance of the causes of their condition. They are taught how to avoid these in future, and they are few who after such an experience ever return to medicine or surgery.

When the body has reached its limits of toleration for accumulating toxins it begins a housecleaning process that may take various forms: diarrhoea, headache, cold, skin eruptions, abscesses or boils, rheumatism, inflammation of special organs, catarrhs, chills, fevers, anything that we recognize as acute disease, and it is here that one should know whether these processes are normal or whether they are abnormal and to be counteracted.

Every such manifestation is but Nature's expression of a necessary detoxication and should be encouraged rather than suppressed, unless we wish to run the risk of interfering with Nature's processes.

During a protracted fast, or after long periods on the raw natural foods, there will occur a surprising array of symptoms that accompany Nature's unloading process.

If mercury has been taken formerly in the suppression of symptoms this will eventually work out through various abscesses, even through a very severe pyorrhoea, as the writer has often observed.

If a common itch, scabies, has been suppressed earlier in life, this too will show as an acute infection of the skin.

Whatever ailments have been suppressed by former treatment of some previous disease will again show, and the body will find no rest till the suppression has come to light and the disease thrown off.

Smallpox is nothing but this very same effort to throw off waste matter, and it has been said that one who has a severe attack

of smallpox will recover from organic chronic disease afterward. And why not? As a rule, no other disease relieves the system of so much corruption.

The body will keep clean if not interfered with, or if the intake of materials every day in the form of food does not continually pile up greater and greater eliminative tasks, till Nature's outside capacity is far overdone, and no system could possibly wrestle with the mass daily created.

Sir William Arbuthnot Lane, one of the really great surgeons of the world and of all time, said not long ago, when entertained by the staff of Johns Hopkins Hospital and Medical College: "Gentle' men, I will never have cancer; I will never die of cancer; and what I am doing to prevent it any one can do."

He said at another time: "After all, there is but one disease—deficient drainage."

Here is a man who understands that all the causes of the various things that we call by many disease names, is one thing, and that deficient drainage, which means that we create various wastes every day in the body, and in excess of what we can fully eliminate.

Here is all there is to disease, all in a nutshell, and expressed by a really great surgeon, who has all his life seen only the end' results of disease as they were presented at the operating table, yet he knows what causes disease of all kinds.

Dr. George W. Crile of Cleveland, one of the greatest surgeons of our own country, said not long ago: "There is no natural death; all deaths from so-called natural causes are merely the end-point of a progressive acid saturation."

He said the same thing as Sir William, but in a little different form, and he, like Sir William, is a surgeon who sees only the end-results of disease.

Now this is just what disease really is: a progressive acid saturation, a deficient drainage, an inability of the body to keep as clean inside as it should, and what can we do about this except to quit fouling the fount at its source?

If one were adrift on the open sea in a boat, and this were to spring a leak, would it be the part of wisdom to confine all one's efforts to bailing? It would be much more to the point to stop the leak, if possible, and then bailing would get one somewhere.

The leaking of the boat is but a symptom of the presence of a break in the bottom, the bailing but tampering with the symptoms: concentrating on the inflow of water and ignoring the source, while stopping the leak is radical cure.

It is ever so in our consideration of disease, for unless we recognize the source and eradicate it we are doing nothing constructive for the condition.

Now there is plenty of proof that this view of disease as the evidence of Nature's struggle to keep clean is the correct view of the case, for the thousands of recoveries recorded in cases of chronic organic disease through this point of view are in themselves overwhelming evidence.

The sick get well from all sorts of supposedly incurable states when the continual cause, which is always toxin formation and retention, is removed and kept removed.

It would boot nothing to recite these cases, for taking only the few thousands in the experience of the writer these would scarcely be considered evidence by medical authority.

It would be possible to recite many thousands so far in the experience of this one observer alone, while the accumulated data from the many men who have been looking at disease from this angle for much longer periods would, if collected, make a most imposing volume of proof.

The writer does not have the slightest desire to aggrandise himself, for he does not need this, but he does feel that if he is able to stimulate hope in the breast of some one who is suffering from supposedly incurable disease, and to add one straw to the weight of evidence on the side of Nature, he will not have labored in vain, realizing fully that his medical brethren will not take kindly to this effort, and that he may even be persona non grata to his medical societies.

Yet the truth should be told, and only by telling it and reiterating it can it be properly disseminated in this time so sold to worship at the shrine of medicine and surgery.

There is apparent a great awakening on the subject of personally conducted health, and when the time comes, as it will sometime come, when the common citizen realizes that all his bodily ills are self-created, therefore wholly self-controllable, there will be a different state of affairs in our wonderful country as regards health and disease.

When each realizes that he creates either health or disease at the table, then each will think that a certain amount of time and thought and study spent on the subject of nourishment is not a wholly bad investment for any one in any walk of life, at any age or in any state of health or disease.

Surely the writer, after his twenty-four years spent in applying natural methods in the treatment of the sick and the creation of health, would not easily go back to the archaic viewpoint of medicine, with its unavailing treatment of a condition or conditions for which the body is itself wholly to blame and which the body alone is able to correct.

His experience is not unique, for it has been duplicated by so many other men that he feels he has nothing new to offer, and only excuses himself for this effusion by the thought that somehow the public is still very much in the dark on the subject of self-help and that there is need for yet other books dealing with the subject from this standpoint.

CHAPTER V

HOW DISEASE ORIGINATES

How does disease originate in a body created and brought into the world in supposedly normal condition?

At what age does disease show?

How long may disease continue without destroying life?

Every infant born of parents even approximately normal should be in perfect condition when first it opens its eyes on a new world.

That this is not the case we too often realise, but it is no fault of Nature that this is so, for you still cannot make something out of nothing, nor can Nature create the essential chemicals out of anything less than the elements which enter into these, so in the case of a shortage of these essential elements in either or both of the parents Nature is balked in her efforts to create a perfect specimen of health.

Deficiencies in heredity may vary from slight catarrhal manifestations at or soon after birth, to hare lip or spina bifida or other physical incompleteness.

All such are evidence of deficiencies in the parents, particularly in the mother, as laboratory experiment in the feeding of animals so clearly proves.

While the grosser deficiencies in development are not correctible, yet it may be safely stated as a fact that anything less than these is no bar to perfect growth and development from birth on to adult life, if proper feeding habits are faithfully followed.

As a general proposition every child with vitality enough to be born alive has vitality enough to grow up into a healthy adult, barring only these incompletenesses of structure before referred to.

Going back again to the statement of Sir Wm. Arbuthnot Lane, before quoted, all disease is "deficient drainage," we will readily see that accumulations can easily occur in the recently born infant, through gross errors of feeding almost from the very day of birth.

Nursing too often or too much, even supposing the milk of the mother to be all that milk should be.

Perhaps the most frequent cause in the new born, however, is the fact that a toxic mother cannot furnish anything but toxic milk for her infant.

Nature is most kind to the foetus during intrauterine development, for whether or not the mother can spare the necessary building materials for her developing infant Nature sees to it that she robs herself in its interest, which accounts for the fact of falling hair, decaying teeth, declining complexion, so common during pregnancy as to be thought a part of this.

However, Nature cannot make the mother give up more than she carries, and so runs short of building material at times, resulting in incomplete development of the foetus, for even Nature cannot make something out of nothing.

At birth the infant begins taking its nourishment from the mother, as is the case with all mammals, and here again Nature

cannot make something out of nothing, for what the mother does not have Nature cannot make her give up, and the deficiencies are transmitted to the infant in the form of deficiency conditions of all kinds, chief of which is, possibly, rickets, or deficient lime salts.

But granting that the mother is replete with everything that the infant needs, there is still wide opportunity for the toxic state to develop, for it is characteristic of every mother to feed her infant more frequently than is either necessary or advisable, with the result that wastes are created from excess nourishment, and more or less of these retained.

Watch Nature trying to get rid of this excess through regurgitation of milk or the passing of curds, even diarrhoeas.

The very first particle of milk that is regurgitated, the first curd passed through the bowels, is evidence of this overfeeding that should warn the mother that she should cut down on the frequency or the length of the feeding periods.

Every diarrhoea is evidence of gross over-feeding, with a fermentation of retained dejecta in the colon and a condition developing there that is intolerable to the system.

Yet it is characteristic of the body to seek to adapt itself to every condition, and in time tolerance for these acute overfeedings will develop, so that perhaps no more diarrhoeas or vomitings occur, but this is no evidence that the same process is not going on at the same old rate.

In spite of this the baby grows, perhaps at the usual rate, with more or less colic and discomfort, but still it grows, the mother is satisfied, for it is an average baby; the doctor is satisfied if no definite pathology develops, and the thing is allowed to go on indefinitely.

It is small wonder that 200,000 infants in our country never see the end of the second year of life, only those who have been able to develop tolerance for the sins of overfeeding or deficient feeding being able to reach the period when the teeth have developed fully and there is opportunity to feed on the outgrowth of the soil, Nature's food for everything that grows, after the nursing period has passed.

Here again there is danger, for the average pediatrist believes that the growing infant should have plenty of concentrated protein foods, animal foods, such as meat or eggs, and insists on the use of one of these each day, with the result that the infant starts early in life this accumulation of protein debris that furnishes the highest toxicity of all food residues.

Here again Nature falls down, in the fact of too much and too great a handicap, for 400,000 of these little ones never see the tenth year, through inability to develop tolerance fast enough to keep their tissues clear of the accumulating waste, or build resistance that will take care of this in the body.

The usual child is either dead or largely immune to the effects of acid accumulation by the end of the tenth year, so that mortality statistics show less deaths between the tenth and fifteenth years than earlier, but this shows only a survival of the fittest, and does not argue a correct manner of life.

If the tolerance for overfeeding and deficient feeding is not created early in life there will never be the large appetite that urges

frequent and heavy eating later on, and the body will be freed from this great danger.

Even with the usual developed tolerance for toxins, there is all through life, usually, a rather frequent occurrence of acute reactions against increasing auto-intoxication, expressing as bilious attacks, sick headaches, diarrhoeas, vomiting attacks, each an evidence that Nature cannot go on in the face of this accumulating debris and seeks to lessen this total by rapid elimination of the amount above the present toleration point.

This only partially rectifies the trouble, however, for with the years toleration increases, and may rise to such height that no more crises will appear, and the body continues to create and retain increasing amounts of toxins, till chronic disease develops in the form of diabetes, Bright's disease, or failure to overcome some of the transient infections that we call the eruptive or contagious fevers, and many a little grave is filled through just such mode of procedure.

If each acute reaction of the body thoroughly cleaned house there would be freedom from the toxic state, but each one only frees the system down to, or a little below, its acquired toleration point, and again the saturation proceeds, till the system reaches a point where function cannot proceed, and again there is this temporary and partial housecleaning, with temporary respite from the evidences of a toxic state, but without eradication of this.

In a later chapter foods will be discussed freely, but at the present time it is well to lay down the principles of such feeding as will forever end all toxic accumulation, with the idea that reiteration is necessary to impress any unusual fact, such a fact as seems to upset accepted belief and tradition.

Every food that grows out of the ground and edible in the form in which Nature produces it is natural food, nothing else is.

Natural foods in their natural state, if eaten in not too great excess, and combined in such a manner as to remove all chemical incompatibilities, are sufficient guarantee against toxin formation, and will insure long life in perfect working efficiency.

Disease develops always and only from violation of these simple tenets of Nature's immutable laws, and can in every case be obviated by strict adherence to these.

Nature does not, evidently, design the use of starches or sugars till after full development of the teeth, as she makes no provision for conversion of these ordinary sources of energy till after this period is reached.

The saliva of the infant below the age of full dentition contains but a trace of ptyalin, just sufficient to convert the milk sugar to primary dextrose and no more, which should be very good evidence that not till full dentition should the concentrated starches and sugars be used, as they will clearly never be properly split before reaching the stomach, where no provision is made for their further conversion.

Yet it is common practice always to add gruels, malt extracts, or even mushes to the food of the infant even before the end of the first year, and it is to wonder how much fermentation and acid formation result from this introduction of fermentable material that cannot be perfectly digested till after the saliva contains its full quota of ptyalin.

Volumes could be written from the experience of this one observer alone on the effects of this early addition of carbohydrate foods to the diet of the infant before the end of the second year when full dentition guarantees the presence of sufficient ptyalin in the saliva to take care of this highly concentrated mass that is the usual source of fermentations all through life.

Every sort of disorder has responded to the simple elimination of starches from the diets of little sufferers from fermentation before the end of the second year, from eczema to adenitis, and such a thing as adenoids will never be seen in the absence of this too early introduction of starches and sugars.

But leaving out the question of too early introduction of this carbonaceous group we still have the menace of a too high standard of protein intake, one egg a day being far too much protein for any child of less than eight or ten years of age, and if such child is taking a quart of milk daily there will be in this alone a very considerable preponderance of protein above all possible body needs.

Keeping well, avoiding the formation of disease or the conditions that predispose to disease, is a matter of stopping this tendency to accumulation of debris of acid character, from either too much concentrated protein or the fermentation of the carbohydrate foods, chiefly, so that instead of being under compulsion of developing a progressively higher tolerance for acid debris, we inhibit the formation of this entirely, or nearly so, when the system will not have to divert so much energy to the creation and maintenance of this wall of resistance.

This is not difficult, and the means necessary will be thoroughly developed in later chapters so that no mother may ever again say that she does not know how to feed her child so as to guarantee freedom from illnesses of all kinds.

"Just as the twig is bent the tree's inclined," and care in the early period of growth will insure good health later in life, as habits of eating formed before the seventh year are very likely to be permanent throughout life.

This puts on each parent, particularly on each mother, a great responsibility, for on her early training in diet will depend much of the future efficiency and development of her child. And it is true that this responsibility devolves chiefly on the mother, for to her is left the purveying of the family foods, their preparation and selection, and their mode of combination. If every mother could take a course in foods and their uses the world would promptly feel the change in its state of health, its efficiency, and its happiness.

We are living in a great age, and never before was the desirability, not to say the necessity, for good health in more urgent need. The high degree of civilization has carried us very far from natural conditions, and if we but know how to eat every day we need flunk none of the enjoyments of modern life, for we will be safeguarded against physical failure by a proper application of the food knowledge now available.

Disease will have no opportunity to develop if we are daily applying only so much as is now definitely known of foods and their uses.

These are not loose statements, but are the result of twenty-four years of daily application of this knowledge to every condition

of the body, at every age and under every circumstance of environment and occupation.

Disease is absolutely unnecessary if we but give heed properly to our daily nourishment, and if nothing else has ever been proved but this statement it is enough.

The blessed thing about regeneration from deep seated organic disease is that this requires but a small fraction of the time represented by the degeneration of the many years preceding, and even if this were not true, the rewards of faithful adherence to the proper rules of diet would be sufficient incentive to induce any one who understands these facts to wait patiently for the new birth that is as certain to follow as that morning invariably follows night.

Exception need be made only in those cases that have so far degenerated that no time remains in which regeneration can occur, and such cases must be far gone indeed before hope is lost, for cases do come back to a high degree of efficiency and health very long after all hope had previously been abandoned.

What has modern medicine to offer here? Nothing but the age-old statement that "the cause of disease is a great mystery," with temporising, symptomatic forms of treatment only, or radical removal of diseased organs surgically, no phase of which touches causes of disease in any manner or degree.

To wait till disease has progressed to recognizable form, till it has developed a definite pathology, is to sacrifice needless time and opportunity, and such manner of treatment is never anything more than symptomatic, never can be anything else, in the very nature of things.

Such is a mere locking of the stable door after the horse has been stolen; a feeble gesture.

This is not in any sense a knock at medicine as an art, but merely a recognition of its extreme limitations as a science.

Science is truth, always, and if not truth then it is never science, for science is always demonstrable truth.

It is not difficult to understand the disinclination of organized medicine to pry into these remote causes of disease; their solution would very largely eliminate the physician from our scheme of life, a consummation not so very devoutly to be wished from the standpoint of medicine.

Dr. Leonard Williams, an eminent physician of London, in speaking of the omissions from medical training in the matter of proper dietary and nutritional study, says that for these omissions some one should be hanged, but who?

We cannot hang a principle or a system, and whom shall we select as the individual for this perhaps needed execution?

However, the light gives evidence that it is about to break, and if official medicine will not harken to the voice of protest on this question of adequate training, the attitude of an enlightened public will force such change within a very few more years, else the medical colleges will have to close their doors.

No one will willingly commit daily suicide, unless already insane, and when the public fully understands the origin of its ills there will be a great stirring and effort among them to go to the bottom of the causes of disease, causes that even the heavily endowed institutions, such as the Rockefeller Institute, have never yet been able to elucidate.

When the average plain citizen understands that his troubles are made and unmade at the dinner table daily, he will begin to attach to the subject of eating something of the importance that belongs to it as the most fundamental consideration of life.

The usual attitude of the average physician toward the subject of diet is to attach little importance to it, and the patient is told, in answer to questions as to what he should eat, to "take plenty of good nourishing food," the very thing he has always done, else he would not be in such condition as to need medical advice, that is, if he takes the usually accepted idea of what constitutes "good nourishing food."

The average citizen thinks that because he has always eaten nothing but what he has been taught to believe are plain, good nourishing foods, he, therefore, should be immune from disease. He will usually take great credit to himself that he has had no bad habits, has never chewed tobacco, never smoked, never used alcoholic intoxicants, and usually has a very clean record for marital virtues, yet here he is, sick, after living on meat, bread and potatoes, with perhaps pies and coffee, the usual good, plain American food of the average family.

What is the use in telling this man to keep well nourished when he has been living on what he understands to be good nourishing food?

It would be difficult to find a combination of foods that, eaten at the same meal, would exceed this combination in acid-forming possibilities, nay, acid-forming potentiality, for such cannot be eaten without an absolute certainty of acid formation.

It is not strange that the average citizen becomes confused in the face of directions to "keep well nourished."

A diet of this type cannot be overcome by any amount of exercise or outdoor living, accounting for the fact that farmers, who live on the average about as described above, show the same line of deficiency and degenerative diseases as do their brothers who live in cities and depend on restaurants or hotels for their nutritional needs.

The writer was called some time ago to Hartford, Conn., to consult with two physicians there, and, not being able to get the two consultants together till afternoon, was entertained by a former patient for lunch at the Hotel Bond, one of the best hotels in New England.

Neither the patient nor the writer had had any breakfast, accord' ing to fixed habit, so when seated at lunch nothing was desired by either except a glass of milk and one or two oranges.

This meager meal greatly perturbed the waiters, and three times we were served with white bread, rolls and butter, which were as often sent away.

The consultation finished, we returned to the hotel for dinner, the time being about seven-thirty, and when the patient was again asked what he was going to have, he replied that anything that was good enough for the writer would suit him very well.

The bill was looked over, very tempting and appetizing as a whole, as measured by conventional standards, and the selection was green pea soup, from fresh peas, a double order of combination vegetable salad and a piece of Swiss cheese, with apologies for the meagerness of the selection.

The patient replied that this was all he would wish, and the order was given, and again the waiters were in apparent distress on account of the very light order, with all of the usual standard foods left out, offering several suggestions as to the items on the bill that were particularly good on this day.

Again we were served without order with white bread, rolls and butter, which always were promptly returned, and when the meal arrived the head waiter stopped at our table and said to my friend: "Harry, where did you get this idea?"

The friend nodded in my direction, and the waiter said: "Where are you from? Boston?" Being assured that the writer was from Buffalo the waiter was asked why he thought me from Boston, and replied, "This meal."

Asked what was the matter with this meal, he said: "Nothing at all. That is the best meal I have ever seen ordered in the Hotel Bond, and I have been head waiter here for the past nine years."

It was then the writer's cue to become curious as to the reasons for such opinion on the part of the waiter, and he was informed that this man was a Frenchman, which was evident, and that his hotel training had been taken in France, and in France, when meat, eggs, fish or cheese were ordered (that is in the strictly French hotels, not those that cater to tourists) no starchy or sweet food was offered, as it was not the custom of the French to combine in one meal these dissimilar foods.

This was grateful news, for the writer was under the impression that the evils of this combination were known to but himself and a few others of the elect in matters of food selection and combination.

The tourist hotels cater to the tourist travel, which is very largely English and American, and it is their boast that no one need know he is traveling in a foreign country, for he can be served there with the usual foods of his home country.

This very common knowledge in France no doubt accounts for the excellent health of the average French peasant, and for the fact that outside urban France the physician is rare, towns of quite considerable size often not being able to boast the presence of either physicians or hospital facilities.

In America we have always combined these very incompatible foods, the concentrated protein group with the starchy or sweet foods, the carbohydrate group, which require alkalin conditions throughout for their digestion, while the concentrated protein group requires and compels the presence of hydrochloric acid for the first step in stomach digestion, so guarantees inhibition of the carbohydrate digestion, always.

Arrested carbohydrate digestion means carbohydrate fermentation, in the presence of heat and moisture, and we get it in every case, whether we are aware of it or not.

Fermentation of carbohydrate foods means production of the carbon group of acids, so we have created much acid every time we make such combinations.

This is of such vital importance that it will be gone into more fully in a later chapter, but its mention in this connection will serve to fix it more fully in mind as one of our chief sources of acid formation, and it is the writer's hope and intention that all of the common and usual sources of acid formation will be so firmly fixed

in the reader's mind before the end of this little book that eating will become a natural process, without the painful indecision as to the bill-of-fare for each meal, a thing that takes away much of the joys of the table.

All food that is not refined and thoroughly denatured is good food, if combined in such manner as to prevent the usual fermentation and acid formation, and all may be eaten as freely as is required without fear of harm, if the simple rules of selection and combination are kept constantly in mind.

This is how disease originates, as outlined heretofore in this connection, starting with the feeding of the baby and continuing with the common mistakes of the adult, not at all hard to understand or to avoid when one gives it but a modicum of thought.

CHAPTER VI

DISEASE AND CRIME

Criminologists have long contended that every habitual criminal is sick, not the impulsive criminal, but the habitual.

There is every reason to believe that this is a reasonable contention, for why should one commit crime if he is as well as he should be?

To be well is to be happy, and when one is happy he has no evil desires or intentions.

Careful examination and complete Bertillons of many thousands of life prisoners furnished sufficient evidence of this statement to prove it well, for these men were not in normal health, nearly all of them exhibiting major deficiencies, and all of them exhibiting minor ones.

The teeth were in poor condition nearly always, the bony development was deficient, the shape of the head and the lower jaw showed deficient development, the palatal arch was too high and the teeth crowded.

This is to be expected in the criminal, for he is such because he feels that he has always gotten the worst of it from the world, and seeks to get even.

Resentment for what one believes is less than his due is a motivating impulse toward recrimination and revenge, and is a state that is directly bred by substandard physique.

When one is as perfect physically as he should be, he is consciously a master of his fate, and defies the world to give him the worst of it, for he feels himself equal to any circumstances that may be in his way in achieving his ends, without resort to weapons or stealth or subterfuge.

Individual cases have come to light of prisoners, some of them life convicts, who, while serving life sentences, have stumbled on health literature that so changed their whole lives that in spite of the imperfect fare of the average penal institution they have remade themselves, and have told the world their tale in most convincing manner.

It is a pity that such a one could not in this way secure his freedom, for henceforth he will be free from criminal instincts and should make a more useful citizen than the average outside compulsory durance.

It is small wonder that the average prisoner leaves the confinement of a State penitentiary worse for his incarceration than before his entrance, for he is there thrown in with the dregs of society, and fed almost always on the cheapest of foods, consisting largely of denatured stuff, white bread, boiled vegetables, some meats, with but little natural food in the form of greens and fruits.

If this opportunity were embraced by organizations for the uplift of the criminal it would be possible to reform all of these men who are not hopelessly degraded, for to achieve new health is possible to any one who is fed properly for a considerable time.

It is not to be presumed that deficient and abnormal feeding will make a criminal of any one who suffers from this, for it is not natural for some to feel criminal inclinations, so deficiencies of deep type may never show abnormal tendency to ways that are dark, but, other things being equal, the deficiencies may be the determining factor in shaping a career of crime; yet the percentage of these is but a fraction of that found in disease where no tendency to crime shows.

Teachers note that the incorrigible boys are physically abnormal, in nearly every case, no doubt from the very same causes: a physical state that almost makes normal thinking and feeling an impossibility.

The habitual criminal is recruited largely from this same class of incorrigible boys, carrying the deficiencies, which may be wholly from early feeding habits, into adult life, and continuing the condition with which he grew up.

It would be a laudable undertaking to institute a series of tests on the feeding of the habitual criminal, if some enterprising state would turn over an institution for this purpose, and it is the firm belief of the writer that a very large percentage of the inmates could safely be turned out again into society, if this experiment were continued sufficiently long to inculcate a new habit of food selection and combination.

Perhaps the ideal place for such a demonstration would be a farm for incorrigible boys, a house of correction, for this would give opportunity for making good the usual deficiencies before growth is completed, and at a time when habit is more easily and permanently corrected.

If some society would interest itself in this work it would be doing far more for the future good of these boys than interminable confinement and moral training without this dietary correction.

To be well poised always, the state of mind closely depends on the physical state.

So far as the writer knows there has not been to date any really scientific test of this theory in actual practice, though sporadic and poorly supported attempts have heretofore been undertaken for insufficient periods.

To secure at all conclusive evidence in such feeding experiments the period should not be less than six months for boys and twice this period for grown men, as shorter periods, while showing some physical regeneration, of course, would not have continued long enough to affect habit permanently.

Not only should the feeding be changed in such a way as to include little but natural foods in vital condition, but this should be accompanied by such course of training in food selection and combination as would leave each with a full understanding of the basic essentials of diet. Unless one knows why he is doing certain things the necessity for a continuance of the plan will not have sufficiently impressed itself on the mind to make its continuance probable.

Laboratory experiments in the feeding of the small animals has developed the fact that irritability regularly follows the creation of deficiencies; the inoffensive white rat becoming fierce and untrustworthy, while this same rat, when its deficiencies are fully

restored, resumes its formerly placid temper, and can again be handled without danger of biting the hand.

Those engaged in such feeding experiments have many of them told the writer that they wear gloves when handling these small animals, to fend off the danger of bites, only when the animal has suffered some noticeable deficiency in condition from a feeding experiment that is beginning to show its effects in the changing condition of the animal.

Always when the experiment is ended and the animal regains its former health there is an end to irritability and fear, showing this to be dependent on the state of health at the time.

What is a grouch but one who is out of condition?

No one who is normally nourished is ever a grouch, and to be well is to be free from all tendency to grouchiness.

The criminal is always an ingrown grouch, and his resentment toward a society that he fancies has wronged him is the excuse offered for his crimes, wrongs that are born in his own interior, for society seldom wrongs any one unless he first wrongs society.

Married women are taught that if they wish to get along with their mate they should feed the brute, on the assumption that only when the stomach is comfortably full is a man in good temper.

Irritability of temper is a concomitant of an empty stomach, if this happens to be one suffering from hyperacidity, for surely the gnawing feeling of a hyperacid stomach does tend to irritability.

This does not argue that it is best to keep the stomach filled to prevent the gnawing sensation that is too often mistaken for hunger, but rather to arrange the feeding habits so that no gnawing will ever again occur even when the stomach is entirely empty. Every gnawing feeling is evidence that the stomach contains a very uncomfortable amount of acid, the acid debris that follows the meal, when digestion is well completed.

The writer is thinking of an old man of seventy-two years who was very prominent in the affairs of his town. Business connections brought him intimately into contact with the public, both as banker and town official, and these contacts always dreaded an interview with him, and a favor was not to be asked unless the times and his temper were both unusually propitious.

This really fine old gentleman was a great sufferer, had gone through three distinct nerve breakdowns in the past twenty years, and had acquired certain very wrong habits of diet as a result of what he considered careful study of his digestive capacity and ability.

He presented himself for treatment very grudgingly, seeming to feel that this was to be but another of what he had always considered experiments, and acquiesced in the necessary directions without the least show of faith or enthusiasm.

In two weeks he had forgotten his former digestive troubles, though he was eating daily the very foods he had so carefully tabooed before, and in one month he returned to his place, the personification of good nature. The writer has many times since been thanked by his neighbors, who thoroughly appreciate the change, the complete change, diet worked in this fine old gentleman.

Where he formerly was suspicious in his dealings with his neighbors, he is now affable and pleasant at all times, and his business has prospered as never before, chiefly on this account.

He warned all concerned when he first came in for treatment that both tomatoes and grapefruit were his two particular bete noires, and that either of these would insure him a night of sleepless suffering.

His first meal, after three days of intensive detoxication, consisted of a bowl of tomato soup with a half grapefruit which he indignantly refused, but when put to the test of a good sport he consented to try it this once, on condition that if pain or discomfort resulted the writer was to sit by his bed all night and hold his hand.

The forfeit was accepted gladly, for there was not one symptom of trouble, his former difficulty having always been from the use of either starch or sugar with these innocent foods.

Now, this fine old gentleman was not a criminal, because he was fundamentally honest, but suppose he had not been reared to honesty, what would have been the result?

Financial crimes. Nothing deters such a person but fear of failure, and it is to his credit that in spite of suffering that would have overcome many a less fundamentally honest man, he never was guilty of taking undue advantage of his business associates or the public, expending all his wrath in vehement attacks on every one who came near him.

Even after this rather long life of suffering, he still in a very few weeks could come back to a normal disposition and agreeable temper, and is now one of the best-loved citizens of his locality.

Surely food has much to do with one's feelings, and one's feelings decide his actions; the criminal being under less restraint than one fundamentally honest.

A mother, a patient of the writer for several years, complained bitterly of the incorrigibility of her oldest boy, a lad of about ten years, and requested that he be examined as to his physical condition.

This showed a boy normally bright, but away below his grade in school and continually in trouble with his teachers, who one after another had passed him up as incorrigible, yet for no lack of ability, as he was very keen under questioning when his confidence was secured, and showed a fair degree of interest in his favorite sports.

This boy had always eaten white bread, together with boiled or fried potatoes and meat, the mother having the old-fashioned idea that these "plain foods" were the things to make him grow and to keep him in health.

He was continually unsatisfied, eating of everything that came in his way, usually candy, for which he had an abnormal craving.

His teeth were poor, his upper jaw contracted, with high arch, and the teeth badly crowded and no correction undertaken, as the mother could not afford the expense.

The boy was made to understand that all of his troubles came from the deficiencies in his feeding, and he promised to carry out the changes suggested, while the mother was advised as to the changes necessary in the table.

In six months this boy led his grade; the next year he made up one of the grades missed, and the fourth year was up with his class, and his mother reported a complete change in his condition and

disposition; also his teachers never again complained of his lack of progress or disobedience to rules.

This boy reminded the writer of the white rats who were fed deficiently—irritable, suspicious, resentful, watchful, stubborn and unapproachable in everything, all because he was not as well as he should have been.

A patient had two daughters, one twelve and the other fifteen years of age, the elder fat, lazy, behind with her school work, utterly refusing to join in the sports of the school, and always slow to bed and to get up.

Heavy feeder, of the wrong foods, which she refused to change, and which were plainly causing her condition.

The teeth were still in good condition, but the arch of the mouth inclined to be too high and the teeth somewhat crowded.

She was interested in different feeding habits because she was feeling bad at the time and was persuaded to change her habits on this account.

From this one experience she realised a great uplift in feelings, became an enthusiastic dieter, and in one year led her grade in high school, and was the most proficient student in several sports; all because she felt better.

No one knows the feelings of another, but one can read the physical signs that will predispose to wrong feelings and wrong thinking, and these may safely be taken as evidence of a deficiency that is correctible and that may be ruining the life.

It means nothing that the subject may be large and well-formed, for deficiencies may have occurred after the frame was fully developed, so these physical evidences do not apply so easily after growth is fully attained, but one will carry in the mouth evidences of deficiency that can be read at any age, such as gingivitis, or inflamed gums, decayed teeth, pyorrhoea, a tongue deeply fissured or heavily coated or bearing the indentations of the teeth on the margins. All these evidences indicate a system well saturated with acids, from deficiencies of the normal alkalin salts, and such a body is far below the normal, maybe far enough to impair greatly the mind or the disposition or to cripple any effort to think normally.

The teeth and mouth development of the habitual criminal is substandard, and indicates that deficiencies have existed long and progressed far, and should be examined in every case with a view to correction of the evident aberrations of nutrition.

When the young man or woman, the boy or the girl, is first convicted of a crime, when the first jail sentence is pronounced, it is generally regarded by the mass of society that here is the beginning of a life of crime, for it is so hard to get back that few have the hardihood to attempt it, and crime then seems to be the elected course.

If these cases were taken at such a time and subjected to thorough examination, with particular attention to the evidences of acidosis or deficiency, a golden opportunity would present itself to make this the last offense against society by starting a course of regenerative diet that would surely make good the deficiencies within a very few months, and open up a new world of enjoyment and good feeling for one that might otherwise drift from bad to worse, as is generally the rule.

Too much attention has in the past been directed to spiritual instruction with nothing done for the motivating cause of crime, the physical state.

It is hard to argue one suffering bodily discomfort into a better spiritual state; rather first relieve the physical handicaps and then the spiritual will easily take care of itself.

Morality for morality's sake is a hard road, and so much depends on the state of the feelings, and these so largely on the physical state, that it is little wonder that so few rescues from a life of criminality are recorded, even considering the army of rescue workers that is giving its very self-sacrificing life to this work.

One must have a strong incentive to work the change in desire that must come in leaving behind a life of crime and adopting one of morality, but such incentive will supply itself when a normal body supports the mind.

When one is as vital as one should be and can be, all the world looks good, suspicion is gone, evil desires seem to have no place in one's thinking, and it becomes easy to be good.

It is not from such states that crime develops, and, if the truth were known, the habitual criminal is more often to be pitied than blamed for transgressions against a society that he has come to regard as his enemy.

Here is a field truly almost untouched, because previous efforts along this line have not included the later findings of science in the matter of nutrition; and what more basic problem can society have than the eradication of criminal tendencies?

The full cooperation of the State would have to be secured, in order to have a perfectly free hand and sufficient time to make such tests conclusive, and if there were any way to secure the interest of such an impersonal thing as the State it should be done, for surely here is a field that deserves a very thorough cultivation.

Too often the criminal is such from mere impulse or accident, and even such will feel afterward the hopelessness of an attempted come-back; yet many of these do become, after a term in prison, not only useful citizens, but trusted employees or officials, and convince any one that they are not habitually inclined to crime, but have been the victims of circumstances over which they did not believe they had complete control.

The criminal is a sick man, and this may be accepted broadly as a fact, so he should be treated as a sick man first, and given in this way a chance to reform, after which he might be termed a chronic enemy of society and banished or confined where he can do no further harm; but surely, if he is a sick man, he should first of all have a chance to get well, which would in all probability mean a moral reform, as his disagreeable physical promptings subsided.

CHAPTER VII

MAN A TRINITY

There is an old German saying: "Alle Gute Dinge sind Drei," or all good things are three.

We worship a God represented by a trinity, the Father, Son and Holy Ghost.

Man, made in the image and likeness of God, is also a trinity, consisting of soul, mind and body.

The soul is the head man, the first man, the ego, the individual, the personality, without which you would not be you, nor would I be I.

The mind is the second man, through which the soul or the first man expresses, the soul's only means of expression.

The body is the third man, the physical, visible part; the means by which the mind expresses, also its only means of expression; its only mode of contact with environment.

Now these three are one, just as the Godhead is one, each making up a part of this individual that is called man.

"The body is composed of many members, yet is one body."

"If one of the members suffer, all the others suffer with it."

We recognise the body as an indivisible unit, a community of closely grouped and interrelated organs, tissues and cells, each an individual, yet so closely related that no one can even exist apart from the whole.

Medicine has too long viewed these various organs as unrelated, or loosely related, units, and has been inclined to treat each more or less individually, not realizing that we are such an indivisible unit that if one suffers all the rest suffer with it.

The body is the most wonderful example of widely diversified function in one indivisible whole that could be conceived, and it must be treated always as a unit. What is good for one part is good for all, what is bad for one part is bad for all.

If the toe is affected by gangrene does not the whole body suffer with it?

Not only is the pain reflected to the whole man, but the absorption of decaying material has to be taken care of by the whole man: the loss of appetite, the headache, the nausea, the fever, the chills; yet only the toe is to the sight affected.

A felon appears on the end of the least important of the fingers, and the same thing happens: chills, fever, absorption, infection, pain, loss of appetite, perhaps nausea, all shared by the whole man.

We make a great mistake in considering individual organs or regions in our considerations of disease, for disease is intrinsic to the whole man, expressing perhaps in the toe or the finger, perhaps the liver, the lungs, the heart, the digestive tract, all parts of this whole man who is to blame for the entire disturbance, because he is in some way outside the law and must be brought back to regularity before any part can hope to heal.

This is just how Nature does the thing, for she makes the whole man suffer; she purges or vomits him, she takes away his

appetite, she arrests his usual functions, till she has cleaned up the local evidences of disease.

When the whole man falls victim to smallpox, now nearly an extinct disease, this is just what Nature is doing to the man as punishment for his sins in so fouling his body that such a disease can get a start in it. She gives the whole man a violent chill, followed by a very high fever; she takes away his appetite completely, not only so but his taste also, to make sure that he will lay up fully for repairs; she produces a violent reaction or oxidation in the body that burns up and reduces to eliminable detritus much foul and effete material that when ready for expulsion is extruded through the skin, first as tiny red points, growing rapidly into vesicles, soon turning to pustules, and when this stage is reached the whole man's headaches and pains and fever decline, and he begins to feel at once much better, though even yet his appetite does not return, nor his taste, and these may be absent for as much as a week.

This is to insure freedom from former dangers of eating, which have produced the necessity for housecleaning in the form of a skin eruption, the only means by which this retained filth would be extruded from the body.

Now we have always recognized the fact that following a fairly well developed case of smallpox, the whole man was in much better condition, former chronic or organic diseases in many cases leaving him, showing that his physical part had cleaned house and gotten into living condition again, able to go on with its functions almost normally, functions that were formerly interfered with by the collection of waste that found exit through the skin during the attack of smallpox.

Smallpox will be seen in this light as a salubrious affair, as it is, for it is a friend to the whole man, just as all other disease if allowed to take its course, for each disease is the evidence of Nature's efforts to clean house, and is never the enemy to the race that is pictured by the understanding of medicine, and for this reason there is never any occasion for "warring against disease," as medicine is pictured as always doing.

Now this is how the physical man, the third man, cleans house. If we can accept the Christian Science viewpoint, it is the first man who cleans house for the third man; but we do not care what relation these three entities bear toward disease for we do know that through the whole man there is a renovation that brings better conditions afterward, and if this same foolish man did not start right in again to create the very same conditions, he would be permanently benefited by the cataclysm just passed through.

We habitually misunderstand both the nature and the object of these acute cataclysms that we call disease, believing them something to be combated, when they are each and every one the evidence of the necessity and the occasion for a housecleaning on the part of the body, and should never be interrupted, but, if anything, should be assisted so far as this can be done harmlessly.

We can give the body but slight help in its task of readjusting its internal affairs to its own desire, for we dare not use means of any kind that will interfere with the arrangements the body has instituted for the purpose of readjusting its internal affairs. The safest plan is usually to stand aside and watch Nature at work.

If we believe the Bible it is only the physical or third man—the house in which we have lived while on the earth, and in this particular incarnation—that dies, the soul and mind continuing to live on under conditions in which there is no further need for a house or means of contact with environment.

Now it is essential that this third man be in good condition at all times, for he is the only means of expression of the second man, just as the second man is the only means of expression of the first man, the individual.

The intelligence of the second man, or the instinct or subconscious supervision of the first man, should be sufficient to keep this third man in order, and would be were the man in a normal environment, untouched by custom or habits; but the trouble is that this man has formed habits that largely govern his actions at all times, and when these habits have gradually led him into wrong methods of refuelling his machine, he is up against the problem of either changing these or suffering frequent readjustments. He gets his internal works so badly mussed up and badly clogged with debris that this third man is not in condition to express adequately the higher possibilities that the second man wishes.

You are no doubt familiar with the parable in the Bible of the man who left his house and went into a far country, and when he returned he found it empty, swept and furnished anew; but he took unto himself seven other spirits more wicked than himself, or than he had formerly been, and the last state of that man was worse than the first.

It is even so with our triune man, for during acute illness of severe character when he nearly approaches the end, he leaves the body and travels into a far country, during the delirium of a severe typhoid or pneumonia, perhaps, and when he returns to his house, he verily finds it empty, swept clear of waste and newly garnished. Yet, what does he do? Even as the foolish man in the parable, for he celebrates his return to health by a jollification that reduces him to a still worse state than before; not always, but too often.

If he would but seize on this opportunity as a new start he would be in wonderfully better case than before his departure to the far country.

Cases might be recited literally by the thousands to prove that the last state is better than the first for a time, but ultimately the last state is worse than the first, always from a return to the causes that made the first state bad.

If this parable was not meant to illustrate man in his triune relationship to himself it at least furnishes a splendid parallel, for it is even so to this very day.

Truly if one part suffers all the other parts also suffer, and if the physical man suffers so does the second or mental man, and through the suffering of these two the higher self also suffers.

Only a nearly normal body can adequately express the wishes of the mind, as only a mind freed from the handicap of an abnormal body fully expresses the higher aspirations of the first man, the soul.

There is a law of the great mass law of compensation, or a tenet of this great law, that provides that in so far as one body acts on another, in just so far is this reacted on by the other; that is, action and reaction are always equal.

If it is true that the spiritual man is reflected on the mental state, as we all know to be the case; if it is true that the mental state is reflected on the physical, as we all know to be the case, as where the physical man is literally wrecked by mental stresses, then it must be true that the reaction is equal the other way around.

It must be true that the physical man reacts on the mental and the mental on the spiritual, else this great law is a myth.

It is true, as we can verify by watching the effect on the mind of purely physical states, instances of which must easily occur to any one.

Now do you see the connection between an inferior physique and crime?

Keep in mind that action and reaction are ALWAYS equal, and you will never forget that the state of the body reflects on the state of the mind, just as surely as vice versa.

Now here is where this arrangement of a trinity of individual and yet unanimous entities works out wholly in favor of the man.

We have the physical state absolutely under our own control and will to do with as we choose, else we would not be men and women, and working through this controllable physical man we can achieve every sort of mental and spiritual regeneration as we choose.

We can choose to treat the body in such a way as to bring it to a normal perfect working machine, a fit temple for the mind and spirit, and we can steadfastly stick to this till we have proved it.

It is pitiable to watch the struggles of a conscientious young man who very much wishes to be good, yet whose bodily desires are making of his fight a tragedy, when all the time the thing that stands in his way is a very imperfect body, one that carries waste of such character as to impose continually on his mental and spiritual parts a handicap that is all but insuperable. He should go into a far country and stay a while; then when he returns he should accept the improved conditions with thanks and seek to improve still further on them, instead of returning to even worse conditions than before.

All the desires of life are the result of habit or training, with the two exceptions of feeding and the sex relation, which are common to all animate life, and these being fundamental to the species are to be respected as necessary parts of our existence, the things by which the race perpetuates itself.

Only in these two things are we free to consider ourselves privileged to follow desire, but (and here's the rub) these very fundamental desires are the surest to undo us if they too are allowed to fall into habit.

Habit should be rigidly separated from both of these vital functions, for we should take nourishment when we need it, not when habit dictates the hour or the menu, and the sex relation is wholly for the propagation of the species, not something to be gratified ad libitum.

In these two ways more than in all others do we wreck this third man, the body, for we are what we eat, daily, weekly, yearly, and we cannot get away from this fact; also we ruin the body almost as surely and often more quickly by the usual sexual excesses, depraving one of the most beautiful of all our endowments by indiscriminate excesses.

Venereal disease is not the greatest danger, though it carries its punishments closely following on the indiscretion, but not always.

The greatest danger is in the physical deterioration that is the direct result of a too free indulgence in the sex life.

Psychiatrists, who deal with mental states wholly, and who so frequently appear in mental cases in the courts of law, tell us that by far the greater number of insane are so because of an aberrant sex function, uncontrolled desire, depletion of the nerve structure and function by overindulgence in sex relations or masturbation, and no doubt they are correct in this.

It is complete misunderstanding of the sex relation and its object that is the nearly universal cause of marital disharmony. This is admittedly true.

This third man is equipped with a wonderful set of glands so interrelated that the loss of any one of these will wreck the function of the entire chain, throwing them into imbalance and disharmony, and among these the sex glands are perhaps preeminent.

All these so-called ductless glands, or endocrines, secrete agents called hormones, catalysts, stimulators of function, and it requires all of them to keep the machinery going smoothly at all times.

The sex glands of the human secrete not only the ova or sperm cells to promote reproduction of species, but also hormones to enter into this chain of zymotic action to keep every function of life moving at its best rate.

This is their greatest function, that of reproduction being rather incidental to this.

When these glands of reproduction are lost the vital hormone chain is broken, and never again will the man or woman be the same, physically or mentally, for no more will the hormones produced by these circulate in the system to perform their work of stimulation of function.

Watch the rapid aging of the unfortunate victim of the surgical removal of the ovaries, and realize why this is so.

Once this removal was considered quite the thing, but even the more ambitious surgeons are growing more conservative on this subject of wholesale removal of these really vital glands.

We cannot break Nature's chain of protection with impunity, and let us hope that the respect of the surgeon for these little organs will continue to develop till their removal will be but a dernier ressort in the near future.

Now let us not lose sight of the fact that we have the control of this whole triune man under our wills by compelling, as we are able to do, a clean body.

The body, the third man, is completely under our own voluntary control, and, also, keeping in mind the law that action and reaction are always equal, we have already outlined the means by which the entire man can be kept normal.

Remembering what was said in fourth and fifth chapters on what is disease and how it originates, you will see that in order to keep this third man straight you will have to watch carefully what goes into him at all times.

When the Lord turned Adam and Eve loose in the Garden of Eden, food was of importance, and He commanded them to be fruitful and replenish the earth, that is, use the sex function for the

further promotion of the wonderful species that was at last completed.

He further advised them that they should eat of every herb that is upon the face of the whole earth, and of every herb bearing seed (vegetables, greens, grains), and of the fruit of every tree, in which there is the seed of a tree bearing fruit, which needs no explanation or qualification. These were complete and specific directions for feeding.

No mention was made of fire in the preparation of these things for food, for man was then a full grown man, able to live on Nature's offerings just as she presented these.

No mention was made of flesh of animal or fish, nor was the intention implied that these were ever to be used.

Compare these simple directions with the modern menu of the average American family today or with the average hotel menu, and see if there are not grounds for suspicion that the so evident changes in custom in the matter of eating may be made to account for man's decline almost from that time.

Not till the flood have we any record of the use of fire in the preparation of food, or of the use of flesh as a part of the diet of man.

The average of the first ten recorded generations, (omitting only Enoch, who was translated at a tender age) was nine hundred and ten years.

After the great flood the use of flesh appears, also the use of fire in the preparation of food, and when Moses wrote his famous directions for Israel he noted that a man should live to one hundred and twenty years.

Later David, the sweet singer of Israel, reduced this period of average life to seventy years, or if strong, then eighty years, and today we are satisfied with an average age of fifty-three, and are inclined to brag about it.

Is it possible that we have degenerated because we have departed from the original directions for diet?

Surely this third man is but a poor example of what a man should be in either health or achievement, yet we are too easily satisfied because our standards are too low.

If the young man who is struggling with his desires were to go at once to a raw diet of strictly natural foods in their natural state, everything that grows out of the ground in edible form, he would be surprised that before long there would not be the continual struggle, a thing he can easily prove to himself.

If he is impatient and wishes to reduce himself quickly to internal cleanliness, let him fast for thirty or forty days, even as Jesus did in his preparation for his great ministry, or as was so common a mode of preparation in the times of Jesus.

These are the means of purification of this very bothersome third man that lead straight to results, and are not so hard to follow as would seem on the surface to be the case, for this is only in the seeming, and because we are looking at the subject from our present standpoint of conventional habit.

More of this later under "Vital and Dead Foods."

CHAPTER VIII

INSANITY A PHYSICAL CONDITION

For a long time we have been having a very hopeless feeling in regard to insanity, for not only has this been on a rather rapid percentage increase, that is, increasing faster than the population, but also mental defectives, morons, cripples, imperfect births, have all been on a percentage increase that is rather disconcerting, and we have been asking why for a long time.

Dr. John Harvey Kellogg opined not long ago that if the present rate of increase were to keep up for just fifty more years we would not have enough normal brains to take care of the abnormal.

Do not be shocked if you are told that this very same condition comes from the very same causes as all of our other degenerations, for this is a degeneration, at least one of function of the brain, and all degenerations are due to either progressive acid saturation or to the effects of drugs, particularly of mercury.

Does it not seem strange that when the country is so well equipped with everything that should make one happy there is still this acute unhappiness that expresses as insanity?

No doubt nerve stresses do play a prominent part in the production of this state, but these are simply the last straws, a condition of the system being necessarily present before this break occurs that has made it possible.

In other words, insanity does not develop out of a clear sky and all at once, but the causes that have perhaps suddenly culminated in this so-called attack have been forming for years.

The real cause, as is true of all disease, is in the state of the system itself, and has always been so, whether this state is produced by continual and progressive autointoxication or by drugs of character inimical to the brain function.

This conclusion is reached partly through theory and partly through experience, the latter partly personal and partly that of observation.

During the twenty-four years that the writer has been enjoying a really sane manner of treatment of every sort of condition from every section there have been seventeen cases of dementia precox, insanity of those below the point of senility, and these were all admitted through misrepresentation, this being that the case was one of "nervous prostration," perhaps with admission of slight mental aberration that was supposed to be due to the condition of the nerves.

Nervous prostration cases, the usual type of neurasthenic patient, are all queer, all have certain mental aberrations that are unaccountable, so it was not difficult to have such case accepted for treatment, and it was usually not discovered till after the friends had sawed off the patient on our hands that the type was a dementia precox, some of these exhibiting evidences of recent restraint from shackles.

We then were compelled to do the best we could with a very bad situation, but with the exception of five cases that were

unmanageable without restraint all made splendid comebacks; two or three relapsed after returning to their homes (and their former habits, no doubt) while the others definitely overcame their mental condition and developed a high grade of health, which was sufficient guarantee that there would be no relapse without a return to acid-forming habits of eating.

This is but a small group from which to draw conclusions, too small to be sufficient argument, but this is supplemented by observation of a much larger group under treatment of similar scope in the hands of others that bears out the experience of the writer.

Now every one of these poor souls was mentally sick because he or she was first physically sick, and had been for a long time before becoming "queer."

Keep in mind the trinity and see where this works out.

Innumerable post mortems have been performed on the dead from this cause, in fact the usual routine is to perform an autopsy on every case that dies in a State institution, unless the friends refuse this, yet there is no change in brain structure to account for this, except in the paresis cases, supposed to be end results of syphilis, where there is some circulatory change that may be due to syphilis, but more than likely to the mercury that has been used in its treatment.

This is the usual end result of mercurialisation—sclerosis—and it would be interesting to find a case that had never been treated with mercurials, yet died of paresis, and find out if the expected brain structure changes are present.

Psychiatrists say that the element of sex abnormality is the predisposing and usually the exciting factor in the usual case of insanity in more than fifty per cent of the cases studied in the State asylums, and I would like to add to this that the other fifty per cent may be traced to nutritional aberrations which would also include much of the sexual type, as physical abnormalities are behind sexual aberrations to a shocking degree.

So if some psychiatrist will devise means to restrain the sex losses, let us add to that a complete correction of the nutritional state and corner practically all of the insanity at one time.

While it may not be possible to restrain sexual excesses, as these are of such an intimately personal character, we can at least clean up the physical state, as that is within conscious control, especially so in institutions where the patient is fed willy nilly with what is provided by the management.

The condition of insanity is so completely misunderstood, so very baffling to the psychiatrist, that little effort is made to do anything for these cases except to confine them to institutions, to restrain them from doing harm to others, and the percentage of those who recover and return to active life is pitifully small.

Again, if the mental state acts on the physical, to just exactly the same extent does the physical react on the mental, and when we know well that mental stresses do inhibit physical normality, it must be that the reverse is true and the physical state does equally influence the mental.

If even the small number of cases before recited cleared up under a purely physical detoxication and correction of the daily diet, wholly without psychic treatment, or even suggestion, it is to be

supposed that at least a fair percentage of all cases would do similarly.

Only recently, within the past three years, a case diagnosed as dementia precox (or reported by her family as so diagnosed) was brought in for treatment of the supposed neurasthenia, the husband admitting some mental aberration which he described as deep blues or depression that caused a great deal of crying, a not unusual condition.

She was accepted and the husband departed to his home, somewhere in Pennsylvania.

Further examination of the patient developed the fact that she was wholly irrational, could not even answer questions, having both amnesic and ataxic aphasia, cried continually, and required a special nurse to restrain her from throwing herself out of the window. She passed stool and urine involuntarily and apparently unconsciously. She refused food or ate like a hungry dog, bolting everything offered, no matter what its character.

She was obstinately constipated, with foul breath and heavily coated tongue. Pulse was rapid and feeble. Sleep was nearly impossible, even under heavy hypnotics.

As detoxication progressed all her symptoms cleared up, but not for two weeks did she quit trying to escape, even to throw herself out of the window.

She stopped crying before the end of the first two weeks and before the end of the third week she was one of the very sunniest and brightest patients in the place, and unless she returns to her former mistakes in selecting and combining her foods it will be safe to guarantee that her mental trouble will never return.

What did we do for her? Nothing, in a sense, but to stop her from doing the things that before had caused her troubles.

We did use the saline purge freely at first, common Pluto water, a solution of Epsom and Glauber salts, for three days in succession, accompanying these three days with copious quantities of orange and lemon juice, nothing more; and following this three-day period of preliminary housecleaning she took twice a day a full enema of tepid or slightly cool water, to clear the colon and to keep it daily cleared.

Diet after the first three days was limited to the natural foods in their natural state, the fresh fruits and vegetable salads, though because she would not chew her food these were given in the form of extracted juices for perhaps the first week.

No other food of any kind was used, nothing at all was done except these simple things, and the result was that when the body had thrown off enough of the encumbering waste, mentality came back as good as ever, and she returned to her home in four weeks as sane as she had ever been before in her life, and a very bright young woman.

This case is cited as typical of the regime and results where the patient has been at all controllable, and it is easy to see that only a controllable case could be so treated.

However, in the State institutions, equipped with means for complete control, all these things can be carried out even on the unwilling, and without cruelty or force.

All institutions for the insane have been for years stressing methods of detoxication, but these consist of baths, rubs, sunshine,

fresh air, and such modalities, none of which go deep enough to reach a case already well progressed with this condition.

For this reason they have not been able to show striking results, though their statistics do show better results than without using these partially corrective measures.

If a nutritionist who fully understands these essentials of detoxication and properly corrected diet could be turned loose in the average insane hospital with carte blanche to go as far as he wished, there is little doubt that in one year he could empty the place of fully half its inmates, for in one year he would be able to change the physical state of the entire group so that only those rather advanced with degenerative change would fail to show an improvement that would convince any one of even half open mind that the table is the cause of insanity, and its cure.

Here again we see the relationship between body and mind, and we are the more impressed with this relationship, as with each year, more and more evidence is produced of its intimate character.

It has now been twenty years since the writer definitely accepted the belief that the human body is merely a composite of what goes into it daily in the form of foods. He has definitely stopped quarrelling with the thing, being forced to this position by accumulating evidence, and it is only since his acceptance of this belief that the practice of healing has ever given him a kick or any pleasure, the work before being done perfunctorily, as a mere pot-boiling occupation, a means of livelihood.

The ancient and honorable trade of medicine meant nothing to him, and he many times regretted his commission to practice it as a life calling.

Every particle of respect was removed for the treatment of disease by drugs even before his graduation, though he went to New York with the firm belief that if one knew enough of the body and its diseases he would be smart enough to find a way to relieve these.

The entire lack of agreement among the various authors, as well as among the more closely related members of the teaching and demonstration force of the college, completely dispelled his naive expectation that medicine was a science, and the ruin was complete when dear old Doctor Loomis, Professor of the Practice of Medicine, said in one of his lectures: "Gentlemen, I sometimes think that if you will give me morphine you may have the rest of the Materia Medica."

From that time on study on Materia Medica was only sufficient to secure a passing mark, while study was concentrated more on anatomy, physiology, pathology, surgery, obstetrics and gynecology, things that did seem to have something somewhat concrete in their teachings.

It is still a wonder to the writer to find men, supposedly well educated and intelligent, who believe in their remedies, when it would seem that the vast number and variety of these, with the widely divergent habit in prescribing, would in itself be enough to convince any one who can think at all that there is simply nothing in the drug treatment of disease, and that after all we must go back to the patient himself, correct the causes of his condition and give Nature what little assistance we can and let it go at that.

When we consider the vast array of drugs that have been used in insanity alone, we do not wonder that we have not as yet arrived

at any definite understanding of its nature or causes, for even yet in these purely mental cases, supposedly, drugs are relied on and prescribed as faithfully as if it did make some difference to the course of the disease.

The writer meets in consultation many men in many localities, all of whom are ready with suggestions about drugs, but when put on the rack as to just what the drug can do in this case they have a very lame explanation of this, and usually afterward do not urge its use.

There is no scientific background for the use of drugs in any condition, for the very nature of disease is such that drugs can have nothing but a purely symptomatic effect at best, so are no heavy part of the well equipped physician in the treatment of disease.

Sir William Osier said once that there were but five remedies that were of any use to the human race, and if he had left out these five he would have merited applause.

Insanity does not differ materially from any other disease, being only a different expression of just the same state as expresses as mumps or measles or tuberculosis or cancer or anything else, all without exception being built on a basis of autointoxication that is a self-created, and to exactly the same extent, a self-controllable affair.

So, in considering what to do for any case of insanity it is necessary to rule out drugs as inconsequential if not positively harmful, and start in to determine by what avenues the patient has departed from the normal, how far he has departed, and the best means for starting him on the back track.

This should constitute both diagnosis and prognosis, for the present condition of the patient will furnish all the data necessary for even a prognosis.

Since Bouchard wrote his little treatise on "Autointoxication" there has been much said of this state, and for a time there were many who enthusiastically followed up the theories expressed by Bouchard, but the methods outlined were never founded on a clear conception of the state in its entirety, and were much short of proper results, so interest waned and all went back to their drugs as the only thing in sight that was worth while.

More recently Guelpa of Paris with his work "Autointoxication and Disintoxication" elicited another ripple of interest, but it was decided that he claimed too much; he was called on the carpet by the French Academy and thrown out, because he could not convince them that he was right.

Guelpa was right in his theories of detoxication, but his idea of diet in the intervals of his detoxication periods was most unscientific, as he allowed his patients to recreate the very same conditions for which they had undergone a detoxication, so his methods were not in any sense curative, merely temporarily palliative.

The secret of successful treatment is suggested by a full under' standing of what causes disease, and when this is well understood the natural and sensible plan of treatment will suggest itself: merely stopping everything that caused the condition.

This sounds hard when we think conventionally about it, but it really is not hard at all, once one has started in on the plan necessary to carry this through; for so much of our eating is pure habit that

once this is broken, which requires a surprisingly short time, the rest is fairly easy, and one can go along for years happy in the selection of his foods, which become so increasingly enjoyable, that it is usual to get letters from those who have been on correct diet for years, saying that they are enjoying themselves at table far better than ever before.

All the really good foods are available if taken in moderation and correct chemical combination. Why should one suffer from self-denial on such a plan?

The insane case has lost intelligent initiative, so others must administer the care necessary in detoxication and diet till a clean body allows reason to return, after which a short period of instruction in the food lore that is authentic will be sufficient to insure freedom from further danger of mental disease.

Benjamin Franklin is credited with saying that only one in every hundred is capable of independent thought and correct reasoning power. In other words, ninety-nine per cent are insane, and who shall decide as to the sanity of the select one per cent?

If left to his own judgment every insane case will believe himself to be the only strictly sane one on the place.

You could never convince him that he is not sane, for his reasoning power is gone, and he fails to see the relation between cause and effect; therefore, he is insane.

Have you ever dreamed of falling over a precipice, or of being burned alive, or of robbing a bank, or murdering some one?

You did none of these things, yet they all existed in your mind as definitely as if they actually occurred.

Physical discomfort causes dreams, and if this discomfort is severe the dreams will take on pain or other dire symptom as their central thought, a reflection of the physical state on the mental, and it is a matter for wonder just how many people are ever actually at perfect ease while sleeping, for we all know the connection between mince pie at bedtime and a bad night.

This does not mean that we cannot eat a piece of mince pie and go to bed without hearing of it, and consider that nothing happened, just because we did not dream some horrible dream, for dreams are only recognized at the moment of waking, and perhaps the pie has been disposed of long before waking and will give no further evidence of its diabolic proclivities; yet it has caused much fermentation, perhaps unconscious discomfort, that no doubt took the form, of subconscious distress of which you know nothing in the morning.

Yet you will have manufactured and retained, stored in the system, toxins from this indulgence just the same, and your dreams, if you had them, were insanity, that is, there was no reason on the throne to tell you that this was not all true.

The insane patient is in a dream, perhaps a violent dream. He may even be a source of great danger to those about him, yet he is merely dreaming, the subconscious mind in control while the conscious mind sleeps, and from a purely physical condition from which he can be roused if the causes are promptly discontinued and kept discontinued till the body has time to unload the accumulation that has caused the state, whether this be self-manufactured toxins, or those from drugs.

CHAPTER IX

WHAT IS AGE?

Old age, so-called (all age being old), is not a matter of years, but rather of condition.

Thus, one may exhibit the signs of senility while yet young in years, while others at great ages may exhibit very few of the signs of this state.

The body's resistance to the passing of time determines what we call age, the body being most resistant enduring the longest without traces of the years, while the one least resistant shows early signs that time is taking heavy toll of vitality.

Anything that lessens resisting power, that lowers vitality, hastens the advance of senility.

We eat, play or work and sleep, as a rounded day, and for so many hours of activity we demand so much rest to offset the effects.

It is wholly while sleeping that we restore the lowered vitality to the normal, which does not mean that the more we sleep the more vital we become, but only that we must have enough sleep to permit of a complete recharging of our run down batteries, if we would avoid a gradual bankruptcy in this respect.

The average length of sleep habit is about eight hours, as previously remarked, but there are those who can seem to acquire the habit of a more intensive rate of recharging that does not require so much time, as in the case of Thomas A. Edison, whose habit for years had been five hours or less.

A few years ago a policeman, a park officer in Philadelphia, was said to have lived entirely without sleep for twenty-one years, his wife and the members of the force all testifying to this fact.

He would sit in the station house in a sort of siesta that was not real sleep, for he would take part in the conversation that went on about him, and apparently was awake to all that happened, but he would sit for two or three hours in this state, and seem perfectly-refreshed afterward, resume his beat, and go through his turn as well as any.

He died at about sixty-five years, of pneumonia, as any one might do, apparently as well as the rest up to the time he took to his bed.

Nature had seemed to come to his relief, following a long period of insomnia, with this substitute for sleep that answered the purpose very well, yet we do not know how much better he might have been or how much longer he might have lived if he had enjoyed normal sleep.

Age is nothing more than the inability of the body to keep clear of its own wastes, so is an autointoxication, just as is disease, and for the same reason is controllable through proper feeding habits persisted in continually.

Instances of extreme age are plentiful, one of the most noted examples being Thomas Parr, who two centuries or more ago repaired shoes somewhere in England. He lived to be 152 years of age and some months.

He was married three times, all his wives preceding him to the next world, lived a very simple life, on simple foods, but smoked a pipe much of the time, and it is also recorded that he got intoxicated on occasion; but these were not habitual or frequent occasions.

We know little of his food habits, but they were said to have been very simple always.

When he had passed the 150 mark, the king, hearing of him, and thinking to profit by his manner of life, invited him to the castle for a closer association that he might observe his habits.

But transported to the surroundings of royalty, Thomas[1] habits no doubt changed, and he did not live much longer after this. His simple manner of eating would not have created immunity or tolerance for the meats of the king's table, and he would rapidly become toxic, so it is probable that this fact was the more immediate cause of his taking off.

A Turkish burden-bearer is said to be well over 160 years of age, also has had a number of wives, but lives simply, and still carries his usual load as porter, working hard every day and threatening to take another wife.

Numerous instances of longevity are reported from various quarters proving that man can, under certain circumstances, live to a much greater age than the usual span.

Perhaps the most striking of these in recent times is furnished by Dr. Robert McCarrison, formerly of the British Army Medical Service, who reports that in a colony in the Himalayan region he found natives who were so old that it would be hard to believe their records correct, yet he was not able to detect possible errors in their •way of keeping these records.

Ages up to and well beyond a century were very common among them, and the economic necessities of the tribe were so urgent that they were unable to support any who could not earn their own living, so these were thrown over the cliff when dependence threatened.

He found men of well attested age up to 100 years and over, recently married and raising families of healthy children.

Men said to be well over one hundred years of age were working in the fields with younger men and doing as much work as any, in fact looking so like the younger men that he was not able to distinguish the older from the younger.

These people were restricted by religious dogma to the outgrowth of the ground for food, no animal foods of any kind being permitted beyond a small amount of milk or cheese, which were considered luxuries.

The rest of the food was grains in their natural state, nuts, vegetables and fruits, and most of this was eaten raw.

The region is very arid, so food was guarded very closely, and each family had to provide fully for itself, and if unable to do so had to go the road of the old over the cliff.

He reported that these people were never sick; they had none of the usual diseases of the civilized countries, as they could not afford to cause these.

There was during his nine years' residence in this post, no case of indigestion, constipation, appendicitis, gastric or duodenal ulcer; no cancer, tuberculosis, kidney disease, gallstones, asthma, hay fever; he never heard of a case of cold or pneumonia or pleurisy, in

fact, he might as well have been placed in some remote part of the country except for the illness and surgery of the hangers-on of the post itself.

Is it possible that these people live so long and are so free from disease because they live very largely on the natural foods?

If you will go back to the original dietary directions given to Adam in the Garden of Eden, you will find these things all included in the diet of these simple East Indians, with additions made by them of small amounts of milk or cheese.

They no doubt cook their foods, or a part of them, but they do escape the devastating effects of the high protein standard of diet usual to the American or European, and in so doing they also escape the mixture of these with the starches and sugars.

Individual instances of great age in spite of conventional habits of eating mean nothing, except that these people were exceptionally strong and so resisted to a greater age the very mistakes that shorten life in the average. These cases do not count for another reason, and that is that for every one who can boast a long life in spite of violation of all the canons of proper diet there are ninety-nine who could not do so, and are not here to be counted.

It takes more than one swallow to make a summer, and it takes many cases to prove a point.

The largest mass example of longevity is that furnished by Col. McCarrison, before referred to, and surely comprises enough instances to make a sort of criterion that favors natural foods.

Let us return again to consider the directions to Adam, and see if there is not sufficient food in these to bank safely on as plentiful nourishment for man under every circumstance of environment, occupation and temperament.

"Every herb that is upon the face of the whole earth, and every herb bearing seed; the fruit of every tree, in which there is the seed of a tree bearing fruit, shall be to you for meat (food)."

It is possible that in the Garden of Eden at that time, which was to Adam the entire world, no herbs of dangerous character existed, so this command could safely include every green thing.

Herb was a general term that meant the plants of all kinds, everything that grew out of the ground, what we call the flora of the region.

This surely furnished variety without invading the animal kingdom in any manner.

Certain vegetarians go so far as to say that the forbidden fruit was animal food, but there seems to be no way to prove this, as Adam died without committing himself on the subject so far as records go.

It is somewhat striking to consider the great average of the antediluvians as compared with the age of those shortly following this period, for average ages surely did shrink, the age of the kings of Israel being rather low for an average.

We now consider a man old at seventy years, and there are plenty of really old men whose age is under sixty years, yet we have no way of knowing why, for some of those who exhibit every evidence of age below sixty years have been exemplary livers, as regards so-called bad habits, and some are abstemious in their eating.

However, the writer has been dealing with derelicts from every where for twenty-four years, and has had exceptional opportunity to observe the physical state of an unusual number of people, who were not examined with the single idea of naming specific disease, or that in plainest evidence, but of estimating the stage of intoxication rather, and his universal observation has been that those cases showing most senility were in every case those who showed the greatest evidence of acid formation.

We regard certain things as evidence of advancing age, as the condition of the arteries, the presence of pyorrhoea, the resiliency of the joints and tendons, the skin, the state of the eyes, the character of the hair, the gait, the lack or the presence of elasticity in walk and movements, all these things go to make senility or its opposite, and it has been his uniform observation that all these evidences of age keep fairly correct pace with the evidences of accumulating acid in the body.

It is not enough to test the acidity of the urine, as this is so variable that it is not a reliable guide, some days much acid appearing in this way while on other days little or none is present.

A litmus paper test of the saliva, the perspiration, the stool, and the urine, all taken together, will perhaps show definitely the presence of a too acid state of the body, but give little idea of its extent.

The mouth shows earliest and plainest the encroachment of a hyperacid state, through the redness and sponginess of the gums, their tendency to recede from the gum line at the neck of the teeth, pyorrhoea, the appearance of the tongue, for acid shows very definite records here.

An acid tongue is flabby, with indentations of the teeth showing on the margins, or it is fissured, or it is heavily coated, or it shows a crop of enlarged papillae on the tip, looking like strawberry seeds, any or all of these at one time.

These evidences of acid can be read by any one, and while they are not in themselves age, yet they do indicate age, as they are evidence of a hyperacid state of the body, and acid and age stand in the relation of cause and effect, else all of our reasoning is wholly wrong.

Old age that is unwelcome is almost the supreme tragedy of life.

When interest wanes, when fatigue is continual, weakness depressing every moment, when food ceases to please, when the former pleasures have all palled, when ambition and enthusiasm are dead, then we are old; what matters it the time or years?

Health, ebullient spirits, enthusiasm, energy, ambition, enjoyment, these are the concomitants of youth, and without these we are old.

Without them we are of little use here, and we might better pass on, as we will be in the way.

These also are all concomitants of health, and without health we are old, no matter at what term of years.

The body dies continually and is as often reborn, not en masse, but cell by cell, and is it not thinkable that if we recreate the new cells of perfect materials they will be as young and as perfect as when we were first born?

Dr. Alexis Carrel of the Rockefeller Institute segregated some connective tissue cells from the heart of a chicken and submerged them in a fluid representing the blood plasma of the chicken, and kept them eighteen years (at the last report on the experiment that has come to the notice of the writer) and by carefully changing the medium every day, so as to avoid the accumulation of excrementitious material from the cells, they remained for this rather long time in as good condition and showing as active growth as when first placed in the solution.

He said at one time that if he had not divided this mass of cells occasionally, throwing away the part taken off, they would ere that time have covered Manhattan Island.

Flat worms were taken by another observer, little minute worms that batten in the sedgy edges of swamps or slow moving water, little things with a very short and definite life cycle. They were divided into two groups; one allowed to live out its life cycle as per its usual schedule, the other immersed in sterile water, free from the usual silts on which these tiny worms feed, and after they had in this way fasted for a time, shrinking in size, they were again immersed in their usual pabulum, when they quickly regained their former size, and were apparently much more active and youthful than before.

This changing was continued till these flat worms had passed through nineteen life cycles of their species, yet were apparently as young and vigorous as ever.

Alternate fasting and feeding apparently had the effect of indefinitely prolonging their lives and renewing their youth.

In the writer's experience the age can be set back very definitely for a period that would indicate a ten year return toward youth, by a reasonably long fast, either total or one confined to the use of a moderate amount of fruit juices, for perhaps one month, or, if the juices are used rather freely, then a period of six weeks to two months, and he has not hesitated to promise this much to any one who wished to undertake it.

Patients exhibiting all the evidences of age have so renewed their youth that they have surprised their friends, after the lost flesh was regained.

Even as the flat worm experiment, though this would have to be carried farther in order to say just how much the life cycle might be extended in this simple way.

It was once quite common to fast for purification of the body, and there is no evidence that this ever does any harm, cases seeming to prove otherwise being those who did not afterward live as they should.

The burning question with most who do not wish to grow old is whether or not the thing is really controllable, and to this there is only theory to answer, but it is reasonable to suppose that if age were due to the increased accumulation of acids, as all are pretty well agreed, then in just so far as acid formation is controllable, to just the same extent is old age controllable.

Let us be reminded again of the statement of Sir William Arbuthnot Lane, that there is but one disease—deficient drainage, then note again that the flat worms were shifted from sterile water to fresh usual pabulum, thus getting rid of any accumulating waste, and also of the necessity which Dr. Carrel found of changing the

menstruum every day, for when he failed to do this the cells showed failure, age.

Then remember what Dr. George W. Crile said, that there is no natural death, all deaths from so-called natural causes being simply the end-point of acid accumulation.

If these statements are not correct, and if the experiments here recited also are of no significance, then we may accept the universal idea that we have no real place on earth after the seventy years are completed, and if we exceed this we are on borrowed time.

If disease is acid accumulation, and if age and death are also acid accumulations, then we can see a very definite relation between a normal alkalinity and youthfulness at any age, and a greatly deferred end-point, or death.

Surely if we do age from acid, and if acid formation is, through our later understanding of foods and nutrition, an entirely controllable affair, then we do have hope that by rigidly adhering to a non-acid-forming habit of eating we can not only pass up disease but we can defer old age to a very long time in the future.

The connection is perfectly plain, and surely we can do ourselves nothing but good in making secure our freedom from all sorts of adventitious acids daily as long as we live.

The more science discovers of health, disease, old age, and death the more closely do we find ourselves approaching the standard of the Garden of Eden in the matter of foods, and if we were to stick closely to this standard we could at least do our cause no harm, either from the standpoint of disease or age.

There is a beautiful old age, one that inspires respect and love, but it is a pity that age generally means decrepitude and discomfort.

The querulous, faul-finding, old man or woman is never welcome, and is only tolerated because of family connections or in respect for a more engaging past that can be recalled.

Perhaps former great achievement attaches importance to an aged person who is even disagreeably old, but as a rule one who reaches the disagreeable condition of many old people is unwelcome at any fireside.

It is fear of decrepitude more than fear of death that makes us shrink from all idea of growing old, and this state is indeed pitiable in any one.

Of one thing we are certain, and that is that the state of acidosis is positively within our own control, and if we can accept the indications as meaning anything then we do get old on account of acid accumulations, and acids we must fight so long as we live.

Whether or not the immediate occasion for failure is an imbalance in the ductless glands, as many aver, even this means nothing more than has been stated, for, as is easily proved, when acidosis is gone the ductless glands are again in balance.

So from whatever angle we view the subject of old age, the one course that seems to be plain is to so arrange the diet that acids cannot form, beyond our power to neutralize these daily, at the same time making sure that drainage is adequate for every need.

This is probably all we can do, aside from thinking properly, keeping young in spirit, taking enough outdoors and what exercise we can enjoy, and getting sufficient sleep every night.

CHAPTER X

THE FOUR HORSEMEN

The Four Horsemen of the Apocalypse represented the four great and dire calamities which should attack the human race, the last of which was death.

To every man, woman and child there appear these four horsemen, and they are lurking just around the corner almost from the moment of birth.

The four great calamities, from the standpoint of the individual, are fatigue, disease, old age and death, and if we live out our time they come to us in about this order, though too often death steps out of line to attack us early in life, from accidents or sudden means of interruption to the usual cycle.

How does it come that these four things, not so very closely related always in thought, should come to be regarded as the four horsemen?

Remember again what Dr. Crile said, that every death from so-called natural causes is merely the end point of a progressive acid saturation, then the connection is plain.

A progressive acid saturation, if really progressive, must have had a beginning somewhere, sometime, and there must surely be some indication of such beginning.

The very first morning that you get out of bed and do not feel impelled to kick the ceiling, that morning you are showing the effects of acid accumulation—the trouble has started, for fatigue is the first stage of this progressive acid saturation.

What is fatigure, anyway? We see more fatigue, we hear about more fatigue, than anything else.

Every one seems to be tired, yawning, stretching, leaning, sprawling, trying to ease the sense of fatigue that is so depressing. ft you try to find out why the tired one is weary you may have difficulty in locating anything that should have caused such a world weariness, and usually the tired one himself can give you very little help on this subject. He is just naturally tired, even willing to admit that he was born tired.

If one has done nothing out of the ordinary to use up energy, if he has slept the regulation period, there is then but one reason for this extreme fatigue that is almost a national handicap, and that is that "drainage is deficient."

More waste has been created, is being created, than can be fully eliminated, and you will remember that Sir William Arbuthnot Lane says that after all there is but this one disease.

Well, this is the first stage of acidosis, toxaemia, acid autotoxicosis, whatever you wish to call it, for it is always only the same thing, acid end-products of digestion created and not eliminated.

So, when you get up in the morning, if you do not feel like kicking the ceiling, then you have started the accumulation of acid end-products of disease that introduce you to the first of the four horsemen, and the other three wait just around the corner.

Have you ever stopped to consider the cost of fatigue?

What is its personal cost to you, what does it cost this great nation, considering that fatigue is well-nigh universal?

This is what it cost one man, before he found out why he was continually tired.

He was a trader in the grain pit, and he told me that day after day he sat down in a big easy chair and let trades, that were easy money for him, go over his head. It was too much trouble to get up from his chair and bid.

He said that not infrequently he has done this when he knew there were several thousand dollars of clear profit in the deal for him, but he was too tired to get up, so he lost this much money in a moment.

This same man fell sick, very sick, hovering for a time on the slippery brink of the grave, yet pulled through, but during his rather long illness his stomach obstinately refused nourishment of every sort, with the result that after four weeks he was fairly well cleaned out, made a nice recovery, went back to the grain pit, and now nothing goes over his head.

The thousands of dollars that he formerly saw floating by, but was too tired to grasp, are now his, because he is not tired any more, and he sees everything that goes on about him.

That is what fatigue does for us, it robs us of opportunity in everything because we are tired and we lose interest.

One business man in Buffalo doubled his income in three months after he learned how to eat, because his income depended on just how he handled his office force every day, and as he was tired and his head was confused he handled them very poorly, so his income was not what it should have been.

His little wife was dieting, even though she was already very thin, but after changing her manner of eating she realised that she felt better, her head ached less, she was less tired, and so she kept on dieting, even though her husband, a big fat fellow, ridiculed her continually for dieting when already too thin, his idea evidently being that when one diets it is always because one is too fat.

In a few weeks this little lady let her maid go, something she had never done without before in her whole married life, and she got the meals, thus getting a good chance to improve her husband's condition and his temper.

In three months this husband's income had doubled, he was pleas' ant and cheerful about the house, he was an enthusiastic follower of diet, and he knew then why he had before been irritable and tired and unsuccessful in his business, and you could not dog him away from his changed habits of eating, for he realized that on these depended wholly his great improvement in condition.

Now why did this man feel that he was unsuccessful before, and why does he know now that he can be as successful as he wishes to be?

The cause before was the presence of this first of the four horsemen, fatigue, the constant accompaniment of failures in everything, and his come-back is due wholly to the fact that he has learned that all his former fatigue was from eating wrong foods, or wrong combinations of right foods, a thing he would not voluntarily go back to for a large sum of money.

This is fatigue, the first of the four horsemen, and the one for which to watch continually, for in his train follow closely after in this order, disease, old age and death.

There is a normal fatigue, of course, for repetition of any muscular or mental act will in time bring fatigue that is normal, physiological, but that is completely relieved by rest.

This marks the difference between the fatigue of prolonged and severe exercise and that of acidosis, for the one is relieved by rest, while the other is not.

Why is one so tired after a full dinner? Surely if food is fuel then the average person has taken on a full load and should be full of pep and enthusiasm instead of so weary that the afternoon siesta is common even among some business men.

Digestion itself requires vitality, it diverts vitality from the task in hand, whatever this may be, to the new task of digestion, which accounts for the fact that one is sleepy and dull after an unusually hearty meal.

Athletes know better than to try to break any records on a full stomach, rather they wait till the stomach is well emptied before attempting anything unusual.

A member of the championship Pittsburgh Ball Club of 1909 told the writer that it was Fred Clark's invariable rule that no lunch was to be taken any day before the game except a bowl of soup and two slices of bread, as his old training experience told him that athletes get drowsy after a too full meal, and he did not like to lose games.

In the winter of 1924 the writer was taking a daily work-out with the business men's gymnasium class at the Central Y. M. C. A., Buffalo, together with a class largely professional, but almost wholly sedentary.

He had interested this group in the subject of fatigue from the standpoint of diet, through a short series of talks before the exercise began, and a class volunteered to make a test of diet on endurance.

In all, eighteen men were tested, those chiefly who were able to control dietary factors quite satisfactorily, as the married men who took not more than one meal downtown.

The army squat was selected as a fatigue check, and the men were promised fifty per cent increase in their endurance at the end of a month through simple separation of the incompatibles in their diet alone, that is, leaving the amount of the foods then eaten wholly aside from all consideration, they were instructed to separate from each other those foods that cannot digest together in the same stomach, as the starchy foods and the proteins.

Breakfast was wholly of fresh fruits, lunch was a starchy type of meal, and dinner a protein type.

Instead of fifty per cent they showed one hundred and sixty-five per cent increase in endurance, and all were cautioned and all promised not to use the squat except as a once a week check, as practice would of course increase endurance.

The heaviest man in the group carried sixty pounds excess and lost fifteen of this, while the lightest man in the group was fifteen pounds underweight and gained six, both on the same plan of diet.

It is always so, the thin building up and the fat reducing, all on the same diet, for after all it is merely normalising the intake of food.

Disease is the second of these four horsemen, and he waits hard by, for not long behind fatigue does he linger.

When we are tired the bars are down for everything, even a cold coming as the easiest infection after one gets too tired.

When we remember that all disease, all fatigue (except the normal physiological kind), all old age, and finally all death, are all from one thing, then we will begin to think seriously about the causes of this one thing, and will seek means to avoid it always in the future.

Adding together the statements before alluded to, that there is but one disease—deficient drainage, and the other, that all deaths from so-called natural causes are merely the end-point of a progressive acid saturation, then we have something very concrete on which to build a theory of disease.

Disease never comes out of a clear sky, suddenly, no matter how sudden its first manifestation, for the conditions that have made this sudden appearance possible have been long brewing.

The first appearance of the first of these four horsemen is the point at which to become interested in one's condition, for this is the very beginning of acid saturation, and high time already to do something to stop it.

"If the little leaks are all taken care of, the big ones will take care of themselves," as they say in Holland.

If all the causes of fatigue are removed then disease will take care of itself, for there will be no disease where there is not a preceding fatigue; in other words, the second horseman never precedes the first.

The second horseman comes to us in a variety of forms, for we surely are subject to a myriad of dissimilar affections, from corns to consumption, yet we can set it down in the book of things as they are that all these various things grow out of one similar soil.

Just as the earthy soil raises a great crop of variegated flora, even so does our body soil raise a widely variegated crop of diseases. Now just as surely as that we cannot get out of a thing more than is in that thing, just so surely can we get no disease growths out of a body that does not have in it the things on which this disease can grow and flourish.

The real disease then is not the symptoms that we recognize and list and catalog and tag with a name, for these are the outgrowth of the soil that must be present before such disease can appear, so the real disease is always and only the state of the soil that allows this thing to appear.

Sir William Arbuthnot Lane again with his one disease, deficient drainage, you see.

Also Dr. Crile's one cause of death. Seneca's suicide statement that man does not die, he kills himself.

The grain merchant had accumulated almost sufficient causes for death, the end-point, but he had just sufficient vitality left to get over the ridge, and he has been better ever since, because much of this acid soil was burned up and thrown off during this cataclysm that was labeled pneumonia.

After this acid soil has grown almost from infancy through the stage of fatigue, then there is a sufficient accumulation to permit of the growth of disease germs, and disease in some form is waiting in the offing for just the right opportunity to implant itself and grow,

necessitating a cataclysm of some sort to right things before function can resume normally.

Acute illnesses of all sorts would be a very salubrious affair if they completely burned up and threw off all the accumulated wastes of the body, but the system has become habituated to so much of this handicap that after the excess is reduced to a little below the usual the body can again resume, and starts off again with still much accumulated waste matter that forms a nucleus for still further accumulations through our faulty habits of eating, and we begin again rebuilding the very same state that compelled this readjustment, and that will compel another and still another till our tolerance rises higher and higher, and we carry eventually a degree of waste that allows of a semblance of function in spite of this.

And so with each year we have added to this stored acid waste, carried at an increasing output of vitality to maintain it, till we age under it. And now appears this third member of the attacking party, old age.

Not every one reaches this stage, for many have succumbed to the first and second of the four horsemen, as witness the four hundred thousand who never see the tenth year of life, the two hundred thousand that never see the end of the second year, and the many hundred thousand that never live to grow up, or that die before old age appears.

There are those who resist for many years, developing all the evidences of the decrepitude that marks the advance of this third horseman, because they have escaped the organic breakdown that fails before the attack of disease.

These continue to function after a manner till they reach perhaps complete helplessness, perhaps bearing many scars from encounters with the first and second horsemen, yet continuing to live and carry on.

These are the wounded in the battle of life, the ones who swell the ranks of the pensioners of the world, carried at a great expense to the producing element, a liability, never an asset.

How easily all these futile encounters could have been obviated, by a realization of the predisposing causes, the repairing of all the little leaks before they became great leaks!

The thing to watch is the first evidence of fatigue, for the first of the four horsemen is already on the attack and if he can be repulsed there will be no opening for the second.

Nature makes no mistakes in her indications, so when fatigue appears it means rest not only from physical and mental work, but from the internal causes that always produce this state of fatigue. Stop the accumulation that is making this state, and by so doing repair the little leak.

The very first day that fatigue shows, unaccounted for by unusual work of either mental or physical sort, the first day that is ushered in by this sense of languor or inertia, get busy, do something, take stock of the present state, and if you are wise you will know that in the rather immediate past something has been eaten, many things perhaps, that have resulted in an uneliminated collection of waste matter, and to add to this is to prepare the way for the second horseman.

Take plenty of active exercise, or stop all intake of food, or both, till this enervated state passes and again you feel peppy and spry.

At first, these evidences of autointoxication pass off rather easily, as they are not deep, of course, but as time goes on a tolerance develops, just as to the use of tobacco or alcohol, and the system carries ever increasing amounts, till its ability to adapt itself longer to this increasing task of maintaining an equilibrium is finally surpassed, and it fails to adapt itself longer, and then decline comes rapidly.

This is age, no matter what the number of years expressed by this state, for age is not time but condition.

Thus is the way opened for the fourth horseman, who waits patiently for this opportunity.

When the body can no longer adapt itself to the increasing flood of toxins, when it begins to fail under this, occupying more and more of its vitality in the vain effort to readjust itself, then this fourth horseman seizes any favorable opportunity to attack, and the end comes, often quickly, often after a struggle that refuses to capitulate till every resource of the reserves has been completely exhausted, and we say such a person had wonderful vitality.

Death is awful to contemplate in any form, but is more awful when it is resisted to the very last ounce of vitality, when nature rebels strenuously to the giving up of its fortresses.

Our best friend, perhaps, has been pursuing his usual activities today, tomorrow we learn that he is very ill, next day he is gone, and we say: "Why, yesterday he was the picture of health."

He was not well yesterday, no matter how he appeared, for death does not come without favorable opportunity, this being the last battle.

Our friend was creating for years a soil that was sure to furnish material for just this denouement, yet he no doubt felt well, or as well as usual, and he would never have believed that death was so near.

Pneumonia, apoplexy, heart failure, thrombosis, septic infections— these are the things that take an apparently strong man off in what may appear to be the prime of life, but not one of these things comes like a bolt out of a clear sky.

They only appear to do so because we do not see these evidences of acid accumulation till the accident has happened.

Just as the writer, twenty-four years ago last winter, was insulted when he was denied an insurance policy without conditions, for he thought himself almost the acme of health.

Then a little sprint for a train dilated his heart, and he knew for the first time that he had a blood pressure, no doubt one that had been forming for a number of years from an increasing viscoscity of the fluid due to retention of much debris of gluey character.

If he had died during this sprint, if the heart had ruptured instead . of partially dilating, his friends would all have said the same things, have expressed the same surprise, as when a strong man in his apparent strength is called suddenly anywhere.

It was only a careful analysis of his condition and the possible predisposing causes at that time that opened his eyes to these things, and it has been his observation ever since that death is never sudden: only the final yielding is sudden.

So if the little leaks are repaired the great will all take care of themselves.

The May 26th, 1928, issue of the Journal of the American Medical Association carries thirty-five obituaries of physicians who had passed on since the last issue, six lived only to the seventy year mark, when one is supposed to have earned the right to die by any means he may choose.

The other twenty-nine passed out from the following causes: yellow fever at 51, intestinal obstruction at 52, cerebral hemorrhage (apoplexy) at 48, septic arthritis at 58, duodenal ulcer at 54, myocarditis and chronic nephritis at 54, gunshot wound by patient at 36, septicemia following mastoid operation at 28, spinal meningitis at 40, angina pectoris at 55, cerebral hemorrhage at 61, carcinoma of the throat at 57, disease of coronary artery at 50, cerebral hemorrhage, chronic nephritis and myocarditis at 62, diabetes at 66, cerebral hemorrhage at 63, arterio-sclerosis and acute dilatation of the heart at 62, transverse myelitis following influenza at 40, angina pectoris at 65, died in hospital at 38, meningitis at 26, chronic bronchiectasis at 67, intestinal obstruction at 62, cerebral embolism at 63, cerebral hemorrhage at 61, suddenly of heart disease (suddenly?) at 29, same at 59, paralysis at 58, pneumonia at 59.

One week's mortality record for the physicians of the country, the very same diseases they return as causes of death in others!

Are these causes understood, or were these men deliberate suicides?

The average life of physicians is a little lower than for the other class of professional lives, and why?

Surely there must be something that is daily overlooked in our study of disease, else these things could not go on in a profession whose whole business is the very thing of watching for disease and doing something for it when it appears.

There's just the point, for they do not see the little leaks but wait for the flood, the completed pathology, the finished diseased condition, something that can be classified and named and treated as an entity, a something concrete that something concrete may be devised to control.

Too late, for the little leak has become a great rush of water before it was recognized.

If you were out on the lake in a boat and it suddenly sprung a leak, what would you do?

If you would look back you would perhaps remember that for some time the bottom of the boat had been showing water, but you paid no attention to this so long as the boat continued to float well on top of the water as do other boats, and others seeing this would not know to warn you.

Now would you seize the bailer and go to work to unload the water without looking for the leak?

This might keep you afloat for some time, but it would mean that unless you continually kept on bailing the water would continue to rise in the boat, which would continue to sink lower and lower, functioning less and less as a boat is supposed to function, and when you were exhausted bailing you would sink, for the leak would still continue to admit water.

The sensible thing to do first is to inspect the boat thoroughly and to calk every little leak before launching out; then if a leak developed, stop everything and calk this; then the bailing could proceed with some hope of a radical cure of the condition.

And so twenty-nine of the thirty-five physicians who passed out in a week died of neglected leaks, at least all except gunshot wound, and this was administered by a disgruntled patient who perhaps laid to the door of this physician some blame for a death in his family from what he considered this physician's mistake or carelessness.

Surely we are overlooking something in our studies of disease. We are failing to see the little leaks, and we would do better to spend more thought and study and experiment on the soil that furnishes the beginnings of disease.

CHAPTER XI

PREVENTION BETTER THAN CURE

We live continually under the depressing fear of disease and death, though we seldom realize this.

We would even indignantly deny this imputation, and insist that we are not afraid to die, though most of us are willing to admit the fear of developing disease that may make of us a less efficient machine than we now are.

We ever fear those things that we do not understand, for the very reason that we have learned to expect catastrophe from sources not anticipated.

If we fully understand what disease is, how it originates, if we are familiar with the only avenues through which this can come to us, then what have we to fear except ourselves?

Patients afflicted with neurasthenia, when everything is feared and misunderstood, are frequently afraid to be left in contact with a revolver or knife lest they do themselves harm; if normal these things would not suggest self-destruction.

We look about us and see the apparently well and strong taken out of what seems to be health, and precipitated into a serious illness, perhaps dying, as a result of something that to us is a great mystery, and we naturally think our own chances not so good as we could wish.

These fears sometimes grow so big that we develop a state of hypochondria, or self-fear, self-analysis, an ingrown dread of some mysterious thing that is going wrong with our insides.

These hypochondriacs are to be pitied, for their troubles are to them very real, yet they have probably not so far developed into recognizable disease.

Sanatoriums are well filled with these people, and they go from one specialist to another, from one clinic to another, one region or sanatorium to another, told everywhere that there is nothing wrong, . because there is as yet no organic change evident in the body.

An attorney of the writer's acquaintance was in just this state, flunking every hard case that came to him because he felt unable to handle it successfully, losing what was once the best law practice in his city because of this fact, yet no one able to find anything wrong with him.

He even went to a world famous clinic, believing that in this wonderful clinic surely they could tell him why he was so ill, yet here again they told him that he was as sound as a button.

He should have been pleased, reassured with this verdict, but he wasn't for he knew he was sick, and it merely deepened his conviction that doctors do not know much anyway.

It was about this time that in despair he took up the study of foods along these lines of acid-alkali balance, and it then dawned on him that he was suffering from acidosis, and by eating of vital basic foods he soon regained his lost pep and confidence, and his practice

reflected this in a very short time, so that again he enjoys the distinction of being the leading attorney in his city.

Everywhere he went he was handed the same advice, not to work so hard, and always he replied that for four years he had been flunking his work, had been taking long vacations, playing golf, staying much outdoors, yet he would return from a vacation just as tired as when he left, and his work was no easier for him when he again entered his office.

This was bound to be true, for he took with him on vacation the same habits of eating; he brought them all back with him; he took his fatigue and blues and depression with him; he brought these same end-results back with him, and so he would have continued to do, had he not been of the thinking, analytical type of mind and figured out his whole trouble himself.

In a sense this is prevention and in another it is cure, for the thing that was troubling him was acidosis and this was cured, and not only so but bound to stay cured, cured radically as we say.

Yet this cure was in reality prevention, for there was on the way, and at no great distance, disease, for the bars were down, the system susceptible to any sort of germ invasion or infection, and his changed habits of eating eradicated the cause, thus preventing the development of disease.

The specialists can now give him the laugh, and say "I told you there was nothing the matter with you," but wasn't there after all much the matter with him?

From his standpoint he is in position to give the specialists the laugh, for now he can point to his renewed vigor and be sure that these wise men overlooked something that really ailed him.

This was stopping the little leak before it developed into a big leak.

Prevention is better than cure, just as it is better to stop the little leak before so much water has entered the boat that it is in danger of sinking.

The writer has known a number of other thousands of cases, of which the above is typical, who had traveled for years from one supposed authority to another, always to be told the same thing: "There's nothing the matter with you."

All the time these people knew that one does not degenerate from a strong man or woman that knew no fear of tomorrow into a whining, fearful pessimist without something radically wrong going on inside, for such declines are more often not traceable to some outside effect than otherwise, and such change does come from very definite states of the interior of a man.

These cases go on for years, gradually developing the most hopeless outlook, going from bad to worse, filling the sanatoria, too often the insane asylums, too often by far the suicide's grave, and all because no one understood that one can actually be sick without evident organic changes or definite pathology.

These cases start with a period of unaccountable fatigue, their first step in degeneration, and as a rule the stronger they are the more depressing is this sensation, for they have once been strangers to it, and its coming takes out of them something that before was their prime activating motive for work.

Is it any wonder that irritability develops here, that one gets as cross as a bear, that he forms the idea that the whole world is against him?

If one knows how to interpret these symptoms and knows what to do he will at once start to calk the little leak by a housecleaning and correction of the dietary mistakes that are the chief causes of such things.

This is self-applied prevention, helping one's self to help one's self, and it is this very thing that this little book proposes to teach.

We do not need to be self-analytical, critical of all our feelings and states, for we need only know what makes us less than 100 per cent efficient, and knowing this to do the things necessary to correct it, with the utmost confidence and wholly without fear.

Once this thing is changed there is a striking alteration in one's whole viewpoint, for the mind is freed from the continual depression of this accumulating waste, and there is perfect poise and equanimity where before there was the opposite. There will be geniality where before there was grouchiness; there will be energy where before there was languor, happiness in place of depression, cheer instead of gloom.

What a wonderful world this would be if no one had the blues! And why should any one ever have the blues?

Every case of the blues is merely an accumulation of the acid end-products of digestion and metabolism, just as every disease is, for all are from the same cause.

With the cause controllable because understood then why should one have the blues, fatigue, disease, old age, death?

The late Senator Ben Tillman, of South Carolina, was once known as "Pitchfork Tillman," because of his irascible temper and his willing' ness to fight at the drop of the hat.

He had high blood pressure, what he called "Congressman's disease." Whether or not he knew of this, he at least did not know that he would suddenly drop on the steps of the Capitol building with apoplexy when but sixty-three years of age.

He was picked up for dead, but it was soon discovered that he had suffered a very serious stroke of apoplexy.

He was kept for a time at his quarters in Washington, then sent South to die at his home.

But dying was not on his program at that time, and with his head recovered he looked himself over, and found one side of his body completely paralyzed, not one finger could he twiggle, nor one toe.

Believing what the doctors had told him, that there was nothing known to medical science that could help him, he started in to study his own condition, sent for literature on foods and exercise, and began regular systematic exercise of the one side that he could use, at the same time so modifying his diet as to allow the body to unload the excess formerly stored there and to end its future manufacture.

Soon motion slowly returned to the paralyzed side, and this too was put to work, and after a few years Senator Tillman was returned to the United States Senate in better health than he had known for many years.

His first official act was to secure the privilege of the floor and to apologize with tears streaming down his face for all his former acts of violent temper.

His explanation was that he had long been a sick man and did not know it, suffering from "Congressman's disease," and warned his fellow senators that many of them were headed in the same direction from the same causes, which he blamed on the universal custom of banqueting.

It was not the hard work, the intense application of mind during heated debates, that were to him the motivating causes that led to his ruin, but the banqueting, and he was from this final appearance in the Senate till his death, at nearly seventy years, known as the health mentor of the Senate.

Had he known when first irritable, tired, or confused just what, this meant, he could have avoided all that followed, for undoubtedly he was a sick man for years and did not know it, just as he said, and so are many others who do not know it.

The world demands of us efficiency with a smile, and when we cannot give this we are at a disadvantage with those who can deliver it.

Who cares for our aches and pains, our discouragements, our causes of depression and blues?

Our friends will soon tire of hearing of these things, for most of them have similar troubles and find it difficult to get a sympathetic hearing.

May something speed the time when sickness will be considered a personal disgrace, when each will know why he is not well and be under suspicion of laziness or inertia if he allows himself to get into such a state, or if in it to stay there long enough to feel that he has a just complaint against the great dispenser of things for being short changed in the distribution of gifts.

It is magnificent to be able to restore the dangerously ill to health, and such is real service, but it is much better, in a much broader way, to influence thousands that are not now sick to take stock of themselves and correct the little beginnings so that sickness will never occur, and this is just as possible as the other, and more easily so.

The proof that this does work is that chronic organic disease does get well even after having been passed up by every specialist in the country.

Many hundreds of such cases have passed through the writer's hands, many thousands through the hands of others using similar methods of treatment, cases that had already developed serious organic disease, but who were willing to make permanently those changes in their way of living that were necessary to stop forever the formation and accumulation in the body of this acid waste, who recovered a high degree of health and maintained it at this high level for years.

Many of these report that they are enjoying life as never before, are actually enjoying the pleasures of the table as keenly as when a child, so these people are not giving up any vital pleasure in life by conforming to a non-acid-forming habit of living; rather they have broadened their opportunities for enjoyment and accomplishment and service, all of which go to make of life a greater success than before.

Now if a non-acid-forming habit of eating will restore the seriously ill to health, will it not more surely prevent the advent of disease?

It is not a great tax on credulity to arrive at such a conclusion.

The whole plan is on a par with the bank account, for it is easier to conserve this by careful management than to recoup it after it has been depleted.

When we write checks against an account that is not active enough, that is not replenished frequently or sufficiently, we soon run into the red, and the bank notifies us that our account is over' drawn, and we have to get busy and make good our shortage or lose our credit, a fearful thing.

If we see to it that the amounts withdrawn are daily made good then we know that we are in balance, and have nothing to fear for our credit.

The body is continually throwing off chemicals in the form of waste matter, many of these such as have to be used in considerable quantities in the body to complete the chemical changes that go on in preparing waste for exit from the body, and if these losses are not daily made good we run short of some of the most vital chemicals of which we stand in daily need.

We cannot get something out of nothing, neither can we get lime or other of the essential body chemicals out of foods from which they have been refined or cooked away, so we must be sure that our losses are made good in kind by using those foods that we know represent these very things continually.

When we eat white breads or white flour preparations we are woefully deceiving ourselves, for these things do not contain the most vital of the chemical salts we require.

Nature placed them there for our use in the whole grain, but man has refined them away under the impression that he can improve on Nature, or to make them more beautiful or more easily baked or more easily handled or stored, or even digested.

When man starts in to improve on Nature he is following a wrong track, and especially when he seeks to improve on the natural foods, for these contain just the things that Nature designed for her children, and no art can improve on them.

So if we would avoid or prevent disease, we should make sure first of all that what we select as food is really such, not a manufactured taste, beautified, refined, or changed in any way from its original state—vital foods, those still containing the life implanted there by Nature, or Nature's God.

These are safe, and nothing else is, even though we may acquire a tolerance for other foods that are deficient and for a long time seem to do well on them.

You will note that little is said about other devitalising habits, but there is no doubt that the causes of enervation, or decline in vitality, are many things, such as habits that rob us of sleep or rest, tobacco, whiskey, drugs, sexual abuses.

These things are all wasteful of vitality, and no one who can think would for a moment seek to lessen their importance as causes of physical decline, but as compared with the usual, the well-nigh universal, mistakes of the table, all these other causes combined must take an inferior place, and the more especially so as when one

is correctly nourished there is a tendency to normality in all other respects, and habits are seldom formed in other harmful things.

A man normally fed from childhood is nearly protected against excesses, for the normal body needs no stimulation or no sedation, so does not crave these things.

The normal body is very much alive in every particular, so is not in the market for the cheap pleasures that thrill without satisfying.

To live without the sense of fatigue in a constant state of rehabilitation is to live without fear. Stop for a moment to consider what this would mean in the lives of every one!

A world without fear would be a Heaven, and it has been truly said that all there really is to fear in this world is fear.

Fear paralyses everything, stops digestion, assimilation, excretion, so that through fear we are poisoned daily with our own body wastes.

Dr. W. B. Cannon, of Harvard, while detailing his experiments on the motility of digestion through his then almost new x-ray studies before a meeting of the New York Academy of Medicine, at which the writer was present, told of the studies on the motility of the cat's intestine, and how as they were watching the rhythmic movements of the peristaltic waves of the small intestine a dog in the next room suddenly barked, and the cat went into a state of fear.

At once all peristaltic movements stopped entirely, the intestine lying absolutely without apparent motion, and it was two hours after before the movements resumed with anything like the rhythm or depth shown before the fear arrested them.

If this is true of the cat, it is no doubt just as true of the human digestive motility, and where the fear is not excessive it is possible that these movements are not wholly arrested, but that they are in some degree interfered with by fears of lesser degree, or by depressing thoughts, there is little doubt.

As one of the necessary prerequisites to comfortable and normal digestion, then, an equable frame of mind is not the least in importance, and can be cultivated by any one, if the health is so good as to remove from the body this innate fear of disease, and all other sorts of fears, for after all, fears are inborn.

In an old hotel in Pennsylvania is an inscription burned into the face of the old walnut mantel: "I have been young and now am old and have seen much trouble, most of which never happened."

It is a fact that most of what we fear never happens, and our carefully groomed fears went as lost effort, and with them went some of our vitality.

Worry is but a phase of fear, and worry is the middle name of a host of good and otherwise very sensible people.

Worry interferes with every function of the body, and interference is in direct ratio to the size and depth and height of the worry, and worry never yet accomplished anything.

Worry, as all fear, is the most insane waste of precious vitality that could be imagined, for it is wholly bad and without giving to the system anything at all to compensate even in small degree for what it takes out of the body.

It is a luxury to some, but withal the most expensive of all luxuries, the most destructive, the least constructive.

So why worry, when worry will never improve conditions in the slightest degree, and will, if indulged, ruin the finest body and mind in the universe?

Worry, like all fears, has a physical background, even as has insanity, and while we may not be able to control fully the mind, we can at least control the physical background.

Instead of telling people to stop worrying, we will do them more good if we try to find out what they are eating, and how they eat these things, and by correcting their evident mistakes we can so regenerate the physical body that worry is no longer in evidence.

Several years ago a young man of property came to the writer reporting that he had not slept a single wink in an entire week, and he looked it.

His face was purple, his brain in a whirl, he was erratic in speech, taciturn, unresponsive to simple questions, in fact, in the early stages of dementia.

He said he had invested heavily in real estate just before the war, and now the factories had nearly all shut down, the young men had either gone to war or were working in munition factories at higher wages, leaving his town almost without man power sufficient for the ordinary work, and the factories were unable to secure help from outside, for other towns were in similar plight.

His family was communicated with and furnished the information that with a little careful handling he could husband his property till after the war, when real estate would again begin to come to its value and he could dispose of some to let him out of his difficulties.

The banks had never pressed him for his liabilities nor were they apt to do so, but his plight had so gotten on his nerves that he imagined that every bank was about to foreclose on him.

Examination showed him to be very toxic, and he admitted being a rather heavy eater of much concentrated food with very imperfect bowel action.

No effort was made to convince him that his financial condition was other than what he feared, but he was cleaned out and sleep forced for three nights, after which the blood left his head and his face turned a normal color; he said nothing more about worries, stayed two weeks, ate only alkalin foods, reduced his toxic state, and returned to his business apparently without the least fear.

After two weeks he asked what he had been worrying about, and said that he did not see why he worried, that the bankers all knew him and would carry him along any decent length of time, and he was pulled to know why he had ever thought otherwise. No change had occurred in his financial state, and it was not till after the war that he finally emerged without loss, but he never worried again.

The cause of his worries was physical, in himself, due to the fact that he carried a toxic load that changed the complexion of the entire world for him.

His would have been another case of dementia from business difficulties, but, like Senator Tillman, the cause was never in overwork or the state of the real estate market, but in his table habits alone.

To prevent disease is to cease the daily cause of disease, and the cause of disease, as before remarked, is in the gradually

increasing amounts of acid end-products of digestion and metabolism, a controllable condition.

So again let us inquire, if seated disease will recover by a reversal of the wrong feeding habits, why will not these same habits prevent disease in the first place?

Prevention costs nothing, but it does save a lot, and if one is of sound mind it must seem that the only sane thing to do is to avoid habitually the well outlined causes of disease, without waiting for its development.

CHAPTER XII

WHAT CAN WE DO TO CURE DISEASE?

From the time when man first began to be sick he has no doubt been looking for some one to help him to get well again.

Cures, sanatoria, hospitals, baths, clinics, climate, solaria, doctors, nurses, medicines, serums, electricity, massage, spinal adjustments, anything, everything to assist him to get over his own little self-created afflictions.

All this with a sort of hazy idea that physical salvation, like spiritual salvation, can be secured vicariously.

But it is not so, and in the very nature of things it never can be so, for our bodies are the result of just how we, individual we, live from day to day, and no one can assume these results but us, and they can be obviated in no way except by a personal house-cleaning and such modification of our way of living as will end forever the causes that have culminated in our present physical state, no matter what this may be.

It is laughable to see the gullibility of man, the invalid, when he listens to fairy tales of cure, through the drinking of certain waters, the taking of certain drug mixtures, the transplantation of the sex glands of a monkey, to remake him vicariously and give him all the enjoyments of youth.

This last operation is not widely blazoned by the poor victim, so its devotees are not available for clinical data later, but every such case that has come under the notice of the writer was not one particle improved even after the usual year that you are told you must wait for results.

A year is a good idea, for one forgets after a year just how badly he has been bunked, and his disappointment is not so keen when he realizes that he is no better as would be the case were he permitted to look for immediate results.

If we could by transplanting organs from animals recover our own lost or depleted functions, it would be very nice, if one does not mind making himself part monkey, to secure this result, but it is simply ridiculous to think of such a thing.

The monkey glands will give up their hormones, stimulating him in just so far as his own glands are deficient but no further, and also stimulating him just long enough to permit of his writing a very cheerful check, but as soon as the contained hormones are used up there will be nothing more to expect, for the gland does not continue to function in its uncongenial surroundings, and any improvement that is apparent is simply imagination, pure and simple.

If one has paid fifteen hundred to five thousand dollars for such operation it will have deeply impressed him with its importance and its potentiality for good, of course. One is reminded of the lady who was bound to have an abdominal section and could not seem happy without this, as all her friends had enjoyed this expensive sport except herself.

No one could find anything for which to operate till she finally found a surgeon who put business before pleasure in all his work,

and who agreed to operate on her for a thousand dollars. He did so, making a simple incision in the skin at the proper site, which was carefully dressed and attended till it healed beautifully, leaving a very neat scar.

He collected his fee, she received what she wanted, and both were happy, no doubt, and she pestered the other surgeons afterward by telling them that now that she had found a good surgeon she was at last all right.

She had found a surgeon who knew what the trouble was and corrected it with a harmless operation; the husband was in on the plan, paid the bill, and there was really no deceit except insofar as it was necessary to deceive this foolish woman in order to please her.

The growth principle never ceases to function in the body, the tendency being to repair all defenses as these require repair, so the tendency in all acute troubles is for complete recovery, and no matter what means have been used these will be given full credit for the recovery, so the means become famous on this account, and no . matter what they may be they will forthwith be set down as a cure for this state.

The writer is reminded of one case of Bright's disease that had come back from the south with grave apprehension on the part of friends and physicians as to his ability to make the journey alive. When he arrived at his home he was taken in charge by his old physician who administered the remedies on which he had learned to depend: the usual digitalis, strychnia, morphine, diuretics for the failing kidneys, stimulants for the burdened heart, food of all kinds high in fuel value to sustain the failing strength, but after the two weeks had passed that were predicted as the outside limit of life he still continued in about the same condition.

A next door neighbor, a patient of the writer, prevailed on this case to call in this experiment, and he consented after making sure that he would not have any freak treatment.

Arrived at his home it was then discovered that he was under the care of another physician, and he was informed that it would be necessary to have this physician present for consultation, but the patient said this would be bootless as the physician would not consider counsel, saying he knew all about the case.

No one knows all about any case, except God, and He is not always available as consultant, if one happens to be out of touch with the throne for some time, and learning the name of the physician the writer said he would go ahead with diet, but on condition that the doctor was not to be told that there was any one else sticking his finger in this particular pie.

He had previously met this same physician in consultation and realised that his education was finished when he was graduated forty years previously, so knew a consultation would be worse than useless.

Now here was the condition: a physician who would not consider the discontinuance of drugging, especially the digitalis, because it had become to him the customary treatment and he connected dropsy and digitalis in thought always.

Why consult with this type of physician when the best one can get is his disfavor, with no possible chance to change the treatment?

The patient could not lie down for fear of drowning in his own fluids, he could not walk about because too weak and short of

breath, so he sat day and night in a large Morris chair, his legs bloated to the limit of the skin, gasping hourly for breath.

He was directed to throw out the medicine and never to take another drop as long as he lived; he was told to take a half pint of Pluto water first thing in the morning to hasten the draining off of the excess fluids that he carried, rushing these out through the bowel because they could not get through the crippled kidneys.

No food was to be given for three days, and the purge used first thing in the morning, but after this had acted freely and thirst set in he was to drink freely of orange juice, lemon juice and water.

This was on Monday evening, and his doctor, who was then out of town, was expected Friday, and would call.

The doctor was not to know that any change had been made in his prescription, and allowed to think that his last medicine was pure magic, so on his arrival he was astonished to find that his patient was scarcely bloated at all, he had walked Thursday and Friday around the block twice each day, and was lying down and breathing as nicely as any one, sleeping all night like a baby, and feeling immense.

The doctor remarked on the wonderful effect of that last increase of ten drops per dose of the digitalis, making a note of this, and the next poor devil will probably have to take this large dose the first thing, and it may kill him.

This was the most unethical thing the writer has ever done, and he has done the same thing when finding on the case some physician who cannot change his thought, and he believes it is justifiable to rescue a patient from the danger of such a physician in every case, but when called to cases where the attendant is unknown to him he always refuses to prescribe or even to examine the case except in the presence of the physician, for this man may be able to reason, and it is not fair to fail to give him the opportunity to show whether or. not he is up to date, or whether he is still in the same old rut of mysticism and medicine worship.

This case made a splendid recovery by learning how to eat so as to need less kidney function, for his kidneys are shortened in function permanently, and he will always have to live within the capacity for elimination of these crippled organs; an easy thing to do when understood.

Now why did this man recover? Not because he was given any magic treatment, but simply because he quit doing the things that were making it impossible for his crippled kidneys to keep the system clear of the particular form of waste that only kidneys can eliminate.

The Pluto water was merely a broom to sweep out quickly much accumulated waste, by removing vast quantities of acid-laden serum from the blood, and lymph from the tissues, and is in no sense a medicine.

The recovery is like all others; if the encumbering waste can be removed down to a possible point for the capacity of the eliminative organs, these will then be capable of keeping the tissues clear, if the patient will stop the usual dietary mistakes and eat those foods in which the necessary body ingredients are fully represented, at the same time combining these compatibly to prevent the usual fermentations.

Those foods are to be eliminated which leave behind them such wastes as are embarrassing the particular organ that is breaking down, or that is broken down, and time does the rest, the same spirit of growth and repair that operates so long as we live.

When we analyze the situation carefully we will be compelled to say that all we can do to cure disease is to stop causing disease. Recovery comes like the dawn, slowly and by almost imperceptible advance, but continuously and finally till the light breaks and we realize another day.

Cases similar to the above could be multiplied indefinitely through the past twenty-four years; nearly all of which were given but a short time to live, definitely condemned by really good physicians, yet who made splendid comebacks when they quit doing the things that had interfered with the law, and when they understood what these things were and just how to avoid their repetition.

Can we cure disease? Absolutely not, nor can we do anything materially beneficial, but the body itself can heal itself if given a chance, as has been proved in thousands of cases in the experience of this one writer alone.

For twenty-four years this writer has been confining all of his treatment for disease to this one plan, assisting by such simple means as the drastic detergent saline purge when time presses, using the enema to assist a feeble colon in its unavailing efforts to keep itself clear of accumulating waste, and definitely stopping the usual food mistakes till recovery has had time to become well advanced, then making such permanent alterations in diet as will approximate as closely as possible the actual needs of each body without embarrassing any lame function, and his patients have recovered only through the ability of the body to heal its own broken defenses.

If you were to hit the thumb nail hard enough with a hammer 'to destroy its function you would lose it, of course. You know this no doubt from early experiences, yet you do not worry, and you 'do not try to make this nail grow on again; you do not use any magic dope, nor do you think any heroic surgical operation even remotely suggested by such condition.

So what do you do to secure another thumb nail? You do nothing but wait, only you do recognize the fact that till this nail grows again it is necessary to stop hitting the thumb with the hammer, also you have learned by experience that it is not wise to hit the thumb with the hammer, and you mentally resolve not to do so again.

So you have cured your thumb nail, and if you stick to your good resolution not to destroy the nail again in this way you have cured it permanently.

You do not stop to think that this healing is a demonstration of the growth principle still active in the body, just as active as when your body was not yet fully developed, but as it is just this, and it is this same principle that acts to cure disease of all kinds, repairing, the damage done.

The organs you have this year are largely new organs, not those with which you were born at all, and largely not the ones you were using last year, for cell by cell they die and are replaced cell by cell by other organs. This same continuance of the function of growth and repair goes on so long as life lasts.

Our care must be that daily we use as food those things that represent everything in the form of building materials that the body requires in making these daily repairs, and using these in such relation as will guarantee freedom from the usual fermentations that result in so much loss of alkali by the body.

In building a house of brick we must also have mortar else there will be nothing to bind the loose brick together, and for so many brick we must also have so much mortar, if we are to build an enduring wall.

The building stones are the materials from which we build tissues, the mortar is represented by the mineral salts without which the building would soon crumble.

Some of these salts no doubt enter permanently into body structure, others are used up in daily function, passing out through the avenues of elimination, in combination with the excreta, while still others are what we call catalysts, chemicals whose presence is necessary in the changes that occur in digestion and elimination and metabolism, but which are not lost, being used over and over again, and even these become depleted through time, and have to be restored through the foods.

If we knew what minerals are shy at the time and could replace them from the shelf, in the form of prepared chemicals, then there would be some sense in describing certain of our so-called remedies as "restorative remedies," but we still have no proof that man can make these chemicals in form acceptable to the body, Nature's form, colloids, having so far eluded the chemist very largely, though he makes now what he calls colloids, but their use does not restore the deficiencies of the body, as we judge this by clinical observation.

Nature provides all her chemicals for restoration of the body in the form of colloids, organic forms, and man has for a long time sought to imitate her in this, but he has not been so very successful that we are now able to insure the recouping of the chemical losses of the body by any artificial means, and must still depend on Nature's colloids as found in plant and fruit.

During acute illness when the body is fighting with all its might and main to readjust its internal affairs to the normal, and when death seems very near, it is but natural that the friends should desire that something very heroic be done, and it is equally natural that the physician should feel the same way. The writer well remembers that he always felt this way about such situations, and yet there is nothing to do but wait, for it is positively dangerous to interfere in any way with the body's own means of readjusting itself to the normal, and if we *realize* this and keep hands off we will be astonished at the short time required to do this work of housecleaning and repair.

Twenty-four years ago, when the writer definitely stopped all interference, it took nerve to give absolute blanks and wait, but he was so firmly convinced that this was Nature's intention that he stuck faithfully to this prescription of just plain sugar of milk tablets, colored in several impressive colors, and then he began to see all these acute cases recover that looked seriously like failures under former prognostic experience.

After two years of the use of nothing but these harmless placebos he quit even this, but in treating cases for the first time it is yet sometimes necessary to deceive the patient in this way.

Four years ago the writer was called in great haste to a new family whose physician was not available at the time, but whose two-year-old baby was supposed to be dying with whooping cough.

It was useless to try in a few minutes to educate this mother who was frantic over the baby's apparent danger, so all that was attempted was to reassure her first, then ascertain what was being done, change this all quickly, give sugar of milk tablets with orders to dissolve one in a teaspoonful of water and give every two hours during waking hours, clear the then burdened colon, and wait.

Orders were given also to use no foods of any kind till the baby-was evidently hungry, nothing beyond orange juice to be considered till that time, and to get in touch with their physician next day.

Two weeks later the writer met this mother with her baby walking beside her, taking an outing, and as she approached she picked up her baby, then looking perfectly fit, and she said to the writer: "Doctor, I wish every woman in the world knew of this wonderful medicine for whooping cough."

It *was* good, for it allowed Nature to work unhampered, and the other slight assistance given was merely in line with Nature's own efforts, unloading a bowel unable to keep itself clear of waste from meat, eggs, breads, cereals, sugars, milk, for her doctor had warned her that whooping cough is a very tedious and exhausting disease and the baby must be kept well nourished, and it was smothered with food.

What can we do for disease? Only stop causing it, and when we have done this we have done enough in every case.

Spasmodic asthma comes from the embarrassment of the bronchial tubes, from waste of acid character, manufactured every day, and whether these are severe spasmodic seizures or the continual catarrhal condition the cause is the same and the treatment the same, merely to stop the formation of this irritating debris.

This is so easily and quickly proven that it is a pleasure to make this proof to any asthmatic sufferer.

To accomplish a quick relief it is well to take the Pluto water every morning for at least three days, confining the diet to fresh fruit juices, always unsweetened. Usually this rather short period is sufficient to bring quite thorough and complete relief, convincing the patient that his trouble is from this accumulation of acid debris which has been partially and temporarily removed, and it is then easy enough to secure the full cooperation of the patient in such dietary changes as are necessary to end this pestiferous condition permanently.

If any unbelieving asthmatic will make this proof on himself he will easily see how foolish he has been to take medicines which never did any good, or even to inhale irritating powders or smoke, which by their irritation cause great flow of mucus and bring temporary relief, for the cause is all the time inside the body and controllable through the diet only.

Relieved in this way asthmatics can continue to live in their former uncongenial surroundings without the least difficulty, and the very same thing applies to hay fever, though this should be undertaken months before the expected attack in order to secure relief then; and the next year, if diet has been right, there will not be one sneeze to usher in the formerly fatal twentieth of August.

Now what cures these cases? No magic dope, no powerful and potent concoctions, nothing but Nature, your own body, through its function of growth and repair, and you need nothing beyond this, if you will remove the causes and keep them daily removed for all time.

In a later chapter the means necessary to remove all the exciting and predisposing causes of disease will be gone into more fully, but if one will select foods all the time that are real food, not manufactured tastes only, and combine these in such manner as will forfend the digestive tract against the usual fermentations of the ordinary heterogeneous mixture of incompatible foods, one will have then done enough to insure recovery from the annoying condition then present, and also to forfend the body against attacks of other sort that pass as the many-headed monster that we have always been taught to think disease.

The program is easy, when understood fully, and its application is pleasant and really fascinating, for food is a great game when you study it, and a game that has no tricks and no chances for short change, nothing but consistent winnings, when played fair.

Nature makes a complete showdown in every case of acute disease, and when you have learned how to read her cards they are as plain as day.

If we can forget our desire to do something heroic in acute . troubles and content ourselves with a removal of the evident obstructions to Nature's efforts to heal, we will have done the most heroic thing possible under the circumstances, and we can wait with confidence in the outcome, for Nature seldom undertakes to set her house in order unless there is sufficient vitality present to go through with this; some say she never does, but the writer's experience teaches definitely that she very seldom does, and if we have vitality enough to be alive in the early stages of this housecleaning that we call acute disease we have vitality enough to go through with it to the end, and the end is always far better conditions than obtained before this was undertaken by Nature.

So long as the body has vitality enough to undertake these readjustments there is hope for us, but when we begin to note that our former colds do not trouble us any more, and our sick headaches are a thing of the past, our formerly fluent catarrh has dried up, and if at the same time we have not removed the cause of these things through the necessary changes in diet, then we are in danger, and chronic disease in some form is already well established, for only then has Nature given up the job of trying to keep us clean inside.

If we would escape the formation of chronic disease, or avoid the necessity of these occasional housecleanings that we call disease, we need do nothing but quit causing these.

We must avoid all the causes of lowered vitality in every one of our amusements, our habits, and we must so arrange our food intake that the former acids will not form again to pollute the fountain of life at its source.

Such program does not fit in well with the practice of the ordinary physician or hospital, for these do something concrete for the disease as it presents itself at the time, something much too concrete by far, for the less they do for disease the better off will the patient be.

After all, what does the usual physician know of health?

His whole training is on disease, not on health; he knows nothing about the latter as it is not a profitable study, except for the patient. This is not the fault of the physician, but the fault of the system which educates him and continues to keep him misinformed on many things that his reason should tell him are not as he has been taught to believe; chiefly that Nature is a blind nurse and needs much expert guidance. All she needs is a freedom from restraint, a free hand.

CHAPTER XIII

THE ROLE OF MEDICINE

The idea of medicine is something to correct or relieve bodily conditions, and this theory, for it is never anything but a theory, has furnished fertile soil of the exploitation of humanity from time immemorial to the very present day.

If the ailments of humanity could be reached in this way what incentive would there be to live correctly?

It matters nothing that there is no agreement in medicine on the proper remedies for any single condition, the nearest approach to uniformity in opinion or prescribing being, perhaps, mercurials, iodides and arsenical preparations in syphilis, quinine in malaria, and sulphur in scabies, but even here there is wide divergence of opinion on the subject of these remedies and their relative or collective value.

Sir William Osier said that he could count on the fingers of one hand without repeating, all of the so-called remedies that are of any use to the human race, and his selection of the five would not suit others who would pin their faith to another five.

It would be ludicrous, if it were not pathetic, to see the implicit faith attached to the efficacy of remedies, not alone among the laity but among physicians themselves, when we consider the completely chaotic condition of drug therapeutics today.

The writer meets in consultation many men who prescribe their remedies with what semblance of confidence a reasoning being would attach to some definite procedure in mechanics, and it strains the credulity for him to believe that after these years of utter failure of drug medication these men can actually believe that it makes any vital difference at all what remedies are used in any condition.

Each one of these men, when questioned as to just what he expects his proposed drug medication to do, quickly waives the point and no longer insists on this line.

The treatment of disease by means of remedies has not one suggestion of foundation except the innate desire of the human to secure vicariously relief from his debts to Nature, and this desire is still innate, and on it and its accompanying faith is built the entire structure of medicine today.

Dr. Oliver Wendell Holmes said many years ago that if all the medicines in the world were cast into the sea it would be so much the better for humanity and so much the worse for the fishes, and he was not so very far wrong at that.

Sir William Osier quoted the immortal Voltaire as saying that "We put medicines of which we know little into bodies about which we know less to cure disease of which we know nothing at all."

Surely if drugs were of unquestioned value in the treatment of disease there would be something like a standard of treatment for each familiar disease, yet if we consult one hundred different men we will get eighty-seven different ideas of our condition and not less than ninety-seven different plans of treatment, showing that

there must be the haziest of ideas on both disease and its means of treatment.

From the days of the witches' broth to the present every conceivable thing that is mineral, vegetable, or animal has been used for the relief of pain and disease, with the idea of cure, yet which of these remedies has persisted?

The present shows a tendency to pull away from these remedies, and other means are sought instead, such as spinal adjustments or the various electric modalities, but in acute troubles the call usually goes out to the regular physician, who feels that if he has not prescribed a drug remedy in some form he has not earned his fee. The Patient usually feels the same way about it.

That drugs do greatly modify the course of disease there is no doubt, but that they improve on the methods of Nature there is more than a grave doubt, in fact there is little doubt that every drug administered that in any way modifies the course of the symptoms is a distinct handicap to the body in correcting the condition at fault.

Drugs will relieve pain by obtunding sensation, they will move the bowels through irritation, they will cause perspiration through stimulation of the skin, they will increase the output of water through the kidneys, but not the excrementitious material that should find its way out through this channel; they will cause vomiting, or sedate an irritable stomach; all these things they will do because they impose a task of other character on which the body concentrates its eliminative energies; but to cure, to improve conditions in the slightest degree, there is not one scintilla of evidence favorable to the idea.

And yet this idea still persists of a cure by means of drugs or serums for the ills of the body, and human nature still adheres to its belief in vicarious remedies for its self-created ills.

If the layman would forever realize that his ills are all of them self-created, and start in at once to prevent these, he would soon lose his respect for drug remedies.

Not many years ago Bernarr McFadden interested a member of the staff of a prominent newspaper in securing proof that there is no uniformity in either diagnosis or prescription for disease, and had this young man accompany a member of his staff to the offices of eleven different physicians, not the little fellows but the big men who enjoyed the reputation of being among the city's best prescribers.

The test patient was selected from the staff of Physical Culture Magazine, and while there was nothing radically wrong with the young man, yet he was not very robust looking, and was furnished with a common train of symptoms that he was to detail to each prescriber.

He got eleven different opinions as to what ailed him, and eleven widely different prescriptions for the supposed trouble, which were compared afterward and found to represent as many different aims.

The reporter dared not publish the findings in this case, as the physicians were too prominent in medical circles there, but if he was a thinking sort of young man it must have caused him to lose whatever faith he had previously had in medicine.

The writer was educated in all the lore of the schools at the time of his graduation, and followed closely the literature

subsequent to that time, yet he early formed the fixed idea that it made very little difference what was prescribed, as the body in some way, mysterious to him then, arrived at recovery or failed to do so independent of remedies.

Then followed, after sixteen years of this unproductive prescribing, his own personal breakdown with a condition for which he knew no remedy, in fact he knew that so far as science, so-called, was able to furnish there was distinctly no remedy, and a careful analysis of his personal habits, as these relate to the table, led him to such modification of his way of eating as brought relief in a very few months, and from that time he began dimly to realize why men get sick and what we can do about it.

However, it took four years and a laboratory course in New York to furnish him with adequate reasons for this rejuvenation.

His former scepticism in therapeutics was then seen to be well founded, for when the dietary errors were corrected the body was able to do for itself what no drug remedies could possibly have done.

Many wise heads in medicine have said over and over again: "The causes of disease are a great mystery." If this is the case then surely the remedies aimed at conditions, the cause of which is unknown, stand but a poor chance of hitting the mark.

The common cold is perhaps the most generally prescribed for of all conditions, unless perhaps constipation, and furnishes a very good illustration of the efficacy of treatment.

As all acute disease tends to early recovery then whatever remedy is used last before recovery is given credit for the cure.

So each has tried some certain remedy for colds and has seen the whole thing vanish after a day or two and at once concludes that he has struck the right remedy for a cold, so he tells all his friends, and those who enjoy an early subsidence of the symptoms of acute catarrh that we call cold are certain likewise that this is great treatment for colds, and so the remedy is established as effective in colds in spite of the fact that perhaps but a small percentage enjoyed relief soon enough after the remedy was applied to connect these two.

Treatment of all sorts is so generally unavailing that the average case is agreeably surprised by anything like a tangible result from any prescription, and yet they keep on trying, like Ponce De Leon in his search for the spring of eternal life or perpetual youth. Always it was somewhere else, never near by, not in Spain, for that was too near home, but surely somewhere in the distant New World, and so his search continued.

What has medicine to offer in the common asthma? Not a thing, for everything has been tried and found wanting, and yet if you take your case of asthma to the physician does he prescribe medicine for you? Surely he does, and you expect it and would begrudge the fee if he did not produce a tangible remedy on which you could place some reliance.

Adrenal extract does give relief by constricting the circulatory supply, thus lessening congestion of the bronchial tubes; likewise morphine, by deadening the nerve centers involved, gives temporary relief, but neither does any real good aside from this temporary relief of spasm.

A patient up from Texas was taken with his usual attack of hay fever which always promptly brought on a spasmodic attack of bronchial asthma, and being a stranger in a strange land he telephoned down stairs in his hotel for the operator to send him the best physician in Buffalo, for he was wealthy and cared nothing for expense if he could get relief.

The physician called happened to be a prominent surgeon, who in asthma could see no occasion for operation so had very little interest in the case, and aside from administering adrenal chloride every night he attempted nothing, well knowing that there was nothing except relief.

After a time the patient asked him if there was nothing that would permanently relieve asthma or cure it, and the surgeon replied that he knew of but one thing that would do asthma any real good, and when importuned for that thing, no matter what it was, he took from his bag a revolver and laid it on the table.

That was naturally his last call, but he had demonstrated to the patient two things, the one that he was honest enough to admit his inability to do anything curative, and the other that he was shockingly blunt.

This patient a little later cured himself through eschewing the usual dietetic mistakes that alone can cause asthma or any other disease.

The next year he did not even have his hay fever attack, and never again did asthma show its head.

Ex-Ophthalmic goitre is a toxic state wholly, and yet there is never anything done to relieve this, attention being directed toward quieting down the heart and nerve symptoms, and eventually excising parts of the gland or tying off its circulation.

This does limit its activity, to be sure, chokes it off, but also sacrifices much useful gland structure, and we need it all, if its hyperactivity can be quieted down to the normal.

We cannot live any great time without this gland, and in those born without a normal function there is a deficient development of body that is called cretinism, or congenital hypothyroidia.

Medicine has nothing at all to offer in goitre except the removal of the gland, a wholly destructive proceeding.

Yet these cases, if thoroughly detoxicated and well adapted to a non-acid-forming diet that represents chiefly the vital foods, will practically all come back to normal gland action.

This statement may be questioned, but in the rather large number of cases of this trouble treated during the past twenty-three years but two have not responded fully to treatment, and of these one was lost sight of for a time and eventually drifted to the Crile clinic at Cleveland where she lost a part of the gland, while the other case was under treatment but two weeks and at once returned to his flesh pots and his incompatibles, realising no benefit of course.

Of the rest, some were young girls, since married and raising healthy families, without any sign of aberrant gland function, and one, who was two months pregnant when treatment was begun, went through the entire pregnancy without incident and fully recovered before the end of her term.

Pregnancy and hyperthroidia are not supposed to be compatible conditions, either abortion or greatly aggravated gland condition being expected in every case.

Progressive pernicious anemia is another condition for which medicine offers nothing at all. Very recently the liver feeding, which is the first glimmer of light that would indicate a leaning toward the suspicion that this is in reality a deficiency condition, as it in fact is; and while the liver feeding does supply infinitely more than the former grossly erroneous diet of meat and eggs yet even this does not clear up the toxic state, and relapse is almost inevitable.

This is plainly a deficiency condition plus a colonic infection, as the cases treated by thorough colon toilette daily, and diet limited to basic and vital foods, clear up within a very few weeks, and where the vital feeding is adhered to afterwards, there has been no relapse, with one partial exception: an elderly lady whose colon was far behind with its work. She refused to use the enema daily as it was always painful for her, and she firmly believed that she had a general vegetable allergy, or intolerance, so that she never used freely either the cooked greens or the raw vegetable salads.

She relapsed about a year and a half after her recovery, but again came back nicely on proper detoxication and dietary correction, and now she uses the enema whenever necessary; also she believes it is possible for her to eat the vegetables very largely. For these two reasons she is now safe, and need fear no more relapses.

This case was supposed to have died on four different occasions in one day, after she had been on treatment for two weeks, but each supposed death was merely a collapse from which she recovered in a few minutes, and her recovery, while slow, was without incident from this time.

Transfusion here introduces a grave danger, for not infrequently bloods that group correctly with that of the patient will yet cause a chill that is terrific, and the blood is lower almost at once than before the transfusion, agglutination of the red cells occurring that ties up a part of even the small number yet available of the patient's own blood.

Yet medicine offers here only a faint hope through liver feeding, transfusion in emergency to prolong life for business reasons, and eventual death, because the cause of this condition is not understood.

Eczema is nothing more than an acid exudate finding exit through the skin, and is curable by correcting the acid-forming diet to a neutral or alkalin one, wholly without local applications or medication of any kind whatever.

Psoriasis goes the same way, but slower, as it is more chronic, and the ancient search for germs in connection with psoriasis, seeking to class it with the infections, is barking up the wrong tree, for psoriasis gets well just as surely as does eczema.

Some cases of psoriasis require that all animal foods be wholly interdicted, even milk, before they will fully clear up, while most will clear up on vital foods including raw milk.

Gastric and duodenal ulcer disappear magically when the irritation of a too free hydrochloric acid is prevented, not by alkaline treatment but merely by ceasing to call out hydrochloric acid,

through omission of all concentrated protein from the diet, even milk, and using only the acid fruits and the raw vegetable salads, or in the beginning the fruit juices and raw vegetable juices, till healing occurs.

This is infinitely better than cutting out the ulcerated area, or anastomosing the jejunum and stomach, as is generally done, for this leaves behind exactly the same condition of the gastric juice, and what is to prevent the formation of a still deeper and more serious ulcer?

The writer has in mind one man who traveled all over the world with a gastric and duodenal ulcer, and who was operated five different times in various great medical centers. The last report showed him supporting five distinct loops of jejunum from the lower border of his stomach, and with a still worse ulceration than any of the preceding, perhaps necessitating a sixth operation, till cancer closes the scene.

It is safe to say that every gastric or duodenal ulcer depends for its presence on a hyperchlorhydria, or a too free production of hydrochloric acid, from a too high protein consumption for too long a time, and it is equally safe to say that every gastric or duodenal cancer originates in a simple ulcer, so there you are. Cancer of the stomach begins away back in a hyperchlorhydria, a controllable condition, a self-controllable condition.

What does medicine do for constipation? Gives laxatives, enemas, but usually only laxatives, whipping a tired horse, making it still more tired, till even the whip in time has no effect, and the last state of this patient is worse than the first.

Constipation will be treated separately in a later chapter, but here let us remind you that this is merely part of a tired body and will never get better till the body is brought up to a more vital condition and kept there by use of vital foods in compatible relation. In all of these conditions medicine throws up its hands, but not publicly, still carrying the idea that in medical treatment is to be found the best for every ill to which flesh is heir, even though all of these things are treated as incurable by the greatest authorities in medicine, and so taught.

Is it not evident that these things are not properly understood by medical authority? Does it not seem that maladies so common must have some source that can be reached through means of some kind?

If we are allowed to create such conditions surely we are in a bad way if nothing can be done for them.

Referring again to the statement of Osier and many others: "The cause of disease is a great mystery," we will call attention to the silly adherence of the masses to any form of treatment founded on complete ignorance of the causes of disease.

As to surgery, we are told that this at least is a definite science, but is it?

To be sure surgery has developed very definite technique for all sorts of operations, but, if Dr. Charles Mayo is correct in stating that nine-tenths of the internal operations that are done today never should have been done, then this is at most a badly misapplied science.

Several years ago there was offered to the New Jersey Legislature a bill providing that when operation is advised the

decision should rest with two internists and one surgeon, thus allowing internal medicine to preponderate in the consideration of the case. This bill was never reported out of committee, yet it would be a good thing as a check on the too ambitious surgeon, and we may yet come to such an arrangement.

When you consider the thing, it is ridiculous to go to a surgeon for an opinion on the advisability of an operation, for surgery is his business, and he is quite apt to think that every one should have an operation.

It would be on a par with asking a builder if one needs a new house, for being a builder he is sure to think that a new house is the very thing you need most.

Two kinds of surgery we will always have with us, and more power to such. The one is the orthopedic man, who corrects deformities, and the other is the emergency surgeon, who repairs wounds. To this sort of surgery we may take off our collective hat for its work is all to the good always, or at least its objects are above criticism even if the method may sometimes be wrong.

It is this infernal curiosity about the interior cavities of the body that has worked so much harm to surgery and the public, and if there were some way to curb this growing tendency to open these hermetically sealed body cavities on the very slightest pretext it would be the best thing for surgery itself, and surely infinitely better for the too frequent victim.

Perfectly legal murders are consummated on the operating table every day in the year somewhere, many places, everywhere, for not every one who essays surgery is a surgeon, though if he has an M.D. after his name who is going to decide that he should not operate?

He has a legal right, whether or not he can carry his operation through safely, and if the patient dies there is no redress for the family, for the whole thing has been within the law.

Deaths from operation, whether occurring on the table or dating from the operation, are so very common that we have become accustomed to them. They cause scarcely a ripple of interest outside the immediate family.

The writer is speaking from a surgical experience that covers only the first sixteen years of his practice, and for the past twenty-four years he has handled perhaps ten times as many cases, comprising a far greater range of conditions. In all this time he has referred but three cases to the surgeon, and in each case there was grave doubt of the advisability of even these undertaking surgery for their condition, and with the exception of one case of very rapidly increasing ovarian cyst he can recall no benefits that came from even these few cases through operation.

Over two hundred and fifty cases of acute and chronic appendicitis have been handled during this very unsurgical period, not one of which has resulted fatally, even including fourteen cases that had ruptured before coming under treatment, and when some surgeon can show better figures he is willing to listen.

Many cases of mastoid infection and abscess have been treated by simple detoxication without drainage, one of which had perforated through the external plate on both sides before treatment was begun, but no other case came to open discharge, yet all got well and preserved perfect hearing; nor did any have facial paralysis

or internal perforation as is always held up to be inevitable in the absence of external surgical drainage.

Now these things are not in any sense personal puffs or a bid for applause, for in each case the cure was Nature's own, and no one is deserving the slightest credit for any of them.

They merely serve to impress the fact that Nature can do the work of restoration herself, if the usual impediments are not thrown in her way by meddlesome treatment.

From the foregoing it must be evident that the role of medicine in the treatment of disease is a very small one, and that wholly obstructive, if not openly destructive, and the same goes for surgery, with the exception of the orthopedic and emergency surgery.

Nature must cure if the thing is to ever be cured, just as Sir William Osier has so aptly said, and the sooner we reach this unassailable conclusion the better it will be for all of us.

CHAPTER XIV

THE ROLE OF FOOD

To say that food is curative in disease is not correct. We must insist on our former statement that the only cure for disease is by the body's own regenerative processes.

Food is causative in disease, but the only way food can cure disease is by ceasing to cause it.

It is through food that we live, without it we would die, but not so soon as most people think, for we carry habitually, stored about the body in many crannies, material on which we can live for a long time, cases who have gone ninety days entirely without food of any kind not being unusual, while eighty days without food is very common.

The forty day fast is very usual, and excites no comment except among those who persistently refuse to consider that the body can subsist so long entirely without nourishment of any kind, and who frankly disbelieve the tales of prolonged fasts.

This will be referred to again under the chapter on fasting, but when we think of food in its connection with disease we also naturally think of the fast.

Food is the most abused of all Nature's gifts, without the least doubt.

We abuse fresh air because we ignore this too often, as also we abuse sunshine by neglecting to take advantage of it on every possible occasion.

We abuse rest either by resting too much, or by neglecting to take necessary rest, just as we abuse exercise by either taking too much or too strenuous exercise or by almost totally neglecting to take any exercise at all.

These are all abuses of Nature's good gifts to man, but among all there is none so totally misunderstood or abused as are her most necessary foods.

Why do we eat, and what is food for? Simply this: Food is replacement material wholly, material with which Nature provides replacement for the dying body itself or for its used fuels.

However we view the subject of foods, we can arrive at no other solution of the question as to the intent of Nature toward us in regard to the use of so-called foods.

Now replacement material must replace wanted material else it is in no sense food.

Thus, if food is taken when none is required this is not in any sense food, but a task to be elaborated by the digestive organs, the assimilation, the metabolism, and again by the organs of elimination, a bootless task, asking the body to work when it should be resting, giving the body nothing but work, when it needs no repair material.

There are those who profess to be able to treat successfully specific diseased conditions with equally specific foods, but no one is smart enough to tell just what materials are needed so cannot possibly know what foods to prescribe for this shortage.

This is carrying the food game too far, and is bringing the whole subject of foods in the treatment of disease into evil repute with those who see the impossibility of this connection.

The body itself knows what materials are needed; we do not, so all we can do is to offer daily those foods that represent everything the body can require, and leave the rest to body intelligence, for each cell of our bodies has an intelligence, else scientists are all wrong.

Call it instinct if you wish, but we can in no other way account for the selective action of the cells lining the intestinal canal, for instance, which select out of the materials passing down through the intestinal tube in the form of chyme those materials needed by the cells higher up, or farther away from this canal, and refuse to take up other materials that are not needed.

This is called the selective action of the intestinal cells, and is admitted by physiologists generally.

We can recognize the shortage of lime in some cases by the bony development or the teeth, and we use lime-rich foods to meet this evident shortage of this most necessary of all our alkalies, but we can scarcely go farther than this in specific dietary prescribing.

Food may almost be said to be curative in such deficiency conditions, for its use is followed by cure, and yet even here it merely furnishes the raw material, and the body itself performs the cure, else it could not have been accomplished.

McCollum, Howe and many others have proved that practically all disease to which the human race is subject may be produced by deficient feeding, not feeding foods in deficient amounts, but foods in any amount, if deficient in some one particular, or some one body chemical.

These deficiencies are referred to as vitamine starvation, but to date no one knows what a vitamine is, no one ever having segregated or seen one, and there is a growing suspicion that after all these elusive things are merely certain definite relationships among the various essential salts or chemicals of the body, a relationship that is broken up by absence or marked paucity of one or more of these, whether through processing or the application of heat.

Whatever they are, or whatever happens to food that is deprived of certain of these salts, the feeding of the little laboratory animals is followed by the development of certain physical characteristics which we denominate deficiency conditions, and these can be restored to normal in a very short time by addition of the missing element or elements.

The role of food in health is that of furnishing replacement material daily for the action of the digestive organs as a pabulum on which the body feeds, nothing more than this; but in disease food plays a major role.

In a later chapter we will go into the subject of the mechanism of digestion, showing just how food enters into the development of disease through a misunderstanding of the processes of digestion itself, and foods that are deficient play a still more important role in development of disease through failing to supply necessary replacement materials for the body as these are required.

There are vast numbers of mass feeding experiments on the human, as in the digging of canals or construction of railroads far

from the base of food supply, where those foods only that could be kept for long intervals without spoiling were available, and in every such case disease breaks out in many forms, chiefly beri beri, which is due to the absence of sufficient fresh fruit and fresh vegetables.

The most spectacular of these was perhaps the converted German cruiser, formerly the Kronprintz Wilhelm, outfitted in Mexican waters during the late war to prey on Atlantic commerce of the Allies.

These men were afloat from early in September without contact with any port, for they had none, depending on the food supplies of the vessels sunk, for their provisions.

These vessels on short cruises usually carried but little fresh food, as this was available frequently while in port, but what was found went to the officers' mess, while the men had to depend on the usual canned vegetables, salt meats, white flour in the form of ship's biscuits, rice, of the polished, denatured variety, and such long-range stuff.

All went well till after the first of January when the men began to get lazy, weak, inattentive, nervous, quarrelsome, and inefficient. Soon they developed swelling of the feet and ankles, blood pressure, dilated heart, congested kidneys, and then one by one they dropped, some having convulsions, some losing the sight, but many desperately sick among them.

By March the captain realized that he was whipped, and that he would soon be without a crew, so he steamed into a Virginia port and surrendered, and was interned there for the balance of the war.

The ship surgeon was all at sea as to the condition, and so also were the many experts who visited the ship from New York, Boston, Philadelphia and Baltimore, surgeons who were supposed to know lots of things, yet this was a new and strange malady to them. They could name the principal condition, which was nephritis, but this meant nothing, for why should these men have nephritis?

It was finally Alfred W. McCann, Health Editor of the New York Globe, who unraveled the mystery, and he knew that these men must have been fed deficiently on such a long cruise, and going into the matter of their diet he found it just as he had suspected: preserved foods, with no sufficient fresh stuff to offset the acid-forming tendencies of this, nearly all of which was concentrated as well as preserved.

His orders were to use fresh fruit juices freely for one or two days, then a vegetable broth, then bran water, made by leeching bran and using the water, then fresh fruits and green vegetables, and every man jack got well in short order, simply because they were short of the necessary chemicals and Mr. McCann knew how best to supply these quickly.

Were these foods curative in this condition? Only as they gave the body opportunity to select those things needed.

The body cured itself quickly when it again received the chemicals necessary to rebuild its deficient structure and fuels.

The condition was pronounced beri beri by Mr. McCann, and so it proved to be, a deficiency condition pure and simple from a lack of the fresh foods that alone could supply these.

When Steffanson made his last trip north he took with him such provisions as his long experience in Arctic exploration has

taught him to be necessary: pemmican, dried fruits, dried vegetables, nuts, vital things all, but when leaving the northernmost government cache three of his men were found to be unfit for the rigors of the trip, and they were left at this post to be picked up on the return trip in the fall.

Here were preserved foods of all kinds, canned, dried, white flour (no other will keep), all denatured in some degree, and when Steffanson returned he found these men nearly dead with scurvy, and he without the fresh foods that would so easily correct this.

He had observed that when a polar bear kills a seal, if not hungry at the time, he tears the seal open and eats the liver, so, thinking that this must represent something vitally necessary to the bear, he had the men kill seals, and using the raw livers he made the men eat of this, much against their will, but with the desired result, for each man recovered and was able to return to the U. S. in very good condition.

Steffanson's pride was injured, for he had made a boast that no scurvy or other deficient condition had ever developed among his men, and even this was not to be laid to him, for his men on the trip north were all in good condition on their return to the Government cache, those who were sick having lived on the preserved stores found there.

Nature produces foods in condition for immediate use, also produces many that can be stored without great harm, but man seeks to improve on his food, and in every case he robs it of some life-giving elements or some necessary ingredients, so that he is not able to feed himself apart from a very considerable quantity of these same natural foods.

Foods that are deficient in any particular are not in any sense foods, though they may be fuels.

Formerly foods were supposed to represent so much carbohydrate, so much hydrocarbon, and so much protein, with no attention paid to what was called the ash. We now know that this ash represents the most vital part of the food always.

Later a great advance was made, supposedly, when so many calories were prescribed for everyone of a certain weight and developing so many foot pounds of energy per day while at work. Now we know that food needs cannot be measured in this way except within wide limits.

Some men on half the food consumed by others will develop twice as many foot-pounds of work in a day, so there is something in the individual that accounts for this great difference. This is his own personal economy in digestion, absorption, metabolism and excretion, for excretion plays a very important part even here, as tissues not properly drained are much less economic in their use of fuels.

All we can do about food is to make sure that what we eat is really food, not simply manufactured taste, then make sure that we get the things that still carry the necessary salts, the vitamines, if you please, combine these in compatible tasks for the digestion, and eat so much as appetite suggests at the time, not eating wastefully, but economising even in the chewing of everything. When we have observed this care we can forget about the proportion of fats, starches and protein and even forget the exact number of calories convention prescribes for us, and we will soon be astonished to find

that we need but a small part of what we are supposed to get away with daily, yet are competently nourished and have far more endurance than would be the case were we to eat far more food.

During the Russo-Japanese war the Russian soldiers were supposed to be among the best fed of all troops, with five thousand calories per man per day, consisting of nearly the standard of our own army during the late war, but the Japanese army, with what was considered then starvation diet, consisting of little except a handful of rice per man per day, outmarched and outfought and outmaneuvered the Russian army at every angle, and showed a much higher efficiency than did the better fed army.

The Japanese army ration at that time comprised scarcely more than two thousand calories, as we compute heat units in food, and this was surely sufficient for their every need.

Since that time the Japanese ration has been much expanded, and now compares quite closely with that of the average European army, and it is safe to say that their efficiency will fall off proportionately.

Surely the lack of meat in the former ration did not affect the qualities of the Jap, for he was a good soldier.

One evidence of the correctness of the older Japanese ration was the almost complete absence of the usual army diseases, the health of the Japs being remarkable throughout this very trying campaign.

We depend so much on food that it is of prime importance to each of us that we know much of the subject of foods, and whatever we think we know now will seem but small in comparison with what we find to learn, once we undertake this very fascinating study.

The good old American standbys of meat, bread (white bread), potatoes, pie and coffee have been tried, examined and finally and utterly condemned, so they are off the list as standbys in future, but they may form an inconspicuous part of the diet for years without apparent harm if their acid-forming proclivities are well offset by the use of much alkalin or base-forming food.

If we must have our meat, we can at least eat it in such combination as will permit of its digestion without putrefaction, and if we must have our bread we should see to it that it is not the white variety, and taken in such relation as will permit of its complete digestion without the usual fermentation and subsequent acid formation.

Also we must see that these foods are well balanced as to acids by use of much greens, salads and fruits, else we will create much acid and leave this to be neutralized by our own alkalin reserve.

Now, if you will go back to the statements before quoted you will see the connection between acid-forming foods and disease, for acids form from fermentation in the digestive tract, as well as in the tissues, from the metabolism of too high a ratio of concentrated protein in the daily ingesta, so the connection here must be plain enough so that any one can see that the use of too much meat, or the use of those foods that normally make too much acid in the system, must play a large part in acidifying the body, or perhaps we should say in lowering its alkalin reserves.

Food is a direct cause of disease because it is the only source through which we can create these acids.

If acid causes disease, as there is not the slightest doubt, and if acid can come from nothing but food, then food is the one and only cause of disease, and how can we escape such conclusion?

Keeping well, then, resolves itself into means for controlling this great food factor, and it is the entire object of this little book to teach just this very thing.

Body hyperacidity comes from four sources, and in twenty-four years a fifth source does not suggest itself, unless we consider overeating of even the right sort of foods in the right combination, and this is extremely unlikely after one acquires the habit of competently nourishing himself at each meal.

When the intake of food is full and complete, as regards the chemical components of the food, a surprisingly small amount of food is required, and so fully and completely satisfies that there is little likelihood of eating between meals or of eating too much at the meal time.

Many people now eat but one small meal a day where formerly three large ones were required to keep reasonably well satisfied, for when these foods were in any degree deficient it was necessary to have much food in order not to starve the system for what was necessary.

The four causes of acidosis, or declining alkalinity, are: First, the use of ten times as much concentrated protein daily as is required for tissue replacement, and this is just the habit in America where we are heavy users of meats, eggs, fish, cheese, and all sorts of concentrated protein dishes; second, the use of refined, processed, denatured, emasculated, bleached, preserved, adulterated, or otherwise altered foods, chiefly the carbohydrate group, comprising the grains and sugars; third, the use of good or bad foods in incompatible mixtures, as carbohydrates with either protein or acid fruits, and, fourth, the retention in the colon of fermenting food residues beyond twenty-four hours following their ingestion, while the average is seventy-two hours.

A summing up of these four causes, or of any two or three of them, is sufficient to account for the fact that from birth to death we accumulate acids in the body, and as acid is at all times intolerable to the body, negativing function, we give up of our stored alkalies far too much to neutralize or bind these adventitious acids, thus lowering the alkalin reserve, without which function cannot go on unimpaired, nor the body resist outside influences of depressing character.

It is so that we build up the condition now called acidosis, and you can readily see that here food is the triple cause, and the fourth cause listed, the slowing down of the rate of travel of the food residues, is also from the character of the foods habitually eaten, so we can put food down as the sole cause of acidosis, or deficient alkalinity, and say that food is THE cause of disease.

CHAPTER XV

VITAL AND DEAD FOODS

Only life can possibly beget life, all through Nature's great realm, and food is no exception to this universal rule.

Analysis of the food which adorns every table reveals the fact that more than ninety per cent, of this is dead food.

If you plant it in the ground it will not grow, so it has no life.

When the tomb of the ancient Tut-Ankh-Amen was opened it was known that he had been dead a very long time; he could never again produce life or beget life, but when the kernels of grain, that are always found in the tombs of the ancient Egyptian mummies, were planted in the ground they grew, showing that during all these thousands of years they had retained this vital spark that can beget life.

Consider again the Lord's directions to Adam in the Garden: "Every herb that is upon the face of the whole earth, and every herb bearing seed; and the fruit of every tree, in which there is the seed of a tree bearing fruit, shall be to you for meat."

All life, all vital, all reproductive foods, hence fit for indefinitely sustaining man, the supreme summit of creation.

Adam may have been satisfied with this arrangement, but Eve was not, but must experiment further with foods, even that forbidden, and her descendents to this very day have followed the custom of monkeying with food directions that are so plain and so complete and comprehensive that they are like a fingerboard at a cross roads.

Through Adam came death, on account of disobedience, and all down the ages since that time disobedience has carried its own punishment. And it is verily thus that we are punished BY our sins, not for them.

Life cannot be supported on dead foods, as laboratory experiments amply prove, and only by means of the small amount of really live food ordinarily eaten daily is life supported at all.

In perhaps every meal is to be found some live food, but the preponderance of dead foods is so great that the race is supported by an infinitesimally insignificant part of what it eats daily, the rest being filler, fuel, but not life-sustaining.

Would we advise one reared very largely on cooked or otherwise devitalized foods to go at once to a raw vital standard? Absolutely not, for the same reason it would not be wise to go from a long residence in a dark cell to the bright sunlight, the difference would be too great to permit of this, and the body unaccustomed to the vital foods would be thrown into the greatest confusion by so radical a change.

We have done very well on foods largely non-vital, but there is no way to tell how much better we would have been on a vital standard of feeding.

Those whose vitality is fast ebbing away, as at the end of a serious illness, or the last stage of a chronic disease, we do not feed even largely of the raw foods in vital form, but use vegetable broths

with also some raw fresh fruit juices and the expressed juices of raw succulent vegetables till the system becomes accustomed to this change; then by degrees the cooked are omitted and the raw increased till the system comes to accept the change without marked protest.

In this way cases of far-gone organic disease come back by slow degrees till they are again functioning almost normally, even after death had set his unmistakable seal on the case, and many of these continue a high degree of health afterward, albeit with some crippling of an important organ that limits the life in some ways permanently.

The reason for the difference between raw foods and cooked is plain, for every chemist knows that heat without any other aid will change chemistry, and whether it is wholly in this fact of chemical rearrangement through heat, or whether the so-called vitamines furnish the explanation, we do not know, nor is it important to know this so long as we have the evidence of a change due to heat.

Tomatoes cooked are not tomatoes raw at all, and yet they are of extreme usefulness cooked if we did not try to live on these.

As a partial food they furnish many elements that may be missing in other foods, so are useful as restorative foods, and science has discovered that they contain the vitamines almost unimpaired, as evidenced by their ability to restore deficiencies in vitamine feeding experiments.

Raw tomatoes contain very little oxalic acid, cooked tomatoes are very high in this, and while oxalic acid is harmless in the body, yet it still does tie up much alkali and should not be used largely, while the fresh tomatoes can be used in vast quantities without lessening alkalin conditions of the body, in fact they do rather reinforce the body reserves in this respect.

Cooked fruits of any kind are dead foods, not that they do harm in this form, but that they do not give us the things for which we eat fruits, or for which we should eat fruits.

The human digestion has become so accustomed to the cooked foods that many have great difficulty with the raw, especially the raw vegetables eaten in the form of the most useful vegetable salads.

For these, it is well to grind the vegetables and at first merely express the juices and feed these in orange juice or other fresh fruit juices till the body has acquired more vitality and more tolerance for the raw things.

By degrees the body can again be trained to depend very largely on the raw vital foods, and when this point is reached it is surprising how small an amount of food is required to sustain full health and vigor.

Several years ago certain French scientists undertook an experiment to show the effect of pasteurization and concentration on milk, that was most conclusive.

A large orphanage was set aside for their use, and the children there of varying age and condition were divided into three average groups, one fed on whole raw, unchanged milk; the second on pasteurized milk, and the third on condensed or dried milk, and their condition compared for some weeks or months.

You know the result, at least if you believe that vital foods will impart vitality and dead ones will not.

Children do well on milk alone for many months, but it is Nature's food for the infant bovine, not the human, and carries over three times as much protein in the form of casein as does the human mother's milk, for the reason that the bovine young grow more than three times as fast as do the young of the human animal, so require this proportion of building material over that provided by Nature for the human.

For this reason it is not well to continue the milk feeding too long, as the child will be overfed with protein and in this way acquire a high habit of protein consumption, which will affect the dietary habit throughout life, and we have to be careful not to take too much protein as long as we live, for it is of all foods the highest in acid-forming potentiality.

The children on the raw milk all did well, most of them gaining in weight and strength, growing faster than the average at this age, while of those fed on the pasteurized milk and the concentrated milk the latter did best, but growth was slower and the general condition not so good as in the case of the raw milk group.

Both the concentrated and pasteurized groups showed deficiencies, and continuing the experiment long enough would have brought on rickets, without question, but the experimenters were under bond not to go far enough to injure the health of any.

Yet we insist on pasteurized milk under the impression that we safeguard children from the hypothetic danger of bovine tuberculosis!

Pasteurized milk is dead milk, dead food, and every farmer knows that he may keep a calf on heated milk for about so long, and after that it must go back to raw milk, if it is to do well.

For diarrhoeas the farmer usually feeds the calf on boiled or superheated milk for a time, but he knows too much of calves to continue this practice indefinitely.

Out of cooked foods we can get the chemical ingredients for reinforcing our depleted alkalin reserves, but we cannot get the vital elements, all of which are destroyed by heat, and it matters nothing whether we call this principle that is lost a vitamine or whether we recognize, with the chemist, that heat alone does something to chemistry.

No food that is cooked can possibly be called a natural food, for its original chemistry has been changed by heat, so no food that is cooked will ever grow again, its vitality is gone, it cannot reproduce itself.

A certain amount of vitality is inherent or potential in the human body at birth, and this may be conserved by proper living or it may be gradually dissipated by many things not natural for the human body.

It surely is thinkable that if our foods are dead, if they can in no way reinforce our vitality, it is easy for us to decline with our varied activities and living stresses.

It is possible for any one to live indefinitely and in good health on nothing but a very small amount of fruits, vegetables and nuts, as these in natural form all represent every element required by the body, and there are those who do this.

A friend of the great George Hackenschmitt, the former world's champion wrestler, and holder of some world's records for strength, recently told the writer that he had visited with this

physical giant at his home in England, and while he is now very near the sixty year mark, yet he looks the best he has ever looked, his health is as near perfect as it could be, he is just as strong and as agile as he ever was, handles the same weights as formerly in his prime (he is still in his prime) and does not carry any visible fat, though weighing two hundred pounds, all muscle and frame and internal works, no handicaps in the form of aldermanic bay window or fat.

Hackenschmitt eats nothing since during the war except raw vegetables and fruits and nuts, his usual day's rations consisting of one head of cabbage, one head of lettuce and from six to twelve Brazil nuts.

His Spartan meal is usually eaten at one time, as his custom is one meal a day, and since he retired from the wrestling mat he has devoted himself largely to scientific studies, and is today the author of a ten volume work on applied psychology that is popular in England.

He was defeated for the world's championship in a match with the American, Frank Gotch, because he had a bad knee, a synovitis, or inflammation of the lining membrane of the joint, and Gotch's favorite hold being a toe hold, he secured this in the first few minutes of the match, and nearly ruined Hackenschmitt, who did not use the leg again for a long time, and was unable to come back for a second fall, thus losing his championship of the world.

After returning to England he undertook a serious study of his own condition, to see why he, a big strong man, should have such an acid condition, and it was these studies that led him to his present way of living.

His knee recovered promptly, and he could, no doubt, again win the world's title at heavyweight, but he is not interested, having found something so much more satisfying in his present manner of life and his present line of study.

He told his friend that they had a cook stove, but it was never used, and any one who would take it away was welcome to it.

He has in this way simplified life for himself and his little wife, who lives similarly.

Eating is so much habit that one can form any habit at the table that he outlines for himself, and to say that he lives under continual self-denial is not correct, for he enjoys his meals even better than the epicure who devotes much time each day to planning more elaborate and expensive meals.

Epicurus himself was the soul of simplicity and abstemiousness, and when we speak of Epicureanism today it is with a complete misunderstanding of the principles expounded by this ancient sage.

It was he who said he was happier with his barley cake than was the king with his stalled ox, and who can doubt it?

He taught that man should eat only the vital foods, and even these one at a time, that is, when hunger calls look for the thing that is called for, eat it and wait for the next call of hunger, but the kernel of his teaching was enjoyment in the flavors of his chosen food, which was not to be swallowed as the dog does, but to be chewed and tasted and thoroughly enjoyed, and he taught a real science of eating that exalted taste to the position of a natural guide to nutrition, as Nature undoubtedly intended.

It was his accentuation of the pleasures of taste that led his misunderstanding followers later to ascribe to his teachings meanings that were never intended, and epicureanism today means devotion to the fine art of eating for enjoyment.

So firm a hold has the idea of pleasure in eating taken on our national consciousness and customs that eating accompanies practically every public function, in fact, holds a rather major position in the most of these.

It is so hard to get a church crowd out to any mid-week function that eating is advertised widely as the inducement to the membership to attend.

If only the raw and wholly vital foods were served on such occasions the custom would not be wholly without good, but the usual church supper represents the usual idea of food, the meats, white bread, potato in some form, a sweet dessert and coffee, perhaps varied by meat or potato salads, while if a leafy or green salad is served it generally consists of one or two leaves of lettuce with mayonnaise dressing, perhaps a slice of banana added as a decoration, the whole usually neglected in consuming the meal, or eaten as a compliance with the bill as served.

In the larger cities one can now find restaurants in which are served nothing but vital foods, or those approaching the vital standard so closely that one can secure a really regenerative meal, and at a lower expense than the usual dead meal. It is encouraging to find these restaurants becoming more popular, as a larger number of people are making it possible for such enterprising proprietor to make a very decent profit in maintaining a place where real food may be secured.

Other restaurants, while serving conventional food, are providing larger variety and better quality of salads and fresh fruits, and stressing better combinations of foods than called for usually by the customary diner.

All these are bringing a new era in food selection and combination that will go far toward improving the national customs in diet, but that it will be long before such customs are the rule is putting the matter both mildly and optimistically.

The average man thinks that because he is still alive and enjoying average health that, therefore, nothing is to be done about his dietary habits, at least surely not before he loses his ability to eat three square meals a day and enjoy them.

This attitude is not surprising when one thinks that dietary direction of ninety-nine out of a hundred physicians is to "eat plenty of food, nourishing food—keep well nourished," or, in other words, keep right on with your usual habits, for this—as the average man sees it—is what everyone has been doing.

The medical training of the usual young man is wholly deficient in food lore, even though there is much reference to diet in connection with disease, but the average training in diet takes in the caloric needs chiefly, with the chemistry wholly misunderstood or totally ignored.

If chronic disease is caused by an increasing acidosis, if acute disease is merely a reaction against increasing amounts of this same acid accumulation, and if this state results only from foods, then what more important phase of study as a preparation for the physician could there be than foods?

This is what Dr. Leonard Williams of London meant when he said that for these omissions in medical training some one should be hanged.

In the south Pacific Islands are cocoanut palms everywhere, and on one of these there is a group of people calling themselves Cocoavores, who live wholly on the cocoanut.

They represent almost every civilized country, and are made up of human physical derelicts who were given up to die in their former civilized surroundings, but who have come here to live out in the great amphitheatre in the sun and to eat of Nature's food wholly unchanged.

When a new arrival comes in he or she is given fifteen trees which are to be tended, the nuts harvested and stored, and these are to furnish the entire diet for the year.

These people do not furnish clinical material for any hospital or surgeon, for they have no disease; those who were suffering from tuberculosis when they arrived, as most of them were, soon recovering and enjoying as good health as the rest, yet the entire food for the year is cocoanuts and what vegetables and fruits can be secured through the warm weather season.

The cocoanut is not by any means a well-balanced food, but it is rich in the things the body most requires, so life can be supported very easily on such provender.

Fats are too high in the cocoanut, and the condition of one living on this type of food must show a great excess of fatty material in the excretions, but being vegetable fats there would not be on this account any tendency to stone formation, as gall stones or kidney gravel, for the vegetable fats do not contain the crystals of cholesterin that are found in all animal fats, even in cream and butter, the crystals that form the nucleus for such concretions as we describe under the name of gall stones or kidney stones.

The hair would be greasy, the skin exuding oil at every pore, yet this would not mean disease of any kind.

Now, if people can live and function normally (as these must be doing if they can recover from such diseases as tuberculosis) when subsisting on such natural foods as cocoanuts, how much easier it must be to live on a wide variety of such foods.

To the unadulterated taste of one eating only natural foods there is a variety and excellence of flavors to be enjoyed in the normal foods that any chef would covet the ability to produce in his artificial methods of tickling the human palate.

The exquisite flavors of a luscious apple, orange, pomegranate, grape, pineapple cannot be approached by art, and the poor endeavors made through the use of artificial coal-tar flavors are easily recognized as but a poor imitation of the real thing, and even then have to be covered up largely by much sugar in order to get by even the jaded palate of the tired variety seeker in new food flavors.

Such imitations would never get by one used to the unadulterated flavors of the natural foods, and would never be swallowed by such; but the usual tired palate is accustomed to being imposed on to the extent of absolute deceit, and readily lets anything by that even remotely resembles the article whose name it is stealing.

In sweets we have honey and the simple concentrations of the cane and maple juice, all of which are vital, except for the fact that

the latter two have been concentrated by superheat, so are not in reality live foods, but still representing the concentrated salts of the original fluid.

When the cane syrup is not only concentrated to the granulation point by heat, but further treated by refinement till nothing remains of its original salts, it represents then nothing but clear carbon compound, nothing but sweetness, with everything taken out that Nature put there, and it is nothing but low-grade fuel, giving the body nothing but stimulation for a time, and the acids resulting from its oxidation in the body neutralized always by filching our own stored alkalin reserve.

In this way it is in exactly the same situation as white flour from which have been refined away all the alkalin salts of the bran and pericarp, leaving nothing but the starchy compounds and protein, the lime and other of the most necessary of our alkalin supplies being taken out with the bran by a fine silk bolting cloth that allows nothing to pass but the impalpable powder that represents these two things.

So these are not only dead foods, both of them, but also robbed of the pennies that closed the dead man's eyes.

Nothing is left that is of value, and experiments carried out many times on laboratory animals in various of the chief laboratories of nutrition all over the scientific world have shown that either or both of these foods will not support life. In the Rockefeller experiments some of the animals fasting, living wholly without nourishment of any kind, actually outlive those fed freely on the white sugar and white flour preparations.

Yet we permit the fine milling of flours, their bolting and complete denaturing, robbing the poor man of his staff of life, the least expensive of his necessary foods, and we still allow the refinement of sugars to remove everything that relates them in any way to food, knowing that we as a people are depending on these as food to nearly twice the extent of any other nation.

When will we wake up to the dangers that lurk in just these two things alone?

Of the dead foods, those that have been changed or processed in any way, there are two classes: those that have been changed only by heat, and those that have lost through refinement everything that related them to food.

Of the two, a considerable proportion of the former can be used without harm, such as cooked greens and roots, if so cooked as to retain their soluble salts, but the latter class should be barred forever from the table of every one who desires to be anything but a physical bankrupt in time.

Our candy bill is enormous, and accounts for diseased tonsils and adenoids in the school children of today to an almost 100% degree.

The writer has seen many times both diseased tonsils and adenoids completely clear up in one month from inhibition of candy intake alone, without further dietary change, and in twenty-four years he has yet to meet the case of either that will not clear up promptly in either children or adults if all denatured food is passed up and the diet limited to those foods that contain only the vital factors that make of any article the only legitimate food for man.

The insane rage of the nose and throat surgeon for tonsil removal is leaving a crop of subjects everywhere whose bars are down for every transient infection, for the tonsils represent the keystone of the arch of lymphatic protection of the throat, the entrance by which so much infection finds its way into the system, and whose guardian is chiefly the tonsil.

Not only so, but seven of the vocal muscles originate in the sheath of the tonsil, and when this is removed the slacking of these muscles shortens the vocal register at both ends, interfering greatly with vocal resonance and control.

Man is created just right; he needs all the organs with which Nature endowed him, and no nose and throat specialist can improve in any manner on Nature's arrangements.

CHAPTER XVI

THE MECHANISM OF DIGESTION

There is not in the whole realm of Nature a perfect example of the diversification of function under one indivisible whole to equal that shown by the digestive tract of man or the lower animals.

We have wonderful machines today that take the crude material, process it, manufacture it into forms and label it, all in one process, and we think this marvelous, but as compared with a man's digestive machinery this is a mere toy.

We take crude materials into the mouth, we chew these and mix them with saliva containing a ferment that starts the digestion at once, this continuing down through the entire tube to its final receptacle, the colon.

Not only is food converted into products that can be utilised by the body, but by an intelligence resident in the cells lining this tract certain things are selected out of the mass of chyme and these further elaborated in the blood stream, thus continuing the process of digestion in the body itself till all the needs have been met, and we are fed.

Each separate division of the digestive tract has its own peculiar function to perform, its own particular addition to make to the total of the task, and no one division can do the work for any other division.

The food absorbed and finally prepared in the blood and lymph stream for use, becomes brain, muscle, nerves, glands, eliminative organs, fat, or some other part, or it is again turned into matter to be eliminated from the body, if not required there.

If the digestion is of starchy or sweet foods there is an entirely different process in use than is the case when the protein foods are under digestion.

Thus, we take into the mouth bread or cereal food or potato, we chew this thoroughly, not only to comminute it finely, but more particularly to mix it intimately with the saliva, where it is acted on by the ptyalin, a ferment or enzyme whose one function is the preparation of this class of foods for more complete digestion in the small intestine, and without which preparation the further digestion is certain to be incomplete, and accompanied by much fermentation.

Starches and sugars, the so-called carbohydrate group of foods, require alkalin conditions throughout for complete digestion without fermentation, acid introduced with these insuring arrest of digestion, when, in the presence of heat and moisture, an alcoholic fermentation sets in almost at once.

If the chewing and insalivation have both been complete and thorough this bolus of partly converted starch enters the stomach through the aesophagus, or swallowing tube, and there, if no acid interferes, this conversion to lower forms, or splitting of the starch, goes on till it reaches the condition of a secondary sugar, or a dextrose.

If, however, acid fruit has been taken at the same time this reduction will be arrested, for the conversion or splitting of starches

by the ptyalin can occur in nothing but an alkalin medium. The reader is asked to remember this fact, for it will be referred to frequently later.

But if no acid occurs to interrupt this digestion or splitting process, it continues till the stage of dextrose is quite fully reached, when it begins to filter out into the duodenum, the next division of the digestive tract, and here again the reaction is alkalin, so the process continues, the action of the enzymes from the pancreas still further reducing the carbohydrate till it reaches finally the stage of primary sugar, or glucose.

In this stage of preparation it is absorbed by the villi of the small intestine, the first division of this below the duodenum being called the jejunum, and from the small intestine is passed to the liver.

The liver is the great filter which stands between the intestinal tube and the general circulation, and it is the business of this great gland to inspect and pass judgment on everything absorbed from the small intestine and the colon.

If the absorbed nourishment can pass this censor, it is admitted to the general circulation; if not, it is then passed out through the bile ducts into the duodenum, and down to the small intestine where it again goes through the same process till all has been finally accepted by the liver or finally rejected, in which case it passes to the colon where it is stored for dejection at some convenient time, and so leaves the body.

If the result of starchy or sugar digestion, in the form of glucose, finally reaches the general circulation, it meets there an enzyme or ferment from the tip of the pancreas, the little ductless end of this very important gland, whose function it is to complete the conversion of the carbon material to fuel for the machine, glycogen, and in this form it is carried in the blood or stored in the tissues, in the muscles, in the interstices of the liver, in the cellular tissues where it will be ready when called for by muscular exercise.

Now, here is where diabetes mellitus comes in, for the diabetic is one who cannot furnish this ferment in sufficient quantity to convert fully this dextrose to glycogen, so that the tissues feel the need for their accustomed fuel (weakness) or the dextrose is carried in the blood beyond the blood's ability to take care of it. It is thrown off, still in the form of dextrose and we recognise it as sugar in the urine.

This is the completed cycle of starchy or sugar digestion, and you can see how important it must be not to interrupt this cycle at any stage by introducing either an acid fruit or other form of acid.

If the ingested material should happen to be meat, eggs, or fish, the animal forms of concentrated protein, then there is an entirely different process.

There is nothing for the saliva to do in the digestion of this class of foods, as witness the quick bolting of meat by the dog or other meat-eating animal, so chewing in this class is of no importance at all, throwing some doubt into the mind as to whether a mouth equipped with such complete mechanism as is necessary for taking care of the complex starches and sugars is really intended by Nature to take care also of the concentrated forms of protein.

When we eat meat, this is passed down without change into the stomach, where its presence produces the flow of gastric juice, one

ingredient of which is hydrochloric acid, and again it is not hard to see where it is wrong practice to combine starchy or sweet foods with this class, for it compels the presence of hydrochloric acid in the stomach as the first requisite for its conversion to lower forms, of course arresting the digestion of all carbon foods, which require alkalin conditions throughout.

With the hydrochloric acid is also produced pepsin and minor ferments, and the digestion of the protein is on.

First this concentrated form of protein must be acted on by the acid to soften its capsule, so that the pepsin can get to work to convert it to lower forms, and without this hydrochloric acid there is little digestion, as the intestine can accept this only after the change produced by the stomach.

Primary proteases and peptones are formed by this first treatment in the stomach, and in this form, a reeking mass of acid debris, it is passed into this same duodenum, or first division below the stomach, where it meets the combined secretions from the liver and pancreas, the duct end of the pancreas, where the proteases and peptones are still further reduced to serum albumens, and amino acids, and primary albumens and proteins of all sorts.

These are now absorbed through the intestinal villi, as were the starchy foods, and carried by the portal circulation to the same old liver, which has this task also of examination and censorship, rejecting or accepting as seems best.

In the circulation there is a still further reduction of the proteins into monoproteins, the most elementary forms, and at once sets in a series of reconstructive metamorphoses to bring this class into the form of our own specific tissue proteins, in which form it is either used at once for necessary reconstructive work or repair or. is also stored in the tissues for future use, the liver again being a very considerable storehouse for this class also.

Proteins are not subject to fermentation (would that they were!) but to putrefactive changes, as witness the decayed egg.

So when these residues reach the colon it will at once impress the necessity of their early removal by the active colon action, else a too long residence there will insure putrefaction.

The digestion of fats is a much more simple process, being a mere emulsification by the bile, and in this finely separated state they are absorbed directly into the general circulation, without elaboration by the liver, through the duct for that purpose, and in the form of a milky looking mixture called chyle.

Fats are stored as such in the tissues or are oxidized directly as energy just as are the other carbon foods, the carbohydrates, and next to sugars are the most directly available forms of energy generation that we have.

They are not in any sense necessary, as is generally supposed, for we make fats out of glycogen, in the absence of fatty foods, as we know from the fat condition of animals fed wholly on grasses and grains with practically no fats in their structure.

Fats do not interfere except in a mechanical way with the digestion of any other class of foods, for they require no part of the digestive process except the emulsifying qualities of the bile, so may be eaten together with any other class, only remembering that they do interfere mechanically with the digestion of everything insofar as they cover the food with impenetrable grease, as in the

frying of meats in fat, thus interfering with the early attack of the gastric and intestinal juices.

Now, if you will remember this process of digestion as relates to carbohydrates and proteins it will do more to clear up the question of why one food should not be eaten with certain other foods than will any argument that could be thought out.

The starches and sugars, the carbohydrate forms of food, all require, without exception, alkalin conditions for their complete digestion, the proteins all require acid conditions for the first step in digestion, so these two opposite forms of food are never to be taken together.

After all food leaves the stomach conditions are alkalin wholly, the bile, the pancreatic juice and the intestinal juice all being alkalin in reaction, so this incompatibility exists only so far as stomach digestion is concerned, but this is vitally important, for if the starchy digestion is arrested fermentation sets in at once, and we have acid formation from this cause.

Protein digestion is carried on in an alkalin medium after this first acid bath in the stomach so can go on side by side with carbohydrate digestion in the small intestine, and if we could get the mass by this first stage of stomach digestion we would have no incompatibility in the simultaneous digestion of these two classes of foods.

So to avoid this incompatibility we must separate these at every meal, which we can do very easily by taking them at separate meals, as the starchy things at noon and the protein at night.

After the food mass reaches the colon, its last resting place in the body, nothing is left to be accomplished except to absorb from this the last vestiges of nutritive material, and it is then ready for dejection from the body.

The residence of this might seem unimportant from this stage if it were not for the opportunities for fermentation and putrefaction potential in this mass, for with our usual neglected act of chewing and insalivation there is quite apt to be raw starch in this colon, in fact this is so almost universal that observers are often found taking the ground that a certain amount of starch in the colon is normal, physiological.

Here again normals are dreadfully confused with averages, for clearly it is not normal for any part of the digestive process to be missed or neglected, and if 99% of people do show raw starch in their stools, as shown by the blue reaction of iodine, it only proves that 99% do not eat correctly, for no raw starch or sugar will ever reach the colon if the work of chewing and insalivation have been carried out as per schedule, and if the digestion of this food has not been arrested by addition of acid or protein to the meal.

The writer nearly twenty years ago checked the rate of passage of these food residues through the body in a large number of cases, and found it to be seventy-two hours from the time food is taken till it is all voided from the body, not that this was normal, though the cases were those with history of one bowel movement every day, but that the average was away below what Nature plainly intends for man.

This has been done since by competent observers who got the same average, twenty-four hours before the food appeared in the

stool, forty-eight hours when at its peak of passage, and seventy-two hours before it was finally all dejected.

Here is too great an opportunity for fermentation and putrefaction, and that we get it the odor of the usual stool can bear ample testimony.

Now, this state comes not from any mistake in Nature's arrangements, but from a breakdown of her arrangements, due wholly to our false way of living, putting too many obstacles in the way of Nature, and when she fails to work we lay the blame on a perverted civilization or the general decadence of man, or our surroundings or our work or anything but what it is, and that is our own individual failure to work with Nature instead of against her, and if we quit right where we are and live as we were intended all this will correct itself.

Once again, all we can do to cure disease is to stop causing disease.

In a later chapter all the suggestions for selecting and combining foods to prevent the usual fermentations will be laid out plainly, so that any one can understand the extreme simplicity of the arrangement, and a few weeks spent in faithfully putting the whole matter to the final proof will convince any one that he simply does not have to be sick at all if he will exercise half as much common sense and display half as much desire and persistence as he puts into any half' way successful line of endeavor.

The heavy user of starches or sugars, if he combines these with cither acid fruits or with meat or eggs, can get up a very sizeable jag from the alcohol generated in the stomach and intestine.

You will see this if you watch, for the glutton who fills himself up with this sort of food will sit down after a meal and almost immediately fall sound asleep and snore vociferously, and many a time has one seen such on a park bench mistaken by a police officer for a common drunk and waked rudely and told to move on or take a ride.

This is a drunk all right, a starch drunk, for the alcohol manufactured after such a meal is produced in exactly the same way as the distiller produces it for moonshine.

Yet this same man will take great credit to himself for temperance, when some of them are far more intemperate than is the average alcohol addict, if they only understood the mechanism of starchy digestion better.

Alcohols, glycerins, esters, all are produced in this way, by fermentation of starches and sugars in the digestive tract of one who has eaten heavily of either starch or sugar and then interfered with the process of Nature in disposing of this mass.

The almost universal "sour stomach" can be stopped at once if the simple law of compatibility of foods is followed, even the first meal eaten being free from this very disagreeable penalty, as the writer has seen accomplished times without number.

Men have complained that they never eat a single meal without an acid stomach following for several hours, but always when the habits were analyzed it was found that they ate bread with every meal, and that either acid fruit or meat or eggs were also taken.

However, if starches or sugars are bolted, without thorough mixture with saliva, they can ferment in the stomach without any acid to cause this, simply because there is no provision in the

stomach for their digestion, the saliva being Nature's provision for this, and many a breakfast of toast washed down with coffee is productive of. acidity soon afterward for this very reason.

We can handle a certain amount of starch very nicely if thoroughly chewed and intimately mixed with saliva, but we all eat entirely too much of this, especially in the form of bread, for we have been taught to think bread the staff of life, and even whole grain bread is never this.

But when we eat large amounts of bread or other starchy or sweet foods, chewing these imperfectly and generally washing them down with liquids of any kind, or taking them in saturated or mushy form, we have done enough to insult the digestive organs without at the same time making the task of digestion wholly impossible by mixture of either acid or protein with this incompleted task.

We usually do all of this, and then we express surprise that living on such plain foods we should develop, perhaps early in life, so many acid conditions.

The wonder is not that so many develop these states but that any are left to complain.

Now, is it any wonder that we do develop so many acid conditions so early, or that we perhaps die of these early?

Never forget for a moment that acid is THE cause of disease, and that acid can be caused in no other way than by our mistakes in eating, and you will have the key to health.

It has been a marvelous intelligence that has created so perfect a machine as man, and no matter by what name we call this intelligence, its supreme wisdom enlists our awe, and puny man should stand reverent in the thought of the possibilities that are potential in him if he will only conform strictly to all the well defined laws of his being.

There is no use trying to evade the punishment for infractions of the law, nor to try to change this law or any one of its tenets, for it has long governed the universe and will not be changed by light wishes of lighter man.

So all we can do is to conform, if we wish to escape the penalties for transgression, and to seek to better understand the law with regard to ourselves.

The usual acid stomach is so general and so easily corrected that it is a very wise thing to make this the test of the correctness of what has preceded, so if this is your particular trouble start in by a rigid separation of the starches and sugars from both acid fruits and the acid-compelling protein, and see if you do not then realize the entire truth of everything that has been said as to compatible and incompatible foods, and if this should so turn out that you are freed from the discomforts of gastric acidity in this simple way, then please believe all that has been said or will still be said in regard to the food causes of all disease, for it is all just as true as this.

It is frequently objected that every one does these things, makes these mistakes, but if that is your attitude, then be prepared for the answer, for it will be: "Look at everybody, and pick out some one who is as well as he should be."

Sickness is universal almost, and in some form disease is present in nearly every one, even in those who think themselves about right.

Not all are ill because of incompatible mixture of their foods, nor from a too high ratio of concentrated protein, nor yet because of the use of denatured foods, but one or all of these things is at the root of nearly every case of departure from the normal, in large degree, so if these very palpable mistakes were corrected there would be very little left to do to approximate closely again the normal in health and efficiency.

One is reminded of the man who while carrying a bag containing all his earthly winnings in money was jostled off the ferry into the Hudson river, and while he could swim, yet he could not both swim and carry his rather heavy bag.

Passengers seeing that he was a swimmer called to him to drop the bag and save himself, but he could not make up his mind to do this, so was drawn under and drowned.

We can easily recognize this as a mistake in judgment, for had he let go the bag he could have saved himself very easily, and might have made another pot of money bigger than the one he strove to. save, but holding to it prevented further earning, and not only so but he was not able to use what he clung to.

It is ever so with habits, for if we can save ourselves without habit we stand in a position to do anything that man can do, but clinging to these we go down, and not only so but we lose even the enjoyments that these formerly brought us, as they pall on us.

One cannot keep his cake and eat it, neither can he attain to health while adhering to his bad habits, even if these are such as are considered harmless, for any habit that destroys Nature's arrangements for man's nutritional sustenance and repair is a bad habit, even if this is neither alcohol nor tobacco.

The body fully provisioned with competent fuels and repair materials is a body unconscious of handicaps, and can rise to heights in performance that are never possible to a body not so fueled.

Referring to what was said in regard to the influence of the body on the mind, we can then see that such a body offers no obstacles to mental growth or activity, and the mind usually reflects this change in nutrition more plainly and earlier than does the body, for the body has to grow better after its handicaps are removed while the mind is better at once.

Thus memory is positive, the mental processes quickened, optimism is the rule, and every one suddenly becomes one's friend, for there is no longer the depression that formerly made for suspicion and feeling of inferiority.

It has been said that one's first duty is to society, but if this is true then one should for society's sake render his own equipment as effective as possible, and in this sense his first duty is after all to himself.

If we can by reducing our own handicaps also place ourselves in position to lighten those of our fellows we will be doing society itself the highest favor.

When we reflect that sickness of all kinds is not the inevitable lot of man, but his own self-inflicted punishment, it is surely the part of wisdom to make such changes in the way of living as will free us from such penalties as disease.

The time is on the way when the ill will not be objects of pity, as we now regard them, but rather objects of censure and candidates for enlightenment.

We, no doubt, owe it to our neighbor to teach him the way of sane living, living for health, but as yet he is not willing to listen, having been always taught that he has little or no responsibility for the diseases that afflict him, and rather enjoying the attitude of the injured party when he gets sick, but when he has been the rounds of much medical talent and then gives up in despair of ever regaining his health he will be in a mood to listen. Then teach him.

CHAPTER XVII

COMPATIBILITY AND INCOMPATIBILITY OF FOODS

For so many years we have labored under the old habit of meat, bread and potatoes, calling them "plain foods," that it is not easy at once to look on this arrangement as harmful.

Yet it is violently acid-forming in character, as will be realized by referring again to the last chapter on The Mechanism of Digestion.

It is men who have lived on these "plain things" that in their later years develop diabetes or Bright's disease or other of the acid conditions that shorten the latter end of life needlessly, and not the wide eater of everything, who stands a better chance to have taken on more alkalin or base-forming foods by this more liberal manner of feeding himself.

This class of foods called carbohydrate includes all the starchy and sweet things of the table, so bread, being starchy, also potato, the stage is set for an alkalin digestion, for you will recall that we , told you in last chapter that these foods require alkalin conditions for their digestion throughout the entire tract, and that the introduction of acid at any point in this process will arrest this, with resulting fermentation.

You will further recall that the proteins require an acid treatment as the first step in their digestion in the stomach, and meat, being a concentrated protein, requires this acid bath, Nature providing this as the first necessary step in the digestion of this class of foods, to soften the fibrous capsule that surrounds the individual components of all organized protein.

Without this preliminary bath in hydrochloric acid the work of reduction to the primary forms of protein, the ultimate mono-proteid of the intestinal chyme, the work is so seriously handicapped that we recognize the almost impossibility of the digestion of meats by any one who does not show hydrochloric acid in the stomach after the ingestion of any concentrated protein, and we give such patient this acid as an aid to digestion.

Nearly thirty years ago Pawlow, the great Russian physiologist, then residing in Paris, took dogs of all sizes and conditions, and making a hole in the stomach, that was closed with a stopper, studied the effects of various foods on the condition and composition of the gastric juice, and he found that this contained no hydrochloric acid till after the entrance of meat or some other form of concentrated protein, that *is,* the gastric juice would form on sight or smell of food, and could be drawn off and examined, but till the meat actually entered the stomach there was no hydrochloric acid found in this, proving that this acts by its presence to stimulate the flow of the acid.

Dogs were allowed to eat meat freely, and the stopper was left in till digestion was well under way, and the percentage of hydrochloric continued to rise till the meat was well mixed with the

gastric juice when no more was secreted till the next introduction of meat.

Now if this works out the same with the human, it is easy to see that when we eat meat and bread together we have set an alkalin task and immediately interrupted this by an acid task, an incompatibility in task that no human or other stomach could possibly overcome, for no stomach could be at the same time both acid and alkalin, just as no room could be at once both light and dark, the two being opposites, so that one or the other would prevail.

Acids may be so completely neutralized, or bound, by alkalies that there is an exact neutral point, when the medium is neither acid nor alkalin, as we show continually in the laboratory in making certain tests.

If the medium were neutral then neither starchy nor protein digestion could go on, as the one can occur in nothing less than a positive alkalinity, and the other in a positive acidity.

Hence, you see that this mixture of starches with concentrated protein is a clear incompatibility, making it impossible for one of. these dissimilar foods to digest, and if the medium is completely neutralized, neither acid nor alkalin, as by the presence of just enough alkalin saliva to neutralize completely or bind the amount of hydrochloric acid present, then neither of these foods would digest, fermentation would result, acids would form, and, in the case of the meat, an early putrefactive change would set in, as occurs so often in ptomaine poisoning.

This is perhaps the commonest incompatibility generally practiced in selecting and combining the foods, and is, no doubt, responsible for more acids than is any one mistake of the many that are made every day at almost every table in the whole land.

Now, if acid negatives the digestion of the carbohydrate foods, then we can see that the use concurrently of starchy or sweet foods with an acid fruit must act in the same way, for these fruit acids remain just long enough in the stomach to cause the arrest of the ptyalin ferment mixed with the food as it is chewed and insalivated in the mouth, and once arrested it cannot again resume, fermentation having already set in.

So not only must we avoid the mixture of meats with our starchy or sweet foods, but also the acids of fruits or any form of acid whatever.

When starchy digestion is arrested fermentation sets in at once, and fermentation produces acid; this is absorbed, and our alkalinity is reduced, and as alkalinity is reduced the acidity, of course, rises proportionately, for a reduction in alkalinity is exactly the same thing as a rise in acidity.

Every function of the body is carried on in an alkalin medium except the first step in the digestion of protein, which is an acid act, and occurs only in the stomach; and function is well proportioned to the degree of alkalinity, the higher this, within the normal limits, the more active and perfect will be function.

For this reason Nature provides us with a very considerable alkalin reserve on which we draw for the neutralization of acids, and when we lower this alkalin reserve we interfere with normal function to this degree.

With the one exception of the stomach during the first stages of protein digestion, acid is wholly intolerable to the body, all function ceasing entirely in an actual acidity, so we find the body quick to bind or neutralize acid anywhere, and to do this it must give up of its precious alkalin reserve enough to neutralize completely all acids in the circulation, else they would wreck the entire machine.

Harmless acids, those not in themselves poisonous, if injected into the circulation of the little laboratory animals in quantity just sufficient to neutralize the normal alkalinity of the blood, will cause almost instant death, all function suspending till alkalinity can again be restored, and they do not live long enough for this to occur.

This intolerance of acid is a normal protection for body function, and if we cannot spare enough alkali from our reserves to neutralize all acids we die, as at the last end of any acid condition actually happens.

This is what Dr. Crile meant when he said there is no natural death, that all deaths from so-called natural causes are merely the end-point of a progressive acid saturation.

This acid saturation is progressive almost from the moment of birth, through over-feeding, increasing the protein intake over what is necessary for tissue replacement, and that is all protein is for.

So, when we have reached the point where we can no longer neutralize the acids present we die, and we are said to have died of natural causes. Are they natural causes when Nature provides first for their limiting to the normal and then by a natural neutralization of these by your body alkalin reserves?

Such death is always unnatural because it has violated Nature's provisions for health, and is a suicide just as is the knife or the pistol way of taking off.

Seneca said nearly two thousand years ago that men do not die, they kill themselves.

So they do, not violently, but little by little through their whole, lives they set the stage for a taking off that is always premature, even if delayed beyond the usual limits of life.

Keep in mind the four sources of acid formation referred to in a previous chapter and you will see that these are self-created sources, therefore, if understood and not avoided, one is a suicide to die through acidosis.

The first of these sources is found in the habit of taking ten times as much protein as the body requires for tissue replacement, the building material with which the body is to repair itself, the most highly acid-forming of all the foods per se.

The second cause or source is found in the general use of the processed, dealkanized, refined or denatured foods that are so common: those made from white flour or refined white sugar, acid-forming in themselves and robbed of their own normal alkalies.

The third source of acid formation is found in the use of good or bad foods in incompatible mixtures such as have been outlined, the fermentation arising from arrested starchy digestion producing much acid with each such mistake.

The fourth source of acid formation is found in the greatly prolonged residence in the colon of fermenting and putrefying food residues: constipation, but as constipation results from rising acidity which lowers function by depleting the alkaline reserves, then this

fourth source may be regarded as dependent on the other three, and we can say that all the sources of acid formation in the system are from food mistakes.

In beginning the correction of eating habits it is well to be satisfied at first with the elimination of the incompatibles alone, and watch the result.

This is not difficult, as it does not necessitate the giving up of customary food, but simply consists of separating into different meals those foods that require completely dissimilar digestive treatment, as the starches and sugars at one meal, and the proteins at another.

Cases could be recited by the hundred in which this one change in diet corrected annoying conditions of many years' standing, conditions that were caused and continued through this one mistake, the acids resulting from fermentation that was caused by these incompatible mixtures being wholly responsible for the troublesome condition.

Thus cases of asthma who refused to alter materially the selection of their foods or to clear the colon daily of fermenting and putrefying debris, would consent to separate their incompatible foods, and this one change completely removed all traces of asthma.

One such case spent her summers in the White Mountains, her winters in Asheville, N. C, and "visited" her family in Buffalo for a short season in the spring and fall.

Her husband said he scarcely got acquainted with her on these semi-annual visits till she had to go again, and her life was spent in hypodermics and smotherings and misery continually.

She was seen in March, but refused to make any further change in her way of eating than to separate the incompatibles, and even this was not done thoroughly, as there were too many occasions when she felt that she could break over just this one time and take her bread with her meat; but her husband reported six months later that she had required but one hypodermic, and that on the day when she received her directions, and before she had put them into effect, nor has she ever been to either the White Mountains or Asheville since that time, now seven years ago.

There is still some thick breathing, no doubt from a permanent thickening or fibrosis of the bronchial walls, but she now knows why she had asthma and how to prevent it, and if she suffers again she will know how and why.

An exceedingly fine young man was head bookkeeper in a railroad freight office, but suffered much from what had been diagnosed as gastric ulcer, though an Einhorn test failed to show the presence of an open ulcer at the time, the test failing to show any blood cells or occult blood present in the stomach. His fellow employees dreaded his bad days, as he was irritable, suspicious, faultfinding, and cross, and why should he not be when each day was a mightmare, and still he was compelled to go through with it?

Operation had been advised, insisted upon, as the only means of relief. But he feared operation, as he said he had seen too many of these among his friends, some of whom had failed to leave the hospital, and the more fortunate after a year or two were as bad as ever, so he refused operation and continued to suffer, though not in silence.

His gnawing hunger compelled frequent eating, but this was followed by an increase in pain and general misery, so he was between the devil and the deep sea continually.

This young man separated completely his incompatible foods, and reported afterward that the very first meal so eaten was fairly comfortable, and after a week he had forgotten all his troubles. The writer has had many a vote of personal thanks from this young man's office assistants for the relief which they experienced through the recovery of his good nature.

Had this supposed ulcer been located in the duodenum, eating would have quite fully relieved the pain, as in this case it is the presence of the acid chyme, as it filters down from the stomach through the opening pylorus, that is the cause of the intense pain, and when fresh food enters the stomach the pylorus closes. When this fresh food is also reduced to a chyme the pylorus allows it to enter the duodenum to injure again the ulcerated surface with the fresh load of acid.

The chief diagnostic point between these two conditions of gastric or duodenal ulcer is in this fact, but it is not at all infrequent that both areas are at one time open ulcers, when pain is present soon after the meal and in two or three hours takes on a different character, making pain all the time till the stomach is empty again, and then the gnawing that compels another meal and another aggravation.

Yet these conditions are so simple that it is a shame that so few know why they have such conditions or what to do about it.

Not every gastric or duodenal ulcer is from the use of incompatibles, some coming from a too high protein habit for too many years, getting up a too high habit of hydrochloric acid production to take care of this.

In such cases the professional reasoning says that as the one and only function of hydrochloric acid in the stomach is the first step in the digestion of concentrated protein, therefore, the way to get relief is to eat much protein, as this will give the acid an object of attack that will more completely neutralise its irritating effects. This works very well as long as one can go on eating more and more and more meat, but there is a limit to this, and when the limit is reached these cases usually find themselves with gastric or duodenal ulcer or worse. a cancer of one or the other region.

This is short reasoning, surely, for the thing comes in such cases from the use of too much meat, and will cease when hydrochloric acid is no more needed in digestion, as by a strictly protein-free diet. Nature soon abandons a useless function.

A few years ago a newspaper correspondent, a free lance, taking assignments from any syndicate that required his services, had just returned from France, where he had been sent on some special work during the war. He had suffered increasing distress for several years, but had finally reached a point where he could no longer write a connected or well-thought-out article, so knew he could take no more assignments, and was seriously considering suicide.

He had been to the best digestive specialists in this country, under one of the leaders in digestive troubles in New York for two years before going to France, and under this man he had been instructed to eat more and more meat, which did give him relief for

several hours, the larger amount he ate securing relief the longer time, because it took longer for the stomach to prepare this large task for release to the duodenum, when his pain again set in, for the ulcer was duodenal, as test showed.

He had about reached the end of this state of affairs when he went to France, and while there he inquired for the very best specialist on such troubles, and nothing but the best would do for him.

This man took an opposite view of the case, reasoning that as such conditions come from too much hydrochloric acid therefore one should quit calling it out, take alkalies for relief and wait till the acid flood had subsided, as it would in a short time.

The dietary plan of this man was good, but still showed too much incompatible chemistry, but before relief could be expected the patient returned via London and there consulted the best he could find, who agreed with the New York man, and back he went to the meat and the pain.

It was at this stage that he presented himself for treatment, and was told very much what he had been told in Paris, so he was now firmly convinced that no one knew very much about such conditions and said so very plainly.

However, he consented to a ten days' trial of the different plan, at the end of which he returned with perfect peace inside his internal realm, and never again cultivated a high hydrochloric acid habit.

Again, all we can do to cure disease is to quit causing it.

This man knows now that he made his troubles every day, at every meal, and he is disgusted with the men who allowed him to suffer needlessly for years when all the time he was but a week away from real cure, if he had been properly instructed on diet. Can you blame him for feeling so?

Dr. Leonard Williams is right, and for these omissions in medical training someone should be hanged, but who?

This man's head cleared in three days so there was no more thought of suicide, and he was a better newspaperman at once than he had been for several years before.

These acid states do not come at once out of a clear sky, but are the culmination of a long upbuilding of acid, a lowering gradually of the alkalin reserve, and this culmination is merely the point beyond which function can no longer retain a semblance of the normal, the breaking point, when pathology shows first, a late stage, and yet there is no effort made up to this point to find out why one is less than well.

The expert diagnostician takes great credit to himself for early recognition of the pathology, but when this is well defined the patient has had his condition a very long time, and this is only the first outward expression in tangible form of a condition that was well developed perhaps years before.

It is even so in the study of cancer, for the whole cry is early diagnosis and radical removal, when cancer has been in the system a long time before there is any local evidence of this, always.

So early diagnosis is never early enough to escape organic disease, and should be considered criminally late diagnosis.

The time to do something, as said before, is when first one feels like less than kicking the ceiling when he arises in the

morning, for then disease is on the way, and we should begin to consider getting back before something happens.

If we were to return again to the natural foods in their natural form, as primitive man would find them, there would be no thought of compatible or incompatible mixtures of foods.

We would probably take nothing at all till free from the fear of being caught by some wild beast, or overcome by some other primitive specimen of our own genus, and when at liberty to think, if we realized a desire for food, we would no doubt take the one thing most available at the time, and of this eat as much as we desired.

This would be primitive habit, no doubt, and correct in every respect.

The writer knows of a young couple who have solved all their digestive and culinary troubles very simply.

When hungry they determine what it is they want; then they prepare as much of this one thing as they desire, and fill up on this alone.

One thing of which they are both very fond is fried cabbage, cabbage shredded and stewed down in a hotel-size skillet or frying pan till all the water is evaporated, or nearly so, then butter is added and the whole stirred in the hot pan till it is slightly browned.

They eat the entire thing at one sitting, and claim they enjoy their new way of living very much more than the variegated style that is usual, and by changing the food from meal to meal they still get the necessary variety to prevent staleness of appetite.

Both had formerly suffered much at the hands of many physicians, but now all their former digestive difficulties are gone and they are strangers to doctors and medicines of all kinds.

This method of eating is not advised, though it is a very easy way to get back to something resembling normal in cultivating the instinct that will again take care of our nutritional needs by telling us what we want, and when we want it, and how much.

Man has lost this instinct through disuse, for his individual preferences at the time have little consideration, the nearest approach to this being usually a choice of two or three kinds of meat at any one meal, perhaps also of desserts.

It surely is much safer to make the meal of not over two or three articles than to include ten or more, as is usual on the table d'hote bill, for the simpler the selection the less liability to chemical chaos is the result.

If every one were to rigidly separate the incompatible foods as noted above, he would do more to arrest the continual and rising tide of acid than any one thing else could do, probably, at least this would be true of those who are not every day heavy meat eaters, for these will create a dangerous amount of acid even if the accompanying foods are not chemically incompatible with the meat.

Of all the mistakes made every day no doubt the commonest 13 this use of foods together in one meal that cannot possibly digest together, and it matters nothing that every one does this, for nearly every one is ill in some appreciable way or to some extent, to say nothing of the greatly lowered efficiency that does not pass as illness till some disease actually develops.

The easiest thing to do first in reforming the dietary habit is to separate all the carbohydrate forms of foods from both acids and

proteins, and when this is done the reward for the slight effort expended will be sufficient to convince any doubter that there is something in diet after all, and may even tempt him to make further excursions into the study of foods as a means for keeping well.

The time and thought spent in this way will yield far greater returns than could be the case in any other line of study or thought or work, so it is to be strongly recommended to every one that he get busy and find out what food does to him and how.

CHAPTER XVIII

DIGESTIVE ENERVATION

By enervation it is intended to express a lack of pep or force in the nerve function, fatigue of nerve force.

There is the same controversy among those who believe in the self-created cause of disease and its natural cure over whether toxaemia precedes enervation or whether enervation is the cause of toxaemia, and the writer is one who takes the ground that either may precede the other as motivating cause.

In those cases who are not subject to great nerve stress and strain, who have no markedly devitalising habits, who are not dissipators, who take all the sleep required to recharge the batteries every night, yet who still come down to the state of enervation or toxaemia, it is fair to suppose that the cause first operative is the toxaemia resulting from gradually increasing acids stored in the body, the end-products of digestion and metabolism. Yet we do see enervation and toxic states develop in those of not markedly bad dietary habit who have gone to the limit in efforts to destroy or dissipate the stock of vitality with which Nature at first endowed them, and it is fair to suppose that the other causes have operated to create a devitalized state that permitted of this accumulation through inability of the enfeebled eliminative organs to sewer the body properly.

However, the writer believes the food causes so greatly preponderate over the causes that we may class as dissipation, that for the purposes of this book he feels justified in assuming that toxaemia causes enervation in a great majority of the cases met with in daily practice.

In correcting what he believes to be the usual causes of this state he finds it much easier to correct the dietary habit first, at any rate, and generally when this is well accomplished there is little or no trouble with the other causes of enervation as we recognize them.

Surely it is true that the gradual accumulation of acids in the system does militate against nerve force, as no one will deny; surely also these food causes are so universal that they may almost be assumed to belong to every one.

So in attacking the subject of Digestive Enervation we are doing so rather from the standpoint of toxaemia as a primary cause of this state.

Nerve exhaustion and digestive incompetency are so intimately bound up together that there seems to be no way to dissociate them. Usually they are better treated together as differing phases of one thing: progressive acid-autotoxicosis, or toxaemia.

These toxins may be of exogenous or endogenous origin, and there are those, as Dr. Tilden, who, knowing that the digestive tube is merely an inversion of the body's exterior, are prone to regard toxins developed within this canal as of exogenous origin, that is, generated without the body, but for purposes of making the subject more clear it seems that we should disregard these technicalities and consider toxins manufactured in the digestive tract and colon as

endogenous, as surely they are absorbed into the body and have to be accounted for by the body.

There is here the familiar vicious cycle, the toxic state creating enervation through body poisoning, and the enervated state further adding to the toxic condition by interfering with elimination of debris.

So what does it matter whether we ascribe to one or the other the place of first cause, since they are so intimately related that we cannot in practice separate them?

Toxic accumulations are like addition, a little bit added to what you have makes a little bit more.

So we accumulate handicaps in the form of self-created and retained toxins or poisons, and we suffer from toxaemia, whether primarily from a breakdown of nerve force or from this accumulation which causes such breakdown.

We do not know how we came so, but we're here.

By enervation we mean lack of nerve force, weakness, inertia, inability to carry on function normally.

Every function of the body depends for its activity or its capability for function, on the character of nerve force with which it is supplied continually, and right here is where acidosis comes in, for the increasing acidity of the body, or, more properly speaking, its lowered alkalinity, is the cause of this lowered nerve force.

We do not mean to say that this is the only cause, for anything that depletes our vitality lowers nerve force.

Loss of sleep, dissipation in its varied forms, too great mental and physical stress, all these tend to lower nerve force, but back of these is so universally the increasing acid state from wrong habits of eating that we are not able to separate these causes definitely.

Enervation in any degree lessens function of every sort, of course, for we are all of one piece, and if one organ suffers so do all, their nerve force being one source only, the very center of us ourselves.

No one part suffers a paucity of nerve force, leaving out the question of external violence that may interfere with the nerve supply to some one part, but we suffer in toto from this state, and the weakest organ or function is the one that shows this plainest.

We inherit from our parents no better organs than the ones with which they were supplied, and if organic weakness had developed in either parent, or perhaps in both, the offspring would be weak in this particular. When the state of enervation begins to show, this organic weakness will develop recognizably, and we say this man has developed this or that disease.

The only disease that has developed is acidosis, or toxaemia, the weakness being only the evident break, the leak to which he was predisposed by heritage.

If this man with the inherited weakness so lives as to prevent the accumulation of the hindering acids, this weak organ will never be in evidence, for it was good enough to carry him this far, and in the absence of further handicaps would carry him through to the end, without question.

So on our parents we may blame only our predispositions to disease of this or that organ, the actual disease being always a thing of our own creation.

When the weak organ begins to fail its work is imperfectly done, and if this happens to be an eliminative organ, as is usual, for these are usually under the greatest stress, then the particular materials that this organ is supposed to remove from the circulation will accumulate all the faster, as when one workman in a line breaks down and gets behind with his particular phase of the work it piles up at his bench and all the works will be slowed down on account of the failure of this one man.

Just so when the kidneys fail, there being no other channel through which these excrementitious elements finding their way out through the body can be eliminated, there begins at once to be a further accumulation of debris that cannot be removed, and the retention of this makes what we call uraemia, or saturation of the body with debris that only the kidney can handle.

This accumulation interferes with every function of the body and everything is thrown into confusion, till perhaps uraemic convulsions occur, the system's final pronouncement against this contamination of her stream of life.

This is the vicious cycle of which we hear so much, for the fouling of the blood stream, its complete cluttering-up with waste, is what makes the kidney break down, and the further addition to this waste, through failure of the kidneys to eliminate even their usual quota, adds to the embarrassment of the kidney, and this still further falls down, adding continually to the accumulation and embarrassment of function, till the final break in tolerance occurs.

Here unconsciousness usually occurs, convulsions, complete loss of appetite, inability to take any nourishment whatever, and Nature seeks in this way to withhold further intake till she has had time to clear away at least a part of the debris that is causing all the embarrassment.

Back of this breakdown is years of accumulation of acid end' products of digestion and metabolism, the kidney failure being but the point of tolerance for the kidney, and the real disease all the time the toxaemia started earlier in life.

Now this is merely by way of illustration, for we are speaking of digestive enervation.

If the great cause of enervation is increasing acidosis, then we will look for this before there is digestive weakness, and this is just what we will find.

Here again we have the fact of a vicious cycle, for the enervation, that alone causes lack of function in any organ, is visible here in the digestive tract perhaps earlier than in any other organic complex of the body.

Increasing enervation means decreasing function; this means slowing down of digestion and colonic elimination, with less completion of the digestive task, more fermentation, longer residence of colonic debris, higher fermentation of this, much more absorption on this account, and a rapidly increasing toxic state.

As the toxic state increases then, of course, so will enervation, with still further reduction of digestion, still higher fermentation from uncompleted digestive tasks, longer colonic retention of putrefying debris, still greater absorption, causing still further enervation. Is it any wonder that when we begin to complain that we can no longer digest our food easily, that we have more gas, more

acid stomach, more constipation, we are already far on the road to a breakdown of some sort?

It is just here that so many lie down with neurasthenia, and with the ordinary idea of "keeping up the strength with plenty of good nourishing food" these people stay in bed for months or years.

Nature has often to go to the extreme limit of entirely inter' dieting digestion, refusing all foods, before she can again re-establish a balance of nerve force sufficient to resume her operations even on a reduced scale.

This vicious cycle may be broken early in such an attack if one can leave home, find relief from the nerve stresses that are usual in one's surroundings, and take thorough rest and relaxation, as at the seashore; but even this is not sufficient if the cycle has progressed far enough to impair digestion seriously. Such trips are usually a disappointment.

It is just as usual practice to continue the dietary habits while on vacation as when at home, and it is even more likely that the intake of foods of all kinds will be increased, for in new surround' ings, unfamiliar foods, relief from other stimulants to thinking, the appetites will be more in evidence, and the larger intake of food is apt to result in still further additions to the total of possible danger in uncompleted digestive and eliminative tasks.

One usually takes on vacation all his causes of disease and brings these home again, experiencing no radical change in condition from this supposed vacation, the only relief being in the change of scene and environment and the relief from tasks that while at home were depressing or done under extreme difficulty that added through fatigue to the total of enervation.

The only real vacation is one that gives rest to every overworked organ and function, a vacation that is often better taken at home, or nearby, and at no expense to the patient.

Such vacation should be taken by every one continuously, not as an occasional offset to the usual depressions of business or work or household routine.

Here comes the first of the four horsemen, fatigue, as a first evidence of failure, for fatigue in noticeable form always precedes enervation, in fact, this is the early stage of enervation, unless the whole routine is so changed that no fatigue will be felt.

We all realize that digestion is seriously interfered with by fatigue, in fact it is common advice never to eat when tired or distressed in any way, as digestion will be very poor at such times.

Enervation is internal fatigue, nothing else, and is the result of the very same causes as produce recognizable muscular or mental fatigue.

When fatigue assails the digestive organs it slows down muscular contractions, the peristaltic waves, by which the food mass is churned and propelled, as well as interfering with the nerve impulses by which secretion of digestive fluids is governed.

When digestive enervation or fatigue sets in the rate of travel of the food mass is greatly delayed, the digestive juices are for the same reason deficient, and the digestive task is but poorly or not at all carried out, resulting in much fermentation and much retention of debris by the colon that takes part in the digestive cycle to the extent of removing the debris from the system after digestion is completed.

When the action of the colon slows down then we see the beginning of what will soon be recognized as constipation, but for a long time before movements are missed there will be a slowing down of the rate of dejection of this debris, the movement occurring today representing material that should have been dejected yesterday, or the day before, yet still a movement occurring every day.

This is obstipation, which in effect is the same thing as constipation, or missed movements.

The idea of medicine here is to use laxatives, but these do nothing except to hurry peristalsis mechanically, as they are irritants to the mucous membrane of the intestine and act in no other way.

This whole idea is a complete failure to grasp the true situation, for the trouble is not in the slowing of peristalsis alone, but in a failure of the entire system of digestion, and the whipping with a stimulant is aggravating the state of enervation or fatigue that is the very cause of the whole thing.

Like all other stimulants, the intestinal stimulants that we call laxatives soon produce a tolerance in the system, and increasingly large doses of these have to be administered, or the character of the stimulant changed frequently.

After a tolerance for stimulation has developed, then surely the last state of this case is worse than the first.

And even if tolerance did not develop, and if the stimulant continued to work, the results of such stimulation are never to empty the colon, as supposed, but merely to irritate and stimulate the mucous membrane of the entire intestinal tract, not resulting in the very thing aimed at.

Thus movements will be forced in this way for perhaps years, soft in character, representing but poorly digested materials, which have been rushed through the small intestine before time was given for complete digestion, while these same movements have passed by in the colon old masses that were in solid formation, allowing the semi-fluid mass to pass through, just as sand will filter through a bucket of shot or stones.

There is but one harmless way to empty the colon, and this is with the daily enema, a measure that can be kept up indefinitely without the slightest harm, if conducted right, but an emergency remedy at best, till normal inervation again produces normal stools before the usual time for the enema.

This will be taken up more at length in the chapter following, when the harmless technique will be outlined.

It is so common to hear a man or woman complain that a few years ago he or she could "digest nails," yet today" everything lies like a load on the stomach."

Inquiry will always also elicit the information that such case gets up in the morning always tired, has constipation, often sour stomach, lots of gas, "everything turns to gas," and the entire train indicates a digestive tract that has laid down on its job.

Here is a picture of digestive enervation not to be cured or treated, but to be analyzed as to personal habit and the faults found there corrected.

No stimulant, no medicine, no dietetic regime here is curative, no electricity will bring back the elasticity to the digestive tract;

only the body itself can restore this, and to do so it must be freed from the handicaps that produced the thing originally.

These are chiefly in the degree of departure from the intended normal in dietary habit, the various things before outlined as the sources of acidosis, and where extreme fatigue is a primary cause, as in undertaking tasks too hard for the physical or mental equipment, this cause must be also eliminated before the body can readjust itself to the normal and again get the internal rest that will allow of repair of its broken resistence.

Here again, to cure disease is merely to stop causing it, and this will always be so in every condition to which flesh is heir.

We cannot improve the body's arrangements for its own care, nor can we even greatly assist these, but we can stop doing the things that interfere with the body processes.

Cases of digestive enervation in the experience of the writer have always come back faster through an entire withholding of food of all kinds than in any other way, as this plan more completely gives the body a free hand in elimination than can any other, but not every one wishes to fast, many misunderstanding the whole process and intent of the fast, so it is not recommended to all indiscriminately.

Until the body has eliminated much of the waste matter that is the cause of this state there will be little or no improvement from physical or mental rest, even though rest is ideally indicated here, for the impossibility of proper rest in a body continually overworked by eliminative tasks that it has not been able successfully to complete must be evident to any one.

External rest does not always mean internal rest, and in the very nature of things cannot mean internal rest till the internal cleanliness has reached a certain point where function will not be continually embarrassed.

Many a case of neurasthenia, which consists chiefly of digestive enervation, has gone to bed, resting under the Weir Mitchell idea, absolutely no movement of any kind, stuffed with all sorts of easily digested pabulum, and continued thus till a complete digestive breakdown ended the insane idea of forced feeding, thus giving the system time to clean house and re-establish a semblance of order, and only then did the patient experience any real improvement.

External rest would not do; it had to be internal rest before improvement could set in.

Neurologists are still scrapping with nutritionists over the question of whether the digestive breakdown, which is a part of every neurasthenia, is the real cause of the nerve break, or whether the failing nerve force is the cause of the digestive failure, and they never can settle this point, for they are both the result of acidosis, the two phases most in evidence in the syndrome that we call by the name of neurasthenia.

A number of years ago a minister's wife was just getting up from her third period spent in bed with this trouble, three distinct breakdowns in six years, the periods in bed representing by far the greater part of the six years.

She seriously objected to any "monkeying with her diet," which she was sure was all that got her out of bed at all.

This consisted chiefly of milk and eggs with meat at least once a day and plenty of white bread twice each day.

She was finally persuaded to stay three days as a test, but feared a fast or greatly diminished diet, as she said she would faint if she were not fed coffee and toast as soon as she woke in the morning, and again between each two meals she was fed coffee and toast, making six meals a day that she had to take care of in her greatly enfeebled condition.

Being so recently out of bed for the third so-called recovery she feared that she would be thrown violently back again into a bed-fast state.

She was purged with three heaping tablespoonfuls of Glaubers salts each morning for three days in succession, diet limited to fruit juices during all this time, and for three days she feared to raise her head for fear of fainting, the nurses being compelled to attend her with the bed-pan during this purging period.

No food of any kind was given beyond the juices of the orange, lemon and grape.

After three days she sat up in bed, greatly surprised that she did not faint Next day she was all over the house, and the next all over the town, taking long walks with enjoyment.

At the end of three weeks she returned to her home, and discharged the maid, who had been with them for six years, and never again employed any help, as she has never in these nineteen years needed any help.

Now why did this lady who got up with difficulty after absolute rest in bed for as high as a year at one time recover so quickly when given no food and purged drastically?

To answer that it is only necessary to remember why she was sick, for the diet she was on when she came there proved that she was made of good materials else she could not have gotten up at all from a breakdown.

The daily foods in her case would require the digestive and eliminative ability of a husky backsmith to handle properly, yet in spite of this she carried on after a fashion, showing a good resistance and a hopeful outlook for immediate improvement when these damnable handicaps were removed.

A long series of similar cases could be summarised in about the same way, continued ill health, nearly complete digestive breakdown, severe enervation of digestion, coupled with an insane diet, yet carrying on. These cases all did well almost at once when freed from this terrible burden of digestion and elimination; eventually all did well, recovering completely, but an occasional case responded but slowly to the rapid detoxication and subsequent diet, apparently having so little vitality left that this had to grow by slow degrees to even a competency for the normal foods with even a light eliminative task.

So whether the digestive breakdown precedes the nerve break' down, or vice versa, makes no more difference than whether the hen is the mother of the egg or the egg the mother of the hen, for both conditions are merely differing expressions of exactly the same cause, and both can be reached as readily as either singly by removal of this toxic cause, and in no other way.

Recoveries through the Weir Mitchell plan are recoveries in spite of absolutely wrong treatment, and only serve to prove that it is hard to kill some people.

To cure disease all we have to do is to stop causing disease whether this be neurasthenia, digestive breakdown, or any of the multitude of ills that we have catalogued through the centuries past, or will ever catalogue through those to come.

CHAPTER XIX

CONSTIPATION A SECONDARY CAUSE OF DISEASE

Sir William Arbuthnot Lane has said that ninety per cent, of all chronic disease comes from constipation, so if we were to accept this dictum as final we would feel that we are cornering nearly all the chronic disease, for he evidently referred to the chronic and so-called degenerative or toxic diseases of which he was speaking when he made this sweeping statement.

This is scarcely a fair statement, however, for what causes constipation? This is not a condition that just grows, like the immortal Topsy, for it has to have a train of preceding conditions before it can appear.

That it is a cause, and a very important cause, of the toxic train of chronic diseases goes without saying, for this must be self-evident when we consider the enormous opportunity for fermentation and putrefaction in the colon of forty-eight hours delinquency.

Still if we attribute to the colon the chief role in furnishing material for the creating of a toxic state, we are still under the necessity of finding out why the colon should reach such a state of helplessness.

If you will remember what was said in the last chapter in regard to digestive enervation it is then much plainer to understand, for the gradual failure of nerve force is back of constipation just as it is back of every other functional or organic failure that heralds disease.

Back of enervation is acid intoxication, from food mistakes, so we are again back at the original starting point, and we see that the functional activity of the colon depends on the degree of nerve force with which it is supplied daily, and that this nerve force is depleted continually by self-created poisons from wrong habits of food selection and combination.

So we are forced back to the original statement that THE cause of disease is food habits.

As the colon begins to lag behind with its work, as the interval grows ever longer between the time food reaches the colon and the time before it is dejected, the degree of toxicity of its contents is certain to deepen, from fermentation and putrefaction.

Let an egg lie in the sun till putrefaction sets in and note that each day the odor gets more and more putrid till the saprophytic germs of the air have finally done their work and the egg is no more, resolved back again into its original components, dissociated by these beneficient little workers in the field of sanitation till there is no longer anything left to identify as egg.

It is even so inside the colon, for the work of destruction goes on to completion inside this depository just the same as outside it, and the odors are evidence of the liberation of hydrogen disulphide,

or sulphuretted hydrogen, a by-product of the putrefaction of protein anywhere inside or outside the body.

Now this work of reduction is a beneficent process, but till the work is completed there are many depressing and very toxic byproducts of decomposition generated, and these are subject to absorption just as are the food materials, and we suffer accordingly.

If meat or other flesh or protein food is decomposing in the colon, it gives to the stool this same putrid odor, and as this is absorbed into the body the perspiration, the breath and all excreta are bound to testify to the presence in the body of this decomposition, and the urine is very apt to carry indican, or indoxyl, showing this very same thing.

So the colon is a source of intoxication, as no one should attempt to deny, yet it is not fair to call this in any sense a cause of toxic state, rather it is the means of intoxication most in evidence.

To render a body less toxic quickly it is of great assistance to empty this cesspool daily and so keep it empty, thus relieving the body of this continual reabsorption that results from a too long retention of material that should long ago have been dejected from the body.

This can be done in no harmless and effective way except through the daily use of the enema, an instrument of sanitation that is grossly misunderstood, because not properly used, as a rule.

You have no doubt heard it said that if you begin the use of the enema you will always have to keep on with it, as it takes out of the bowel all its resiliency and reaction to its contents, and perhaps this would be true if one were to use it always quite warm and continue to remove all of the contents daily, just as a leg that is lame will not recover its full usefulness unless one makes it work sometime, and if crutches are used indefinitely, or if one were to lie in bed to save the leg from work, then it would be all too true that its function would not return permanently or completely.

This would be the wrong way to use the enema, for it should consist of three quarts of tepid or slightly cool water, the entire three quarts to be injected at one time, to distend thoroughly and thus empty the colon for the first two weeks, the length of time usually required to unload the entire contents of the average torpid colon, and after this to be reduced to two quarts, retained for two or three minutes, while the abdomen is deeply and vigorously massaged to insure the penetration of this water into every part of the colon without putting this daily on the stretch.

Thus, the colon can be emptied without robbing it of any of its own vitality, and if the juice of one lemon is added to this two quarts of water, it imparts a kick to the colon that helps it to come back to greater activity, at the same time neutralising much of the medium that offers the best breeding ground for the anaerobic bacteria that infest the colon, and whose presence there is made necessary by the retention daily of this material that can be destroyed in no other way than through germ activity.

For twenty years the writer has studied by means of the fluoroscope and the x-ray film the effects of the daily enema, and he has yet to see evidences of the least harmful effect, and the regularity with which constipated patients report a return after several months' use of the enema to the normal three movements a

day is pretty good proof that the effects of a proper enema are salutary, rather than otherwise.

Cases of colitis, which is merely nature's effort to protect the body from the absorption of the decadent material, recover after a proper correction of the diet, with daily enemata to remove mechanically this decaying filth till such time as normal activity will have opportunity to return.

And, after all, the test that should be required in every case is this very thing of recovery instead of the reverse.

In the interest of a better condition of the body it is surely unwise, as well as immediately unhygienic, to allow this mass of debris to remain to ferment and putrefy and still further intoxicate the body, just because we do not at the time have sufficient colonic function to expel the mass without assistance.

The vicious cycle set up by retention of such material, absorbed through an already toxic wall of colon, must tend still further to add to the toxic state that has caused the whole thing originally. So how can be break this cycle easiest and most quickly without harm to the patient?

The enema is the answer, and as it can be used in this harmless way it is surely much better than to allow the colon still to distribute through the system this decaying material.

If Sir William Arbuthnot Lane were correct in his statement that 90% of all chronic disease originates in the colon, then by the same reasoning we could say that so great a percentage of disease can be cured by flushing out this sewer daily.

Chronic disease is not so simple as this, however, for many things have entered into its formation, chief of which is, by every consideration, the use of foods that have intoxicated the body, and that would intoxicate it even if the colon were up to the minute with its task of removal of waste.

The use of much too great an intake of concentrated protein, such as meats, eggs, fish, cheese, peas, beans, lentils, nuts, cereal foods, have all contributed their share of acids to the body; the use of the denatured, dealkalinized foods, that we call refined, have added still further to this acid total; the use of carbohydrate foods with acid fruits or other acids, or with the concentrated proteins that are responsible for the presence of the hydrochloric acid in the stomach, making digestion without fermentation an impossibility; and, finally, the slowed rate of passage of food residues through the colon itself, all have worked together fairly to swamp the body with adventitious acids that have interfered with function of all kinds, and that of the colon no less than the rest of the body functions, and we have the vicious cycle in full operation.

So when we think of constipation as a cause of toxic states, or . disease, let us go still further back and ask ourselves what started this whole train that made constipation possible, and we will be getting somewhere in hunting for the causes of diseased states.

Constipation is regarded almost universally as a cause of disease, just as is catarrh, yet both are merely expressions of a cause that produces both, and when we consider that constipation is itself but a catarrhal state, a catarrh of the colon, we can again go back to what was said of all catarrhs and realise the true meaning of catarrhs of all sorts.

Each is but the evidence of an internal toxic state, the visible effect of toxins created internally and seeking extrusion from the body through the mucous membranes, just as the various skin inflammations are the same thing as regards the skin.

The multitude of cases that have come under observation and treatment since this sort of treatment was begun, in the practice of the writer and those friends whose data was available to him, would seem to prove that at least constipation is well nigh universal in distribution among the ill, whether we regard it as a first or a secondary cause of illness.

It has been the writer's experience that these cases, even of very long history, can come back to a normal movement after each meal in a few weeks or a very few months of daily proper enema and such correction of the diet as will end acid formation and leave a sufficient bulky residue for the colon to allow of exercise of its muscular coat.

Occasional cases of greatly depleted vitality require a much longer time for recovery, but in the absence of restraining adhesions, as after abdominal operation, recovery in a few weeks or months is the rule, not the occasional exception.

Yet when recovery is complete, when the bowels are moving freely and naturally after each meal, then we have removed only the secondary, a secondary, cause of toxic states, and are under the necessity of maintaining a non-toxic habit of diet, if we seek to secure freedom from constipation in the future and wish to remove all the toxic causes of disease.

A list of the causes of constipation would read just like a roster of the causes of disease, for they are one and identical, all disease being from one prime cause, as are all degenerations of every sort, and whether the toxic state is from wrong feeding habits or from drugs, as so often the case, makes no difference, toxins of foods or drugs being the prime factor.

Speaking of the effect of drugs as a cause, an immediate cause, of constipation, it is simply shocking to have to record the great numbers who will say that they were never constipated till after having some sickness during which they took a great deal of medicine.

So many attribute their first constipated state to some medicine taken that there surely must be a rather large causative factor here.

How many typhoids will say they were never constipated till after their attack of fever, and that since that time they have had great difficulty in keeping the bowels open!

Influenza is another condition that antedates almost immediately numerous cases of constipation.

Anything that depletes vitality may be the last straw that breaks the camel's back of resistance, and when the vitality for any reason falls suddenly this may be, is apt to be, the point at which one realizes constipation for the first time.

The primary cause is so evidently the general state of the body that here is pretty good evidence that body changes precede the slowing down of bowel action, and that whatever of increased auto' intoxication follows after this is dependent only secondarily on the constipation.

Constipation, colitis, diarrhoeas, hemorrhoids, itching of the anus, all are evidences of the toxic character of the contents of the

colon, and all are curable by sterilizing this foul cesspool and afterward keeping it up to date.

If one were to eat only of fruits and vegetables for a time, after the colon is once emptied of its decaying load, it would then be safe to wait till voluntary movement of the bowels occurred, as there would be nothing retained that could cause harmful absorption, and there would be accumulated a sufficient residue of cellulose so that the colon would become fairly full of this, and have a sufficient bulk on which the muscular coat of the colon could act easily and reestablish muscular contractions.

No doubt the usual constipation is greatly aggravated, and possibly largely caused, by the use of so much food that leaves behind little or no cellulose residue, as white flour or white sugar preparations, meats or clear muscle cuts or eggs or milk, as the colon cannot act on nothing, and the foods with little or no residue will leave nothing for the colon to do, so the accumulating wastes there are putrefying further with each day's retention, still further weakening the colon structure till a well developed constipation may arise from a rather short period on just these foods alone.

Vegetables and fruits have a heavy structure of cellulose, which is wholly indigestible, fibre, the bulk of the food of the vegetarian animals, and it is surely of value to eat these vegetables and fruits for this reason if it were not for the far more important reason that they give us the chemical ingredients of which the body stands daily in need.

It is largely by means of certain of these chemicals that elimination is made possible, just as all function depends chiefly on the degree of alkalinity due to the presence of these necessary alkalin chemicals, so their loss from the refined foods, together with the paucity of cellulose fibre, must be a very large factor in the creation of torpid colon, or constipation.

Keeping in mind then that back of constipation is digestive and general enervation, you can easily see that cure must include a revitalizing of the body, a return to a more vital way of eating and living, and cure is never anything else than this in any condition that is abnormal.

So the means necessary to cure any disease are those necessary to cure constipation, plus the enema till this return of vitality can have time to materialize.

Probably more ingenuity has been expended in seeking for means to make the bowels move than on any other phase of ill health or of abnormal bodily conditions.

Drugs of every conceivable action have been used and recommended by eminent authority. Sand has been eaten by the ton, literally. Bran has had almost universal glory as a means toward this same end. Neutral and bulky oils have recently had great regard. Rectal dilatation has been recommended by many. Yet constipation remains today one of the most universal handicaps of the race, and furnishes by far the most profitable field for the sale of drugs, perhaps rather closely approached in this respect by pain relievers of the aspirin type for headaches and neuralgias dependent largely for direct cause on this very same constipation.

Recall again that everything absorbed goes straight to the liver, and is it difficult to see the connection between putrid states of the colon contents and liver or gall-bladder disease?

These get well so easily when the colon is flushed daily and thoroughly that this still further illustrates the intimate connection here and further impresses on us the necessity for a toilette of the colon that is as regular as the face bath.

Teachers have so often reported that when in school and under the strain of teaching they always develop constipation, and that when on vacation they are not so bothered, that it impresses again the intimate nerve connection between function and nerve cause.

Anything that depletes nerve energy, or that diverts it greatly to other uses, is a cause of lowered function, not more so and not leas of the colon than of the stomach in the digestion of food.

So it is necessary to conserve nerve force, to avoid its dissipation through great nerve stresses, or fatigue, or too great concentration of the mind, or loss of sleep, or any other cause that can vitiate our nerve force or impair it in any way.

Bran is so generally considered harmless as a stimulant to bowel action that it is timely again to warn that even bran serves as a stimulant to this lazy colonic function merely through the irritation of the lining membrane of the colon, and like all other irritations the colon becomes accustomed to it, and like all stimulants its use is followed by a compensatory reaction, so that it is never to be recommended as an aid to better movements of the bowels.

When it can no longer secure the activity because of this adaptation of the colon membrane to the irritation, then it tends to accumulate in the colon, and the danger of impaction is just around the corner.

Then truly the last state of that man is worse than the first, for it is hard to stimulate the colon further, and too long retention of any distending mass weakens the colon and it is hard to recover from such a handicap.

Aside from a bulky diet of fruits and vegetables there seems to be nothing that can be used by mouth that is of any aid to failing colonic function, for everything else has been tried and found wanting, so the first step looking toward cure of the constipation will have to be foods that leave a bulky residue, such as fruits and vegetables, a source of exercise for the colon, and that also give up salts that enter into all eliminative function, and add to this the enema used in the way suggested till this function again becomes well established.

There can be no harm from such treatment, and the fact of nearly universal recovery of normal colon tone through such means and in a reasonably short time, is the very best proof that it is effective, as well as harmless.

A further description of the proper enema will perhaps be necessary for those who have had no experience with this means of emptying the colon.

The best position is usually the so-called knee-chest position, on the bath room rug.

Get down on the knees, stoop forward till the head rests on the floor, insert the well lubricated tip of the enema outfit, then lower the chest as close to the floor as possible, thus giving the water a down hill direction on entering the rectum.

Eighty degrees F. is a very good temperature for the water at first, afterward lowering this as far down as comfortable, seventy

degrees or less, when the body has become accustomed to the eighty degrees so that it does not seem cool any longer.

The juice of a lemon added to the three quarts of water will increase the effect of this, and really goes far toward sterilizing the colon.

Release the compression on the tube and allow the water to flow slowly into the rectum, with the bag or container not more than three feet above the hips, to avoid a too great pressure and too rapid flow of the water.

When the pain becomes severe, as it will at first, pinch the tube and wait a few moments before admitting any more water, perhaps massaging the abdomen somewhat at the same time.

Admit a little more, or till the point of extreme tolerance is reached, then if not much water has been taken it will be better to evacuate this, and when easy of pain start all over again, till in a few days three quarts can be injected at one time without great pain.

Two weeks of three quart enema is usually sufficient to insure that the colon has been completely emptied, and to one who has not before had the experience there is a surprise in store, for the amount of ancient material unloaded is truly astonishing.

After continuing the three-quart quantity for two weeks the amount may now be reduced to two quarts, at the same time lowering the temperature to seventy degrees if this is not uncomfortable, and continuing this daily two-quart enema till returning colon tone produces voluntary stools before the usual time for the enema, at least one such every day for a long enough time to resemble fixed habit, two weeks or more.

Then when the enema is discontinued there will be two or more stools a day, which will grow under proper diet to a stool after each meal.

Seize on this opportunity to create a fixed habit of a stool after each meal, by going to the closet after each meal and sitting quietly and soliciting a stool, and in a rather short time this will become a habit and will secure a free stool within a very short time after sitting down.

Nothing less than this is normal action, and if man were subject to a different set of laws he might hope for a special dispensation of Providence in his favor in this respect, but Mother Nature does not play favorites, and man has to continue to abide by the same general laws as do all flesh if he wishes to escape punishment for their infraction.

The universal rule of the animal world is a movement soon after eating, not occasionally, but always, if such animal is normal, the entrance of food into the stomach starting a peristaltic wave that is the natural source of this movement, the body emptying the tract for the oncoming meal.

Nothing less than this is natural, and nothing less will save man from this secondary source of infection through a deficient colon action.

The means are not hard, and any one can stand the task.

CHAPTER XX

APPETITE AND HUNGER

These two terms are used loosely, as a rule, and taken to mean practically the same thing, but a sharp distinction is to be drawn between them always.

Appetite is the result of habit, the return of the meal hour, or the result of odors, tastes, or sight of food that tempts the desire to eat.

The gnawing that occurs always when the meal time is past, and that is so loosely called hunger, is nothing but the irritation suffered by an empty stomach carrying residues in acid state from the last meal eaten, relieved, to be sure, by eating, as dilution of the residue renders it less irritating.

This discomfort is referred to the pit of the stomach, and is variously referred to as a sinking feeling, a gnawing sensation, a grinding, or various other terms that indicate the discomfort its presence occasions.

It is quite unlikely that one person in a thousand has ever experienced the difference in sensations between this surpassed habit appetite and true hunger, for seldom is any one ever allowed to feel the sensation in this land of plenty and frequent eating habits.

The habit of many of the early civilisations was to eat but one meal a day, and this in the evening, after the activities of the chase, the fight or the work were ended, and it is to be supposed that these people did not have the gnawing in the pit of the national stomach or they would never have cultivated such habits.

The armies of Rome and Greece when at their height of efficiency, and when both kingdoms were predominant on account of their military strength, ate but one meal a day, and this in the evening, and it is reported of the Roman army that the combined weight of armour and equipment was so great that the average modern soldier could not carry it and fight, while the Roman soldier ran at good speed into battle, fully encumbered.

Yet these men did this on an empty stomach, and seemed to have been mighty efficient as fighters, judging by the strength of armies they conquered.

Every disagreeable symptom of the empty stomach is due to appetite, a habit affair, and the sensation comes from the retention in the stomach of acid debris left from the digestion of the last meal.

If one resists the compelling desire to eat at such times, or if something happens to divert entirely all thought of food, the feeling passes, and one can then forget the supposed need of food, and at the next meal time there will not be the disagreeable gnawing sensation, but habit alone calls for food, and the usual regular diner feels that he has taken serious chances on his life or future efficiency by neglecting even this one wholly superfluous meal.

If one goes without eating for two or three days this desire for food wholly leaves, and the most perfect indifference toward all food sets in, which as ordinarily interpreted would mean the beginning of death from starvation.

If one can shake this superstition, this atavistic fear of starvation, he can then begin really to enjoy living, for there is a feeling of release from the compulsion of the table that compares with what Christian must have felt, in Pilgrim's Progress, when his burden of sin rolled off at the foot of the cross. He afterward traveled so much lighter and felt such relief that the remainder of his journey was comparatively easy. Even so, when one first feels this sudden realization of release from the compulsion of the table, there is a most wonderfully unlifted sensation that looks forward to far better things in the future.

The writer well remembers going through this stage for the first time, and never since then, now twenty-four years ago, has he felt a return of this slavery to the table that we all subconsciously feel, whether we know it or not.

This was a divorce from the table habits of all the years preceding, when he would have looked with horror on a proposition that would take him too far from a base of supplies.

Now, while writing these lines, he is on the fourth week of a self-imposed fast, to be followed by an equal period of diet restricted solely to grapes, the thirty-one days of July fasting, and the thirty-one days of August on a strict grape diet.

This is the yearly housecleaning, not strictly necessary, perhaps, as the habit is to eat but one meal a day all through the year, and this chiefly vegetables and fruits, and if concentrated foods are used, as happens once or twice in a week, these are so combined as to prevent fermentation.

Yet he enjoys the table perhaps better than the average man, but never with the feeling of compulsion that ties man close to his base of supplies.

This month of fasting is taken close, very close, to Nature in a little cottage on the south shore of Lake Erie, close to the water, where nude sun bathing is enjoyed every bright day, and where living is largely in the raw, nude state in which the skin has an opportunity to regain its natural instincts and effectiveness as the outer organ of elimination.

Appetite, there is none, not the slightest desire for food of any kind, a little lemon juice in the water drunk, if craved, perhaps a bite of orange or a few grapes, to relieve the disagreeable taste of the fasting mouth, being the nearest approach to food, and this taken not from any sense of hunger or appetite, but for comfort only, as the fasting mouth is disagreeable always, giving evidence of the character of material the body is unloading through the digestive tract.

A spring exerciser is used daily and records the same number of pulls as when eating is at the average habit, and without the sense of fatigue that usually accompanies this form of exercise.

This book must be completed and ready for the printer before the end of July, when camp is broken and the office is again resumed in Buffalo, and but twelve days are allotted to this work, three of these still remaining, so we must hurry.

A voluminous mail has to be answered once every week, the week-end passed at Crystal Beach with the family, leaving but four days each week for writing, and as this was not begun till the second week at camp the writing days were reduced then to twelve for the remaining three weeks of the month.

This is not the way to write a book, to force it in a given time, but it was the only opportunity, so was embraced, and here we are at work.

Imagine, if you can, what success we would have if all the time there were this continual gnawing at the stomach that we erroneously call hunger! The thing would be impossible.

Now what we have been talking about is appetite, and in order to distinguish this from hunger let us impress once more that appetite is habit and its resultant accumulation of the acid debris from the last meal eaten, every sensation depending on these two factors always.

Appetite is a creation of habit, wholly, and never a normal thing.

Hunger is the systemic need for food, has no sensations at all except a pleasureable anticipation of eating at some early period, can be deferred without the least discomfort, and expresses itself definitely, as a desire or need for some one specific article of food.

Hunger is never in evidence so long as appetite persists, the disagreeable sensations of appetite covering it up completely, so that we have no way of knowing whether or not we need food till this divorce from the table is quite complete.

The writer has not before fasted for longer than twenty-eight days at any one time, and never in this period did he come to normal hunger, for the fast was always broken because of conditions that seemed to make its further continuance undesirable, but always without real desire for food, nor does he expect to reach normal hunger in this present thirty-one day fast, but some time he expects to go through to the end of a complete fast till hunger demands some one specific thing, and nothing else will do, and only then will he find out what hunger feels like.

Hunger is the announcement of the body that its internal stores of food are exhausted, and there is then instant demand for some one thing that combines those ingredients of which the body stands in immediate need, which the writer has seen three different times expressed as desire for either fried ham or bacon.

These were cases that fasted to the limit, till a normal hunger developed, a fast made necessary by a state of the body that did not permit of slower methods of readjustment, and in all three cases there was a rejuvenation that was truly remarkable.

Mark Twain always leaves his readers to guess just how much of what he tells in his inimitable style is really the truth and how much is merely a good story well told.

In one of his volumes, "The Man Who Corrupted Hadleyburg and Other Stories," he tells of traveling all over his own country seeking a return of a lost appetite, then a sea voyage at the recommendation of his physicians, then travel over much of Europe, still without the lost appetite, and finally his stay at the Appetite Cure at Hochburg House.

Here he was confined to a room, and given a list of foods that he should select his menu from, consisting of the most revolting articles, growing progressively more revolting as the list proceeded, the fifteenth article being "new spring chicken in the shell," and the thirtieth and last being "boiled rubber boot heels."

He was told that he could not consider as first meal any article above the fifteenth, as his case was considered a fairly bad one.

He rang the bell when first it occurred to him that it was time to eat, and ordered some food, no matter what, but was reminded of his diet list, and consulting this he remembered the new spring chicken in the shell and indignantly refused food. Day after day this performance was repeated, all the time approaching the fifteenth article, till on the fifteenth day he surrendered and ordered the disgusting new spring chicken in the shell.

The tray was served by the big boss himself, and as Mark was about to carve the diminutive chicken the proprietor took the tray, announcing that he was now cured, and forthwith brought him a platter of proper food.

Asked how he ever came to adopt such a novel idea for restoring appetite, the proprietor, who was not a physician, told a remarkable tale of shipwreck with a crew of thirty men, and all they could salvage was thirty days' rations for one man, or one day's rations for the thirty men.

They were thirty days from the nearest island by whaleboat, and the captain divided the rations into thirty parts, to each man a thirtieth of one day's rations, and the result was so striking that the man never forgot it, every one on board recovering from all his petty troubles, one a tubercular passenger who had shipped for his health, as they were going around the Horn, another a sailor who had abscesses and boils, but all made the island in good condition. The proprietor said all celebrated their return to food with a gorge that nearly killed them except himself, who had learned to appreciate the fact that the human body needs but a small part of what it takes daily to support it in good working order, and he never again returned to the free and fancy eating habits that are usual the world over.

And so he had conceived this idea of "The Appetite Cure" at Hochburg House, and his fame as a restorer of the joys of eating had spread all over Europe.

It may be but one of Mark Twain's stories, like the jumping frog of Calavaras County, but it is a good story and illustrates just what he probably wished to impress: the bad habits of eating that prevail generally being governed by appetite without allowing hunger any opportunity to decide what is best for the man, when to take this or how much.

There is nothing compelling about hunger, but about appetite there is the greatest compulsion, the dreadful gnawing sensation driving one to eat almost anything that is offered, even civilised, men eating each other when driven by this compelling desire or goaded on by their atavistic fear of starvation.

It is nothing but atavistic, no doubt handed down by our remote ancestors from times when food was all important as the one means of sustaining life, and the supply very precarious.

But in America today what chance is there to starve if we understand what food is, for it grows all about us, and even in winter we could subsist on plain wheat grains, or other forms of grains, in good condition, a bushel of wheat serving to support a whole family most of a winter?

When men are lost in the woods for a week there is usually grave doubt expressed as to finding them alive, or miners trapped in the workings are believed to have little chance of rescue unless this reaches them before ten or twelve days, as the general impression

prevails that one cannot live more than ten or twelve days without food.

It is the exaggeration of this fear that actually takes life before even ten days in not a few cases, and men lost in the woods are too often found in ten or twelve days dead, not from starvation but from fright.

At sea in an open boat, subjected to the heat of a tropical sun, the sweating and exhaustion from needed water to replace the losses from the sweating and evaporation of the body fluids, one is then in great danger, for we cannot dry up the body fluids without great danger, so these cases die from thirst, not hunger, for the body, if supplied with even a small amount of water, does not suffer from thirst, unless under intense heat, while living even many weeks without food.

Hunger at the end of the body's resources of fuel is a most compelling thing, and will get the thing desired if it can be gotten by any means whatever, and it is Nature's safeguard for the body to prevent the beginnings of starvation.

Real starvation cannot possibly set in so long as these body stores remain in even small degree, but death from accumulated toxins can occur much earlier than this.

The writer when fasting and at the same time continuing his usual activities, as he always does, has frequently been amused by the tale of some panhandler who requested the price of a meal, saying he had had nothing to eat for two days.

When handed a little sympathy and the statement that the writer and supposed donor had not eaten for perhaps two weeks, he of course considered this nothing but a stall, and went away grumbling over the lack of generosity and sympathy from some one evidently in better circumstances than himself.

If many of these bums were allowed to lose themselves in the woods it would cure them of their habit of peregrination and teach them to settle down to work, for they would get a new view of life, if once allowed to become really hungry.

Appetite is merely a stage in adaptation of the body to the use of its own stores of fuel; hunger is the finale.

Appetite with its disagreeable sensations is almost universal; hunger almost unknown.

Appetite is felt as a gnawing sensation in the stomach; hunger is felt nowhere in particular, but is an anticipation of eating only, and in its milder forms is confined to some one article that is most desired at the time.

Appetite makes a man into a bear; hunger into a man.

Appetite is created from habit; hunger is physiological.

During the writer's earlier experience with sanatorium treatment of the down-and-out chronic, it was his custom to begin this with a fast of two weeks, using nothing but water, or at the most a very small amount of fruit juices daily.

Diet was begun on the third week after admission, and the reaction of the various types of patient and disease to this plan showed every degree of appetite possible to imagine.

This was at first so disagreeable that he early adopted the plan of deep saline purgation to tide over the first three days and hurry the body in adapting itself to the internal feeding, the feeding on its own stored fuels, and usually at the end of the three-day period

there was an almost complete distinterest developed toward all thoughts of food.

An occasional case showed flashes of appetite for a week, seldom longer, and it was always a question if this was not a purely psychic appetite, the result of this same old atavistic fear of starvation.

After a few days there was a peculiar feeling of uplift that drove many to break forth in poetic effusions for the first time in their lives, some really clever screeds developing from what seemed very commonplace equipment.

These patients would go comfortably to the end of the two weeks and submit to the breaking of the fast without suggestion of any kind as to what was to be eaten, as no desires had pointed to anything in particular.

Among these were often desperate cases whose chance of continued life depended on a much more thorough and complete detoxication, and who fasted to the physiologic end, till hunger again developed, and in every such case there was a distinct desire for some one article of food, and nothing else would do.

This desire of normal hunger was always respected, and the thing craved was given in very small amount, and not infrequently this was the last desire expressed; the craving of true hunger had been satisfied and the body was then ready for any good food, and always these cases expressed themselves as never before having experienced such keen enjoyment in eating in their whole lives, and all declared the simple soups, the salads, the fruits, the best they had ever tasted.

All worshipped the genius of a cook that could develop such tastes in food, and yet the cook had nothing to do with it, the patient's own appreciation of the taste of food furnishing the art that was only in the seeming.

Probably not one in fifty of the cases treated was ever put through the complete fast, the rest having developed sufficient cleanliness of tissues as permitted a return to normal eating at the end of the first two weeks, but even these cases, after the cleansed body returned to dependence on the foods eaten daily instead of on its own stores, developed an appreciation of the flavors of foods that they were keen to keep afterward as the best sauce for foods of all kinds.

After all, hunger is the very best sauce, and when we think that the average man or woman goes through life without this sauce, depending on condiments to add flavor to his or her foods, we begin to realise what the average person is missing of the real joys of the table.

Appetite is a deceitful jade at best, being wholly unnatural and unreliable, leading us into many mistakes, and not till hunger has been uncovered, as by a fast or abstaining from food habits for some time, does she ever have an opportunity to show what she can do in the way of adding to the enjoyments of the table.

Epicurus allowed himself to become hungry; the king did not, so Epicurus could say that he was happier with his barley cake than was the king with his stalled ox.

He actually got keener enjoyment of taste out of the simple cake than could the jaded palate of the king out of his meats

seasoned with various appetising tastes added by his chef to make this dish more pleasing to the king.

And now comes a celebrated French chef advocating the injection into the veins of the slain animal of various intrasauces to change the flavor of the meat.

Stimulants to appetite are considered quite the thing, and the ingenious chef who can add strange flavors to surprise the sense of taste is the successful one who can command a large salary from the jaded palates of his customers.

People are robbing themselves continually of the very essence of table pleasures when they are depending on appetite without allowing hunger to direct the needs of the body.

If we were to pass up one meal a day for a time, we might then really need food by the next meal time, but carrying this further, to the passing up of two meals a day, we could then be reasonably sure of real need, and could enjoy food as never before.

It is the victim of appetite who roars over a steak that is not done or not seasoned to his individual taste, never the hungry man.

It is the victim of appetite who says he cannot eat fruits or salads because they distress him.

He has lost his ability to digest or even enjoy the choicest foods through perversion of his habits in eating, and only by fasting or greatly reducing his intake can he come to any real appreciation of the simple plain flavors of unadorned natural foods in their natural form and flavor.

The science of cookery has perverted this sense of taste, and it is often remarked that, from the standpoint of physiologic living, a man's worst enemy is his wife.

Trainers of animals who wish them to perform always allow them to become hungry first.

Dog trainers who wish a good day's hunting over a keen dog never feed him till after his day's work is finished.

The writer knew quite intimately several years ago a dog breaker who was always said to know more about a dog than any other man, and who said he had proved to himself that it was true that a good dog with a full stomach was no good on the scent or the trail, by taking two equally good workers, feeding one and refraining from feeding the other, taking them to the woods and putting them to work.

Always the dog without food in his stomach was keen in the chase, he passed over no points or tracks, stood faithfully on the point until he was told to go in, while the other dog, whose stomach was working on a mess of meat, was careless, missed points, ran over birds, flushed many out of cover that he did not know were there, and was careless in obeying commands to go in or stop.

Next day he used the same dogs, but switched them, feeding the dog that had before fasted, and fasting the one that had been fed the day before, and the result always switched with the dogs, the keen dog was always the one not fed while the careless and inefficient dog was the one that was digesting food when he began to work.

The reason is plain, especially as the dog depends on his sense of smell and cannot use this effectively unless he is able to breathe through his nose, and dogs depend on panting for the evaporation during exercise that we men get through perspiration. The dog

fasting did not need the evaporation as his internal works were at rest, while the dog who was digesting food had to run with his mouth open, lolling his long tongue in the breeze to ease the rising heat of exercise, so could not get scents till too late, flushing his birds instead of scenting them at a distance.

Another surprising thing to him was the fact that the tired dog at the end of the day's hunt was always the dog that had been fed, while the fasting dog was always still fresh and eager for a longer hunt.

This led him to the fixed practice of feeding but once a day, and always at the end of the day, and led further to his complete freedom, in his large kennels, from distemper when others were losing dogs almost every year from this cause.

So the old Roman or Greek habit of feeding only at the end **of** the day was not half bad.

CHAPTER XXI

FASTING

The fast as a means of physical and spiritual purification has its origin so far back in history that no one knows from what period it dates, if indeed it does not much antedate man himself.

All through the animal kingdom fasting is the instinctive means used to recover from injury or illness, man alone adhering to appetite even when ill.

It is even considered scientific by the medical lights of all time to feed in illness, and the more desperate the character of this or the more protracted its outlook the more importance is attached to concentrated nutrition, "to keep up the strength."

If this is scientific then all Nature is wrong, the animals in their native environment all need intelligent keepers, and a sick body should not rest, but should work at increased rate.

When illness sets in the first thing that happens is a total and complete loss of all desire for food, even not infrequently a repugnance to foods that produces nausea or vomiting at the mere thought of food, or its odor or sight.

Nature as it expresses itself in the sick body must be all out of time with science if such a case should be fed, but it is fed, and the more serious the illness the more importance does nourishment seem to have with the average prescriber.

It is thus that little illnesses become big, that short illnesses draw out into weeks, and it is just thus that so many that should get well are unable to withstand the unnatural character of their treatment and succumb, not to the disease, but to the great aggravation of the toxic state caused by feeding unwanted foods and taking unnatural drugs.

Fasting almost went out for ages, until Dr. Tanner's public demonstration in New York a number of years ago again excited a little interest in the theme, but it is doubtful if one per cent, of the present population, if they still remember the incident, actually believe that Dr. Tanner had not some way of securing nourishment that they did not know about.

In fact, his medical attendants at the time expressed some doubt on this point, not being willing to receive the witness of their own eyes that this man actually went for forty days without nourishment of any kind whatever.

Fasts of ninety days have been accomplished, while one enforced fast was that of a young girl of fifteen years. She had swallowed concentrated lye, thus closing the lower end of her aesophagus, and for this reason was unable to swallow anything at all for 180 days. This was perhaps the longest recorded existence without nourishment.

The longest fast under the writer's personal care was for fifty-five days, in a fleshy woman of forty-two years who had preceded this twice during the same year with shorter fasts, one of twenty-eight days and one of thirty-three, the longer fast of these preceding by only two weeks the fifty-five day fast.

She weighed 235 lbs. before the first fast, which was taken in August, but by February she had regained all that was lost during this fast, which was about thirty pounds, and when completing the thirty-three day fast she still weighed 200 lbs.

In the two weeks following this she had regained twenty pounds, as she did not stick to directions for diet, so again undertook a fast till the weight was reduced to comfortable proportions, which to her was fixed at 160 lbs.

At the end of the fifty-five days she had lost sixty pounds, and having achieved the figure set, she broke the fast, though there was no hunger at this time and she was feeling as fit as at any time in her life before.

During all three of these fasts she continued her usual household duties, getting meals for her husband and his brother, frying meats, and preparing the usual savory dishes of which they were fond, but after the first three days this was always without the semblance of appetite.

Various troubles, from which she was suffering before fasting had disappeared, and her health had improved in every way, and from being almost helpless from her flesh she grew to be very handsome and attractive, and was so light at her work that she said she had forgotten the sense of fatigue.

One case fasted forty-three days while continuing his work, which was clerical, and after breaking the fast his weight returned at the rate of two pounds a day, although his entire food for the twenty-four hours weighed less than this total.

The writer's experience has been chiefly with the shorter fasts, and when he hears some one who believes in the physiological fast say that it is dangerous to break off any fast till the body itself announces a return of hunger he knows that such observer's experience has been limited to the long or complete or physiological fast, for no one who has instituted, carried through, and arbitrarily broken several thousand short fasts could ever make such a statement.

The fast is a physiological rest, a rest internally as well as externally, and whether long or short it is none the less a rest that has allowed of a certain housecleaning and readjustment that cannot fail to do great good, unless all the possible good effects have been dissipated by the manner of breaking off and resuming the feeding.

The writer does not hesitate to break any fast at any point, and can see no harm in doing so, nor does he believe it can ever be harmful, unless the return to feeding is too rapid or the selection and combination of food such as to set up a new intoxication on top of the one even partially eradicated.

If the fast is for even one week, and followed by a proper selection and combination of foods, there is certain to be great good realised from it, and the appetites will have been broken and opportunity offered for the creation of newer and better ones.

The fast was quite generally practiced at the time of Jesus' ministry, and it is not to be supposed that there was anything miraculous about His fast of preparation for His earth ministry, for He was preceded by such men as Elijah, Moses, and many prophets who always prepared for every great undertaking by a prolonged fast, the favorite length of this seeming to be forty days.

As a purifier of both body and mind it is without doubt the thing par excellence for the purpose, for not only is the body again as that of a new-born babe, but the mind is purged of unrighteous thoughts, and is occupied with the higher things of life, thus greatly aiding spiritual growth.

This is natural and easily thinkable, as accounted for by the chapter on The Trinity of Man, for the physical man during the latter stages of the fast can have no depressing effect on the mental man, being free from disease or toxic states, so the mind enters more and more into the subconscious, the soul part, the ego, unencumbered with the usual physical handicaps of the usual toxic body.

While fasting is the short cut to better physical conditions, it is by no means the only or the best, except where the element of time enters in strongly.

If the physical state is such that it cannot be carried much longer, then the fast may be the best as well as the quickest way out of the difficulty, and many are the cases of deep-seated disease that recover through this means after all hope through other sources has been cut off, so as a last resort in desperate cases it is still perhaps the best way.

In this age of table worship it will never be as popular as it fully deserves, but will always continue to serve those who are so far down the slope that they will adopt any means whatever that offers hope of salvation from impending death.

In preparing for a fast it is better not to break off at once from full diet, especially if this contains the usual highly concentrated foods, but to begin by missing one meal a day for a week, then for another week miss two meals a day, taking but one meal daily for at least a week before trying to stop eating entirely. It is also better to make the meals allowed of vegetables and fruits only, till the appetite for regular meals has been thoroughly broken.

It is never so hard for a vegetarian to fast as is the case with the heavy meat eater.

One of the latter, hearing this statement made, said if he were a vegetarian he would gladly fast.

Yet the vegetarian, as a rule, enjoys what he eats as thoroughly as does the meat-eater, but his habits do not have so strong a hold on him as they are not so stimulating.

After two weeks of preliminary diet the fast may then be undertaken without much jar; there is not so great desire for food, and usually after the first two or three days there is no desire at all. The thought of food becomes remote, and one wonders why people think they must eat three meals a day.

When the appetite first leaves is when the first great uplifted feeling comes, the first realisation of emancipation from the formerly imperious demands of habit appetite.

Then day after day there is a feeling of lightness and ability to think, nothing seems hard to accomplish, there is freedom from the depression of fatigue of either physical or mental man, and one becomes in love with life.

This does not last, however, for there are still periods of both mental and physical depression, corresponding to the cycles of detoxication, when more waste than usual is thrown into the circulation, creating the former toxic feelings.

These depressions are of shorter and shorter duration, however, as the body unloads more and more of its toxins, till at the end there may be the greatest freedom from all depression, even though physical weakness is more marked during the last day or two before the end of the fast than at any time after the appetite is broken.

The writer during the last fast, two years ago last June, undertook a measurement of strength before and during and after the fast, using a bar-bell arrangement that was increased, both as to weight and number of movements, for a month before the fast and the twenty-eight days during the continuance of the fast itself.

May first the exercise was begun with thirty pounds in the bar-bell and fifteen in the dumbbell, and increased as prescribed in the course accompanying the outfit, till by June first the weights were at forty-five and twenty-two and a half, and the number of movements increased as per schedule.

June first the fast was begun without previous preparation, but out of a clear sky and in cold blood.

A feeling of weakness was present during the first three days, which was not actual but merely a feeling that made for a disinclination to work, but when this was undertaken there was no actual weakness, as the usual weight was lifted the usual number of times with only about the ordinary fatigue.

After the third day the weights seemed to grow lighter, and the lifts easier and freer and with less sense of fatigue, and at the end of twenty-eight days the weights were at sixty and thirty pounds and the number of lifts increased as per instructions with even less sense of fatigue than in the beginning when on full diet and with just half the weight used.

He has further noticed that when beginning exercise during fast' ing there was a sense of weakness that passed off after a few lifts, and thoroughly convinced him that he is just as strong while fasting as when eating the full rations.

All his previous fasts have been carried on without any change in his usual work, which is always fairly busy.

The present fast is undertaken, however, under entirely different conditions, but it is anticipated that it will be at least three days longer, the work being purely mental, with only so much lake and sun bathing as is desired or enjoyed.

No other physical activities whatever are taken, with the exception of one weekly visit to the sanatorium to see how everything is going on in his absence, and to spend a week-end with his family at another beach many miles distant.

If judgment is used in exercise, there is no reason why the fast should be taken at absolute rest, as is so often urged, though violent exercise to the limit of endurance is of course not to be considered in any case.

The glycogen available for the body effort is largely used up early in the fast, and while muscular effort may be unimpaired, yet continued effort would be seriously hampered on account of this lack of fuel, and much harm might be done the muscles themselves by injudicious effort too long continued.

It is a beautiful thing to watch the external parts of the body renewing themselves during the fast, and to know that the internal parts are pursuing the same course.

On beginning the fast the skin is often dry and scaly and lifeless, and before this has proceeded further than the beginning of the third week, usually, there is an entire change in feel and appearance of the skin.

It becomes gradually soft and moist, the pink at base of the nail is life-like again, the eye clears, the color of the sclera lightens, all yellowness disappears, the injection of the corneal vessels declines or disappears, the eye brightens, the hair becomes soft and lustrous, and there is a general appearance of a rebirth.

If it were possible to see the internal changes they would no doubt be still more striking, but we can judge of these only by the external changes and the excretory testimony, as by urinalysis.

Where albumen and casts have been present these clear up, the urine becomes concentrated and dark at first, and later clear and limpid in appearance.

Many a case whose urine will not permit of life insurance takes the fast and presents himself for examination and passes with flying colors, which is not fair to the company, unless at the same time he makes such permanent changes in his dietary habits as will continue the improvement, and he usually does, after such demonstration.

The writer has fitted many such kidney cases for life insurance who could not otherwise get it, but always on condition that the way of living was to be continued, and he cannot recall a single case where the company was ever a loser on such a condition.

The blood during a fast undergoes no visible changes as to cell count, unless markedly abnormal when the fast is begun, in which case there is a return to the normal.

Progressive pernicious anemia recovers quite regularly under a rather protracted fast, generally two weeks or more, as did the first thirteen cases under this plan of feeding; the fourteenth, in almost dying condition when she arrived, being the first to fail to recover normal count.

For most of two weeks the red, or erythrocyte, count continues to fall before there is regeneration in the blood-making organs; then gradually the microscopic picture begins to show new round erythrocytes with regular edges, no crenations or irregularities, and soon there is noticeable increase in number of these, with gradual disappearance of the adventitious cells present in the beginning.

Not unusually there is a gain during the succeeding two weeks that brings the total back to the normal five million erythrocyte count, even though this may have been at or below one million in the beginning of treatment.

In all, during the past twenty-four years, one hundred and five cases have been treated by these simple methods, detoxication, colonic irrigation and corrected diet, but eight of whom failed of initial recovery, some of these continuing to live so as to prevent return of the blood disorder, while others returned measureably to their former habits, being generally in environment uncongenial to marked dietary changes, and relapsed to anaemic state again, some dying in this return, and some again coming back to normal through a repetition of the simple plan administered here.

Progressive pernicious anaemia is considered an incurable disease, and so the writer always regarded it, and it was a case of this kind that started serious thoughts in his mind before his own

physical breakdown, thoughts that perhaps colored his views of his own recognizably incurable state of disease.

He was at that time practicing in a rather small town in western Pennsylvania, in general and surgical practice, of which railroad surgery took a part of his time.

An intimate and highly respected professional friend in dying left him the care of his family's health, among which was the aged father of his wife, then far gone with progressive pernicious anaemia.

This case had expert counsel from the very beginning, and after the writer took charge he continued to have the most eminent counsel that could be secured.

None criticized the diagnosis or the treatment, declaring that all was being done that could be done, and according to the light on the subject at that time this verdict was no doubt true.

As the disease progressed downward about as predicted and expected, the patient reached a condition of complete coma, when nothing more than an occasional teaspoonful of water could be swallowed. Treatment had been by hypodermic very largely for some time, but when coma developed we all quit and waited daily for the end. This was unaccountably delayed, however, and day after day he showed no change in condition, yet treatment of all kind was withheld, as it was so palpably useless. After ten days it was apparent that there was an increase in hemaglobin, as the color was plainly coming back in lips and fingernails, yet no comparison was made at this time, still waiting for the end.

After three weeks this old gentleman, seventy years of age, opened his eyes and asked for something to eat, and he got up again, reopened his office, and for a year and a half after this seemingly miraculous recovery he continued to look the best he had looked for ten years, but suddenly relapsed and promptly died, from a return to exactly the same causes as produced the condition originally, an acidosis largely of colonic origin.

For six months after this incident the writer awoke on many an otherwise peaceful night with the startling question: "Why did this case die according to program while we were doing all that science knows to be of use, and when we quit doing anything at all he recovered?" The only possible answer was that we must not have been doing the right things.

In about six months after this unexpected recovery another case occurred in a lady of seventy-four years in the same town, and she was told the story of the former case and agreed to allow her colon to be kept empty and her diet to be interdicted till a definite appetite appeared. The result was another complete recovery, not through food, but absence of food, and with only a sensible treatment of the colon, wholly without drugs or medicines or serums or camouflage of any sort whatever, simply through the body's own efforts relieved of all visible handicaps. So followed ninety-seven recoveries out of one hundred and five cases, all of which recovered in the same way, by not doing the things that interfere with Nature at work, fasting playing the major role in all, later proper diet and proper colon toilette.

Not long after this second recovery, when the entire medical conception of disease and its proper mode of treatment seemed turned upside down, the writer's own breakdown occurred. While

this was seemingly in no way related to these two upsetting recoveries, yet, no doubt, it was these results that had much to do with shaping his determination to look for relief through diet. This was the more especially so as he was well aware that, from the medical point of view, he had no chance at all for more than a very few months of life, and these months filled with such agony as he had been forced to witness in many fatal endings of the same condition in his patients for sixteen years—a frightfully common ending.

It was not till after he had applied the very same principles to his own case, without the absolute fast which was not then practicable while continuing his work, but through the one vegetable meal a day plan, that he got relief. Even then he was unwilling to believe that such simple conception of disease and its treatment could ever apply to more than a very limited number of the most palpably toxic states.

Then followed four years of application of the principles of this theory to all manner of chronic states, till he was finally forced to accept it as a main principle in practice, so dropped his work, went to New York for a thorough course of nutritional study, and opened a sanatorium for the treatment of those conditions in which medicine failed always to improve the state.

It did not take long for word to be passed that here in this little obscure town was hope for those who have been condemned, and they came from everywhere. The longer the principles have been applied the deeper the conviction that we verily can do nothing to improve on Nature's own plan of physical regeneration, and that all we can do is to cease doing the things that deter her best efforts, chief among which are feeding and drugging the sick.

He now considers it malpractice to give food to the seriously ill, and looks on drugs in the same way, yet his medical brethren who have not had the same experience cannot, of course, be expected to agree with him or even to understand the objects of his peculiar aims or methods.

This is not their fault but that of their training, and again Dr. Leonard Williams is right in thinking that for the omissions in medical training, in the matter of food and nutrition, someone should be hanged, but again, who?

So fasting has its place in treatment of the sick, but do not make the mistake of thinking that either foods or fasting are curative, for only the body's own resources are in any sense the agents of cure.

What fasting does is just what right food does, the mere relieving of the system from former handicaps, and while right foods in the right combinations will relieve a former handicap of wrong foods (or wrong foods *in* wrong combinations, which is the usual thing), yet even right foods in right combinations may be a handicap when the body is not able to handle even these, and desires in no unmistakable voice to be let strictly alone. It is then that the fast is clearly indicated, and this indication should be as faithfully respected as any other indication in disease or in health, and no food of any kind should be offered or taken till the body announces through normal hunger a return of need for nourishment. Then the need for fasting has passed and feeding may be resumed,

and it is then that care must be exercised not to create again a toxic state that will make another such cataclysm necessary.

Thus fasting and feeding, as resting and exercise, emphasize again the great law of compensation, of give and take, of action and reaction, each having its definite place in the body's scheme of keeping her balance or regaining it when lost.

CHAPTER XXII

HOW TO BREAK THE FAST

Fasting has been said to be harmful, and instances are cited where some one was not so well after fasting as before; also cases are said to have died from the fast, either during its continuance or as an after effect.

This is not strange, when one considers that in nearly every case the fast is not undertaken as a stunt, but to cure deep-seated disease that has failed by every other method to recover, and is very often of organic type, generally recognized as incurable by medical authority.

If compared as to results with other methods of treatment it is easily discovered that there is nothing that at all compares with it as a treatment for otherwise incurable states, and the deaths in every case were among that class of organic failure that were necessarily fatal under any form of treatment whatever.

The writer's own experience with just one disease mentioned in the last chapter, progressive pernicious anaemia, is evidence enough for him at least that there is in fasting a therapeutic means not to be compared with anything else.

This does not necessarily mean that the absolute fast is to be greatly preferred to any modification of this, such as diet limited wholly to leafy vegetables and fruits, for while these are not in the strictest sense a fast, yet they constitute such lowering of the usual dietary standards as to be in effect a partial fast.

Any plan of feeding that gives the body daily less food than it requires for its daily maintenance is a fast, whether this be absolute or partial.

Any form that limits the body to less than it needs is breaking habit, compelling the body to use in part its stores of fuels, and is thus detoxicating the body, so is a beneficent process, if those foods allowed are actually restorative.

If everybody is toxic, and if detoxication consists in a lessening of this toxicity by removing from the body any part of its toxic burden, then by every process of reasoning the partial or absolute fast is a benign and beneficial undertaking, and should be taught and encouraged as a means of return to better body conditions.

Except for those cases already about to pass over when the fast is begun, it is safe to say that every case of harm traceable to the fast, either directly or indirectly, is from the manner of breaking the fast and the subsequent habits of eating.

When old and injurious habits of eating have been successfully broken by the fast, there is an opportunity offered to create new and correct habits, and these can be built up after any form of fast very easily.

The usual habit of diet, with its dead foods and its woeful paucity of vital elements, is the thing that has made the fast seem desirable, perhaps necessary, and to return to any part of these wrong habits is like the man who left his house and went into a far

country, then when he returned and found it all clean and new he took in still worse spirits than himself, and the last state of that man was worse than the first.

The body needs certain things every day, must have them, and if not in the food then they are taken out of the stores carried within; but if these are day after day refused the body, its own stores become in time depleted, and bankruptcy results. So to restore these daily must be the prime object of taking food in every case, thus making of feeding a process of daily restoration of used body elements or fuels.

When no food is taken, as in the absolute fast, the body calls in and rearranges its own stores, balancing the needs of every part and function, so that recovery from what we call deficiency conditions is accomplished while fasting, without introducing from without any fresh material.

It would naturally be thought that in deficiency conditions the fast would aggravate, as it adds nothing to the already deficient body, but this is not the case, and if you will refer to the Rockefeller and other experiments you will note that those little animals that were fed on the white flour preparations died sooner than did those fed nothing at all, and here must be the reason.

It was known that the animals fed the white flour preparations died of acidosis, which is a form of starvation anyway, and it is not hard to see that the acid-forming tendency of the white flour, added to the total deficiency of alkalies carried by this form of so-called food, would be sufficient to poison the animal as its own waste would not do to the same extent, and death resulted from acidosis, or imbalance between acids and alkalies.

Now this explains why one may fast with benefit even in such conditions as already show deficiencies of the normal body elements or salts, making of these deficient conditions no bar to the successful use of the fast.

However, it is the writer's firm belief that in place of the absolute fast it is better and safer to use every day the extracted juices of fruits and raw succulent vegetables, as a variety of these will furnish every element necessary for body rehabilitation and repair, leaving out only the proteins and fuels which the body does not need for long periods, as it carries large stores of these habitually.

The sticklers for the absolute fast would decry such a plan as not being an absolute fast, therefore not to be classed as fasting at all, yet the body will lose weight from its own stores of fuels almost as rapidly as in the absolute fast, unless large amounts of the fruit juices are used, when a sufficient amount of the grape sugar of the fruits will be taken to keep up a part of the body's needs for glycogen, but juices up to a pint a day, using orange juice as a standard, and containing an ounce or two of the vegetable juices, will give in effect the same results as will the absolute fast, yet offer to the body daily an abundance of those chemicals of which it stands in greatest need continually.

Science says that fasting tends to increase acid states of the body, to aggravate an acidosis, and the writer used to accept this, and for that reason he feared to apply the absolute or partial fast to the diabetic case, as this of all others offered the highest evidence of acidosis, but when he began to reason that the acidosis was only

rendered more evident during the fast, the acids not really increased, but during their passage from the body were merely more in evidence, he had nerve enough to apply the same line of treatment to a diabetic case also, and it was the beginning of his first success with this starved class of sufferers.

Fasting does not create acidosis, but it does make it evident, and if one will in the beginning of a fast test all secretions and excretions available with the blue litmus paper this will be evident, for they will perhaps show a mild acidity in the beginning that turns violently acid in reaction in a week or two of fasting, and continues to show this heightened evidence of acid till the very end of the fast. This does not mean an increased acid state of the body, but that the body is now getting rid of acids faster than when feeding, thus lowering in the end this acid total that we call acidosis.

Now as to the proper methods of breaking the fast, we would say go slowly, do not feed one bite more than is required at the time even partly to satisfy the desire, and as there is no desire unless the fast has gone to the end of all body stores, it is easy to begin with a half glass of orange juice, sipped slowly, and insist that the patient sip this very slowly and taste it as Epicurus would do.

Repeat this in two hours, after the stomach has had time to absorb it, or much of it, and again wait two hours.

Repeat every two hours, increasing the juice as well borne, and in a day or less there will come a strong desire for food that can be satisfied with large quantities of the fruit juices of whatever sort are available till perhaps the third day, when two courses offer.

If it is desired to regain the lost weight quickly, and if one does not mind stirring up quite a little catarrh, then milk offers the best way, as it is possible to regain lost weight at the rate of two pounds or more a day on free milk drinking.

If the milk is used, begin with a half glassful every two hours, or if very hungry this may be given every hour, and increase fifty per cent each day till up to as much daily as the patient can enjoy, which often amounts to six or eight quarts every day for two to four weeks.

But after the weight is all regained on a milk diet it still remains to institute permanent diet, as no one can do well on milk indefinitely. Milk is merely a good emergency ration, to be used while building up fats, but not to be long continued, as it is one of the worst catarrh forming foods of which we know.

If there is no great desire for haste in regaining the weight it is always best to build up to normal weight on just the same foods that are to be continued through life as the main dependence in nutrition.

Then when weight is regained there will be nothing further to do, the habit having already been established.

Now recall what was said in the chapter on vital and dead foods, and realise that this is the golden opportunity to form such habits as will embrace only the vital foods.

Everything that grows out of the ground, if at all edible, is good food just as Nature presents it, raw, whole, unprocessed and unrefined, including all of the vegetables, the fruits, the nuts of every sort, and if a certain amount of raw milk is included in this there will be no harm done, though if it is to be used in considerable quantities there will be a gradual return of the universal catarrh,

perhaps also of constipation, as these both go with a diet in which milk figures largely.

Every food is potentially positive or negative in its effects in the body, the alkalin foods being positive, the acid-forming foods being negative, even as in the laboratory.

Preponderance of acid-forming foods in the daily menu will mean that the alkalies of the body are tied up, used to bind the acids formed daily, and thus our positive position, our preponderance of positive elements is lowered, continually stolen from us, and we are in the position of a city whose criminal element *is* in the majority, tying the hands of the police so completely that it takes one officer for every criminal and none to prevent fresh depredations.

If the fast, either partial or absolute, were of use in no other way, it has plenty of justification in the fact that it offers a termination to wrong habits of eating that no other plan does, and for this reason furnishes a starting point for new and more correct habits, and this alone would more than offset all the very few deaths that have ever resulted from it either directly or indirectly, if there ever were such.

Starting all over fresh and clean with no habits to crimp one's desire to keep clean inside, it is not at all difficult to form a correct habit of food intake that will so fully satisfy the desires for food that the former habits will be entirely gone and forgotten, and a new era of greater enjoyment of the table will be ushered in to compensate amply for anything in the former habit that may be passed up with regret.

The best method of relieving the mind of bad thoughts is to keep it busy with good thoughts, they tell us, and the very same thing holds good for food thoughts and desires.

Starting with freedom from all habit, as at the end of a long enough fast to break these thoroughly, we can keep the body satisfied with good foods, and then there will not be the usual craving for the bad foods.

It is good practice with children to insist on the salad as the first course, perhaps also fresh fruit, if no starches or sugars are to be included in the meal, then there will be less desire and less room for meats, eggs, or other concentrated foods, and the body will have gotten those things of which it stands daily in greatest need.

It is exactly so with the grown-up, for if those things of which the body stands in greatest need are eaten first, there will be less desire for those things of a less necessary character that might be desired.

Fill the desires with the good things, then there will be but a modicum of desire for the bad things of the table.

Why is this not best in every consideration of life?

Fill the body with the positive, and the negative will not be so persistently desired, . . . instead of living negatively, telling ourselves continually that we must not do this, we must not do that, like bad children who have to be continually admonished not to do things.

Cycles may be virtuous or beneficent, just as surely as they are vicious or maleficent.

Filling the body with positive elements as these occur in the base-forming foods of the earth tends continually to positive or alkalin states of the body. This reacts on the mind, just as do all

bodily states, and the mind freed from the acid effects of a toxic body tends continually to the positive and constructive in everything, while if we reverse this process we have the vicious cycle represented by the body suffering from acidosis and tending to make the pessimistic and degenerate mind that reacts on the body to depress still further all function, and perhaps, in the end, the criminal is evolved.

Fill the mind with constructive and positive thoughts, and the body with positive and constructive foods and all this tendency to wrong thinking and wrong body conditions will vanish overnight.

Never forget that disease of all kinds grows only on a toxic soil, therefore an acid soil—the toxins all being acid, destructive in character—and then it becomes easier to see why we should emphasize the positive in selecting our foods, for the positive are the alkalies, the negative the acids.

The writer has seen whole families of children raised on the negative plan, . . . "do not do this, you mustn't do that" . . . and in all these children he has never seen one positive individual develop.

These children were also fed largely on negative foods, so full of negative, destructive desires, and when freed from restraint their actions showed their natural tendencies, for all their thoughts were centered on destruction.

These were all potential criminals, but all could be so easily changed that it is a pity that parents do not know the a, b, c's of diet.

In breaking the fast without the use of milk it is well to begin with increasing amounts of the fresh fruit juices, and if the alkalin vegetable juices are also increased this tends still further to supplement the body alkalies which are most necessary in the work of reconstruction of the depleted stores of body fuels.

After the juices are raised to the complete satisfaction of desires, then use the fruits in their original skins, these taken just when desire dictates, and as freely as wished, though it is wise to omit the banana, which represents as much carbohydrate food as does the potato, and also to omit the plums and prunes, as these contain hippuric acid in sufficient amount to tie up much alkali. Hippuric acid does not oxidise and disappear from the body quickly as do the other fresh fruit acids, the citric, malic or tartaric acids, all of which are broken up and thrown out of the circulation within about an hour after their ingestion.

Leaving out, then, only bananas and plums, all the rest of the entire line of fresh fruits may be used freely as desired, if wholly unsweetened and if eaten with the skins, except the citrus group, the oranges, lemons and grape-fruit, whose yellow outer skin should be removed, and the white part eaten if it does not cause distress.

After a day or two on the fresh fruits one is then ready for the raw vegetable salads instead of the expressed juices of these vegetables only, as obtained during the fast or the earliest days of its termination.

Salad vegetables of the lighter sort should be used first, as tomato, cucumber, tender lettuce, tender shoots of all kinds, either wholly undressed or with nothing more than the simple lemon juice and olive oil, or plain sour cream.

Seasoning should either be left out wholly or limited to light seasoning with paprika and celery salt, never vinegar or white or black pepper, as these are very irritating and will tend to set up

again an abnormal state of the taste buds and the lining mucous membrane of the mouth and digestive tract.

The unadulterated and simple taste of the plain undressed vegetable salads will be a revelation to anyone who has never tried salads in this way.

We habitually season things so highly with such irritating condiments, we sweeten so much of our food, we fry meats, we try all the time to make big tastes, that the sense of taste becomes vitiated and benumbed, and the delectable little tastes are considered flat and uninteresting, while after a fast, or following a long period on regenerative diet, there is again a recrudescence of this taste sense that is wonderful, as it so greatly heightens flavors that every little distinctive flavor of each component of a combination salad undressed is thoroughly appreciated and highly enjoyed. After all, Epicurus was right.

Now if we have hurdled the difficulties in the way of digesting the fresh fruits and fresh salad vegetables comfortably so far, we are in position to take on a certain amount of nuts, these to be used in very small amount at first, thoroughly chewed to a veritable liquid before swallowing, and increased as we take care of these comfortably, but never beyond two ounces a day, as this amount supplies us with all the protein required for any one day's repair; and do not forget that this is all that protein is for.

We are now on Nature's full diet just as God gave it to Adam and Eve in the Garden of Eden eons ago, and just as complete and satisfying today as it was to those simple children of Nature at that time, and just as capable of keeping us in good health and perfect repair as in that long-gone time.

When we speak of ideal diet this is it; but few wish to live so long or enjoy such health as this sort of living would favor—or guarantee if persisted in as a life habit—so it is not to be expected that many will come to such a standard, even after a fast.

For those who wish to return to a full modern standard of diet there can still be safety from the usual diseases if in rebuilding these two things are kept constantly in mind:

The first is that we *do* need much vital base-forming food every day, and for this reason we should let salads and fruits occupy first place in our daily dietary. The second safeguard of nutrition is to keep in mind always the compatibilities and incompatibilities of foods, as these will not do us nearly so much harm if combined in such a way as to prevent the usual fermentations to which the average man or woman is subject every living day from these avoidable errors in combination.

For those who wish to retain the cooked food habit, as interfering less with conventional living, the next stage is the soup or cooked leafy greens.

Soups to be harmless must contain neither thickening nor yet meat stocks, as the thickening places the soup in the class with the starchy foods, and the meat stock places it in the protein class. Even if these two dissimilar classes were not incompatible in the digestive tract, yet the introduction of either thickening or stock makes of soup something to be digested, which it should not be.

To make a good soup that tastes like soup, cook the selected vegetables together till the water is reduced low and the vegetables very tender. Select celery tops, spinach, carrot tops, turnip tops,

chiefly the top part of the vegetables carrying worlds of chlorophyl and salts and vitamines that the bulbous root does not to the same extent, and stew these together till tender. If a thin soup is desired add only butter to this, while if a more substantial soup is desired puree the tender vegetables through a strainer and add only butter for seasoning, perhaps a little celery salt if this seems necessary for normal taste, but always remember that the less salt used the easier it is to keep well.

Either of these vegetable soups makes a tasty addition to the meal, and supplies that lack of something that the user of cooked food misses so much in the raw meal.

Later the whole cooked roots and greens may be eaten freely, as they do no harm except as they might take the place of the more vital raw foods.

After a week on salads, fresh fruits and vegetable soups, with cooked roots and greens, the more substantial foods may be used; if the starchy foods, then baked potatoes rather than the whole grain breads, as these contain but one-third as much starch as do the breads or other cereal preparations.

But when meats are used no starchy food of any kind is to be combined with them, as you will remember from the directions in the chapter on compatible and incompatible foods.

If the baked potato or the bread is used, then no acid fruits or acid dressings on salads or greens, and no meats, eggs, fish or cheese, because these dissimilar foods do not digest together in the same stomach at the same time.

It is very desirable to cultivate early the habit of eating but two meals a day instead of the conventional three, for many reasons, chief of which is that we never need more than one meal a day, and this after all activities are over for the twenty-four hours. All over this is built up habit; and also, if we are going to make mistakes, to overeat or to combine our food wrong, it is better and safer to offer ourselves but two opportunities daily to commit these mistakes, rather than three.

If milk is to continue to form a part of the diet, it is necessary to omit this from any meal at which starches, sugars or the concentrated proteins are to be used, as milk does not digest well with any other classes of foods aside from the non-starchy, or low-starchy, vegetables and the fruits.

If the restored faster does not fall into the very same dietary mistakes that were habitually made before the fast was undertaken, he will be permanently benefited by his experience; but if he does, he may be surprised to find that the system, temporarily freed from these mistakes, refuses to go back to them in future, and he may experience much digestive discomfort from attempting to force it to do so.

It is these difficulties in the way of a return to wrong habit that make so many feel that the fast has done them harm, for they cannot now do easily the gastronomic stunts that before were easy for them, and they feel that they have been grievously wronged in being restrained from doing themselves harm enjoyably.

CHAPTER XXIII

NORMAL DIET

You have often heard it declared that "what is one man's meat is another man's poison."

If you believe this, then you must believe that a normal diet for man, to be at all wide in scope, could not be.

If one man's meat is another man's poison, then nothing but individual custom and habit have made it so, for basically we are all the same thing, made out of the same universal clay of the earthy soil, and all supported by this same soil, so fundamentally what is good for one man is good for all, habit alone excluded from the count.

A strictly normal diet for man is without doubt the diet recommended for Adam and Eve, but convention is so widely separated from Nature that this diet today is looked upon as a freak of some diseased or very erratic mind, and its followers are under suspicion of being early candidates for the insane asylum.

The best we can do, in attempting to regain even a modified approach to normal diet from our widely divergent standard, is perhaps to accentuate the vital foods a little more, to exclude the worst of the devitalized group, to limit the concentrated foods markedly, and to combine into compatible groups all the foods to be eaten every day.

This will be at least a near enough approach to permit of a decided acid reduction in the body, as such arrangement would limit acid formation almost to the vanishing point, and thus allow the body opportunity to eliminate the chiefest of the encumbering acid toxins. This would mean an approach to health that would be most gratifying to any one who follows conventional habits in both the selection and the insane combination of his daily foods.

So if you will interpret what is said as referring to this compromise diet, all the time realizing that it is not the ideal normal by long odds but a possible approach to the liveable condition, then we will proceed to outline what would be to the average person a "normal diet."

First let us get rid of this accepted idea that any modification of conventional habit in foods is diet, for diet is a restriction of eating for some definite purpose, as the relief from some specific diseased state. What we mean here by diet is nothing of the kind, but merely a normalizing of the daily intake of foods to bring this measurably toward the ideal.

The writer does not believe in diet as generally accepted, except in certain very limited conditions where certain foods are taboo (as concentrated protein in nephritis or the carbohydrates in diabetes), and these only for a time, till the crippled function can be partly restored through rest and rebuilding of vitality.

Anything less than this should never be called diet, but rather scientific eating.

As eating is one of our necessary fundamental functions, surely there must be a science governing this; and if so, what more

important consideration is there in our daily lives than this very vital one of daily nourishment for our body?

It has been remarked before that the body is composed of sixteen constant chemical elements and their salts, and that fundamental eating, eating to restore the body, should embrace the entire list; so no habits of eating that do not do this can by any sophistry be made to appear as foods, because not restorative of the body deficiencies, which we have said is the one and only excuse for eating at any time.

This then must be the first condition of normal so-called diet: that it restore to the body everything that the body expends daily in form either of body structure or body fuels.

Normal diet, aside from this ability to restore, must be of such character that no great burden is needlessly placed on any part of the digestive or eliminative functions, as by the use of a great over' plus of concentrated food such as meat.

It must not contain a great excess of the concentrated fuel foods, as the starchy or sweet or fatty substances, as these if used in excess will accumulate in the system in the form of carbon compounds and so interfere with function by their presence and their acid-forming tendencies.

It must not contain in one task any incompatibilities, since the digestive organs can accommodate themselves to but one distinctive task at one time, requiring either acid or alkalin conditions in the stomach. Even the school boy realises that nothing can be both acid and alkalin at one time.

It must contain enough bulk to permit of undigested residues for action by the muscular coat of the colon, else we cease to have normal activity of this receptacle.

Now, can we make a so-called diet fit these various but absolutely necessary conditions?

We will not only have to do this but at the same time retain enough of the pleasures of the table to attract the average well' fed man or woman, else we can accomplish nothing in a work of this kind, since human nature is loth to give up something with which it is familiar and well pleased for something untried, unless this is made to convince him of its great superiority over his accepted standards.

First, as to competency of nourishment or full replacement value, we are forced back to the Garden of Eden standard very largely, as all processed foods are deficient in some or many particulars, and not only is this true, but every cooked food is also deficient in some particulars.

So the normal diet must include much of these Edenic foods, if we are to avoid running short of necessities.

These are the salads, fruits, and nuts, you will remember, so to be normal these will have to be included in the normal diet to large extent.

We must include the cooked vegetable foods for the reason that we cannot separate ourselves from these under our present system of living, so all we can do to normalise these even approximately is to so cook them that they are not overdone or completely destroyed by heat and to conserve all their soluble salts, which are usually lost with the ordinary forms of open cooking. This is especially so with the class of cooks that still believe it fine

art to parboil and drain all vegetables, to remove the "crude" flavor from them.

The so-called normal diet will include some carbohydrate foods every day, at least at one meal; and while these are not good foods for the average fairly sedentary life, yet if they are used in proper combination and are of the whole variety they may be permitted in small amount without straining our idea of what constitutes a normal diet.

Two cares are to be exercised here, the one to see that all of the original elements are retained, as in whole grain flours or cereals, and in the case of the sugars to see that the normal brown color has not been refined away; and the other care is to remember always that this class of foods requires alkalin conditions throughout for digestion, so are to be rigidly separated both from acids and the acid-compelling protein foods, such as meat, eggs, fish or cheese.

With these two considerations taken care of we may eat a mod' erate amount of breads or cereal foods or sugars once a day, unless we are past middle life and of sedentary habit, when it is much safer to omit them entirely from every meal.

If we have no religious or ethical scruples against the use of animal corpses as food, then we are able to add meat or eggs to the so-called normal diet, but these also require a certain amount of care in combination if they are to escape failure in digestion, and if they are to leave the body before putrefactive changes set in

When eating meat, eggs, fish or cheese, it must be kept in mind that these produce in the stomach, as the first necessary step toward their later digestion in the intestine, hydrochloric acid; and it is easy to remember that this permits of the use of no carbohydrate foods whatever at this meal, no breads or potato or cereals or starches of any kind and no sugar, as these carbohydrate forms of food will not digest in anything but an alkaline medium. A mixture of these cannot possibly be admitted therefore into a normal diet, so these must always be put on the taboo list as neighbors in normal diet.

Desserts are considered a part of normal diet, but it is a question if these should ever be anything but taboo here, for coming at the end of a meal, as they do, they represent excess, a mere catering to the palate to leave it pleased at the end of a perhaps too full meal.

If desserts are admitted it is best that these be confined to fruits, and of course at the end of a meal comprising either starchy or sweet foods this could not be called normal. So desserts could have no place here, and the habit of taking a dessert will soon be forgotten, if left out at even one usual dinner, and soon we cease to include the dessert in our bill.

This is better, for the dessert of sweets at the close of a meal containing a concentrated protein such as meat has no doubt put a curse on a meal that might otherwise have caused no great harm.

Now, with this general outline of a normal meal let us put this into form for a day, and see if the plan does not produce an array that will both please and satisfy all need, and if continued will change wrong habit into right habit.

The day is best started with a fruit breakfast, or no breakfast at all, which is perhaps better than even the harmless fruit breakfast.

This may consist of two or more oranges, apples, grape-fruit, peaches, pears, grapes, any one of these in season, but better not any two as one fruit alone digests much better than any two.

If milk is taken at all this is the best meal at which to take it, and it may be served cold or warm, but always raw if it is possible to secure it in this unchanged form.

Never heat milk in an open saucepan or vessel, as that part coming into contact with the overheated surface of the utensil is thoroughly cooked, as the taste of the milk will testify. Instead, rather set the milk bottle in very hot water, less than the boiling temperature, for as long as necessary to raise it to a comfortable drinking point.

If accustomed to a hot and concentrated breakfast this will leave you feeling that you have had no breakfast at all, but stick to it till it becomes customary, and it will be found a great improvement over the usual pancakes and sausage of the winter, or the rolls and coffee and perhaps poached egg of so many, or the bacon, eggs, toast and coffee that is perhaps the average breakfast of the city man.

Such breakfast is generally called a "light breakfast," but it starts the day off all wrong, not only with an incompatible mixture of egg and starchy toast, but with a digestive task that will seriously detract from mental and physical efficiency till the stomach is emptied at about noon.

The heavier breakfast of doughy pancakes, sausage, perhaps even fried potatoes and coffee of the average farmer, is simply a colossal mistake—even his outdoor activities not being able to save him from rheumatism or neuritis or frequent colds—and goes far to account for the fact that the average farmer does not live as long or keep as free from disease as does his city relative who works in an office and takes a little less horrible breakfast.

The lighter breakfast of fresh fruit and milk can be wholly dispensed with, even in the case of the farmer, and a forenoon of great activity be carried through with a wholly empty stomach with great gain in condition, when one is used to this.

Several years ago a young married man whose wife was a very good cook came to the writer suffering from night sweats, palpitation of the heart, and distressing cough, and reporting that his work of heaving coal and grain at a local sales plant was too heavy for him.

Inquiry developed the fact that his breakfast consisted of a very large meal, heavy foods ,in which meat and much bread of the white variety predominated.

He was convinced that he could get through the morning only by reason of this very heavy breakfast, and said that before noon he trembled with weakness and hunger.

His total food consumed exceeded six thousand calories, as computed in heat units, for the day, and he considered that if he could only eat more it might last him through the day without this distressing weakness and the night terrors from which he suffered, and which he attributed to going so long at night without food. There was no medicine that could reach such a case, as was explained to him, but he was told to pass up breakfast entirely, and just do what he could at work till he got used to this.

It took him several weeks to come to this idea, but in desperation he finally tried it, and after the first week, while he was growing accustomed to the lighter meal, he found that he not only could get through the same amount of work as before, but did this easier and without the trembling and hunger that formerly drove him home at top speed for his waiting dinner.

After two weeks he reported that he was able now to unload a car of grain by ten-thirty whereas before he had required the entire forenoon, and that a car of coal required only the day up to three-thirty where before it required the entire day; and said his boss had always allowed him a half day for the car of grain and the entire day for a car of coal, so he now had some time to himself.

The thing that surprised him most, however, was the fact that now he was not nearly *so* hungry for his noon meal as formerly, nor could he eat so much, and his forenoons were always his best time for work, the noon meal seeming to slow him down till digestion was pretty well completed.

He came ultimately to eat but a very light lunch at noon and to do nearly all of his eating at night, and never again had trouble with his work or his sleeping.

The writer had the same experience when doing much bicycle riding many years ago, his meals slowing down both speed and endurance, so that breakfast was left out entirely and the lunch also omitted before a hard ride.

It is hard for one who suffers from this gnawing that he calls hunger, and who becomes weak from this sensation, which he finds relieved by eating, to believe that it is due to the use of too large meals of wrong materials poorly selected and combined; yet he can prove it to himself very easily by passing up such a superfluous meal as breakfast and noting the result after the body has become accustomed to the change.

Where the breakfast is admitted at all to the normal diet, it should be limited to the single fruit, or at most to this and a glass or two of milk, and nothing heavier can be considered normal.

Lunch for the office worker and the farmer or laborer are of course different considerations, wholly so, though in both the vegetables and fruits are to form the backbone.

The office man needs only these, just fruits and vegetables, and these either cooked or raw, but better the raw vegetable salad than the cooked roots or greens, and if his appetite rebels at first over this curtailment of the usual business men's lunch let him add again the glass of milk or of buttermilk or fresh fruit juices, but better no tea, coffee or cocoa, as these stimulant drinks leave behind their unavoidable compensatory depression, even as every stimulant of every kind.

The laborer or farmer will require more concentrated food, as he uses up so much more energy than does the office man, but even he, when he accustoms himself to the lighter diet at noon, will find that he does his work much more easily, and is much less tired at night than would be the case were he on the heavier lunch.

As both proteins and carbohydrates are generally considered necessary for the manual laborer, he may then use his starches at one meal, preferably at noon, and his protein foods at night, thus separating by several hours these incompatible foods.

If the starches are taken at noon, these may be in the form of either baked potato or whole grain breads in moderate amount, as two fair sized potatoes or four to six slices or ounces of bread.

Stewed vegetables, raw salads and sweet fruits, as dates, figs or raisins will complete the meal, and no acids will form if the starches have been very thoroughly chewed and intimately mixed with saliva, and if they have not been washed down with any form of liquid whatever.

If meats are used at the evening meals these may comprise any sort desired, in moderate amount only, as the body's needs are completely covered by two ounces of lean meat; more is a handicap.

If soup is used it must be remembered that neither a meat stock nor thickening of any kind is to be used, though for flavor Vegex or Savita or Marmite may be used, all vegetable extracts of harmless character.

The cooked greens or roots, the raw vegetable salads and generous amounts of the acid fruits will complete a meal that from our conventional standpoint may be called normal, at least it will not be highly acid-forming in character, if the tendencies in this direction that inhere in meats are well offset by plenty of vegetables, salads and fruits, all of which are highly basic in potentiality and effect.

There will never be the full feeling after meals so arranged and combined, because there will not be the instant fermentation which is usual and which gives this full sensation. The absence of this will at first lead to the belief that the diner has stinted himself too greatly.

As a matter of well-proven fact, it is this full feeling only that terminates the meal with the average diner, and unless the stomach feels uncomfortably full the filling process is continued till the end-point of discomfort is reached.

This absence of discomfort may lead at first to too full eating of even the right foods, but soon it will be learned that the full feeling is never present as before, and less and less food will be required to satisfy, till in time the total food intake will be greatly lowered, through eating right instead of eating in the former wasteful manner.

There should be no different feeling in the stomach after a proper meal than before it, for before the meal there should be no sensation in the stomach and none afterward.

Such a meal will after a time sustain far greater activity for a far longer time than would formerly a much larger amount of food eaten in the former manner.

When meals can be passed up without discomfort, then one knows that his formerly highly acid stomach has reformed and now harbors no irritating debris of any kind, for it is only this irritating acid debris that causes the disagreeable sinking, gnawing feeling that we call hunger, and that drives us to eat when the stomach should have rest.

If all disease is from acid formation and retention, and if this is due in every case to wrong habits of eating, then the above program will not only bring digestive comfort with heightened efficiency and endurance, but will soon banish fatigue and close the gates against disease of all kinds.

If this is not all true then this whole chain of reasoning is wrong, and every argument falls to the ground.

But here again the proof of the pudding is in the eating, and there are cases by the thousands who have so changed their eating habits, and who are all willing to say that the things promised are all realized.

Digestive comfort is complete, appetite is no longer compelling, endurance is enormously increased, blues and discouragements are forgotten conditions, the doctor is an unnecessary adjunct to their households, and the fear of disease is banished forever.

Such results must be founded on something more than mere unsupported theory, for these people were formerly, many of them, without hope of health, and now know why they were sick and how and why they got well; also they know how to keep well in future.

Such have been the rewards of a little care and attention to the selection and combination of their foods, and it would be hard to persuade them that their improved condition is not directly due to this care, for nothing else was done to cause any change in condition.

Many of these recovered cases say they have never before enjoyed life as now, even enjoying the pleasures of the table as never before, so they are not giving up any really good thing in reforming their dietary habits.

If one is happy in his present condition, why should he seek to change it? The writer has always made it a fixed habit never to try to influence any one who was satisfied, but to confine all efforts to those who realized that there is something better that has not yet been attained. And to these it is easy to give hope, for veritably new and much higher things are in store for any one who is willing to so change his diet as to remake his body, to change its entire chemical composition, as is done by arresting acid formation and permitting the body opportunity to throw off the old acid conditions and create new and normally alkalin states.

Of the thousands of patients handled through the sanatorium form of treatment there have been but three in the nearly twenty years of this that were considered too obdurate to waste time on, and who were sent home to continue their former useless treatment with drugs and surgery, while even one of these, three years later, returned and took complete treatment very meekly and thankfully, and made a wonderful recovery from many years of ill health.

These, all three, flatly refused to make any change in their way of eating, so were of course outside all hope of benefit by a treatment that centralizes about this one thing.

There have been many others who took the course doubtfully, evidently without belief in its curative power, but who were among the loudest in their appreciation of what it had accomplished in their own cases.

The vast majority of those treated during this long time, however, have been those who had tried everything else, and who felt that through diet lay their best course toward a return to health, and who were willing to believe in the methods from the beginning, or who had come in as a result of the recovery of many of their friends, and who were on this account willing to accept whatever was laid out for them.

Such are always easy cases to treat, but when each statement is disbelieved, and the methods questioned, it becomes very hard to enthuse over the treatment of such case; yet only in three instances was it considered too hard to do, and the cases dismissed.

After all, normal diet is merely the eating of normal foods in a normal manner at normal times and occasions, nothing more than this, and a near approach to this is perhaps the course outlined above for average cases.

CHAPTER XXIV

MENUS FOR ONE MONTH

The writer in teaching food has always avoided menus, preferring that each learn the principles of food selection and so be in position to create these menus for himself.

However, there is so much dispute and discussion over various phases of the diet question that he has been for years besieged by requests for specific menus, and has been forced to adopt this style of teaching food selection and combination by illustration.

The following pages of menus for one month are taken from the Sun-Diet Health Service, an institution for the purpose of teaching diet for health.

This incorporation is a part of the East Aurora Sun and Diet Sanatorium, intended originally as a follow-up service for the patients leaving there, to keep them on proper diet for one year, after which there is no possibility that they will return to the former careless method of eating that is general, and which they followed before coming to the sanatorium for treatment.

It is only necessary that one feel the great change in the body that results from correct, or nearly correct, eating for a year in order to be sold for life.

So many requests came in continually for the Service, from friends of returning patients, those who were not ill enough to require sanatorium care, yet who did not wish to make mistakes in eating, that it was decided by the management to issue the Sun-Diet Health Service to the general public, and the rapidity with which this has spread in the two years of its existence is all the proof necessary that there is a great general interest aroused in the subject of foods and diet.

These menus are not strict diet in any sense of the word, but are a compromise issued to those who have not followed any form of dietary instruction previously, or who have followed a wrong system. They are not intended as a curative system of feeding, if there is such a thing.

Their entire intent is such a combination of foods, that are readily procured and not too difficult in preparation, as will allow any one to secure the entire menu materials in almost any city market; yet such an arrangement as will preclude the usual frequent mistakes in menu building, the object being to prevent the acid formation that makes of life a sour proposition to too many people every day.

Slight errors in combination may be detected in these menus cited, though when these occur it is in the interest of a more attractive menu, and all are of very minor character, so that strict adherence to the outline given will practically cut off acid formation, the acid-forming foods used being wholly counteracted by a proper arrangement of highly basic foods in the same meal.

Within one year after beginning the faithful use of such a menu there will be almost total extinction of acid conditions, and organic

disease that has resulted from former acid states should be well on the road to recovery.

If constipation is marked, it is always well to use the nightly enema of tepid or slightly cool water, till returning activity of the colon produces a stool daily before the time for the enema, when this may be dispensed with, and there should then result a three-times-a-day habit that should last the rest of one's life, if food habits are modeled on this simple plan.

The use of the enema is wholly without harm if the water is below the temperature of the body, about 80 degrees F. being a favorable and usable temperature. Three quarts (this being the capacity of the average colon) should be injected at one time, to distend thoroughly and completely empty the colon, and this continued for two weeks, after which the amount may be reduced to two quarts, and this amount continued, retained for two or three minutes while the abdomen is thoroughly massaged.

In the beginning it is well to use a heaping tablespoonful of soda, common baking soda, to each enema, but after two weeks, and when the water is reduced to two quarts, add the juice of one lemon instead of the soda.

This, with corrected diet, will at once stop the absorption as well as the formation of adventitious acids, and relieve the system of much work that was formerly necessary, thus conserving its alkalies to keep up its formerly depleted reserve of these.

Accompanying the menus as issued to subscribers is a food chart with the usual foods listed under nine different heads, each division lettered, and the combinations listed by letter, so that it becomes easy for any one to make extemporaneous menus that will not be acid-forming in total result.

The menus selected are those from the summer months and are prepared chiefly of those foods seasonable during the summer, but most of the articles mentioned are seasonable all the year through. All are such as almost any market offers in season.

SUNDAY

BREAKFAST—Orange juice, milk.

DINNER—Relish—ripe olives, radishes; vegetable broth; broiled steak with mushrooms, steamed green peas, baked onions; Salad— tomato and cucumber with mayonnaise dressing; Dessert—peach ice cream.

LUNCH—Steamed spinach; Salad— fruit salad with mayonnaise; Dessert—strawberries with whipped cream (unsweetened)

MONDAY

BREAKFAST—Whole wheat toast, crisp fat bacon, black coffee.

LUNCH—Pea puree, steamed beets; Salad—small green string beans and sliced onion, dressing oil; Dessert—fresh pineapple (unsweetened)

DINNER—Broiled steak with broiled mushroom; steamed broccoli; Salad —asparagus tips on lettuce with mayonnaise dressing; Dessert — strawberry whip (unsweetened)

TUESDAY

BREAKFAST—Orange juice, milk.

LUNCH—Cream of asparagus soup, steamed kale; Salad—shredded cabbage and celery with mayonnaise dressing; Dessert—fresh fruit with whipped cream (unsweetened)

DINNER—Meat loaf, steamed spinach, steamed carrots; Salad—sauerkraut and grapefruit with mayonnaise; Dessert—lemon gelatine, whipped cream (unsweetened)

WEDNESDAY

BREAKFAST—Whole wheat muffins, butter, maple syrup, crisp fat bacon, black coffee.

LUNCH—Cream of celery soup, steamed endive; Salad — apple, grape and cherries on lettuce with mayonnaise dressing; Dessert — fresh peaches with cream (unsweetened.)

DINNER —Baked green peppers stuffed with mushrooms, steamed spinach, steamed parsnips; Salad— tomato, carrots, asparagus, green onions, shredded, mayonnaise dressing; Dessert—fruit gelatine with whipped cream (unsweetened.)

THURSDAY

BREAKFAST—Orange juice, milk.

LUNCH—Vegetable soup, steamed string beans; Salad—shredded cabbage, celery and onion with mayonnaise dressing; Dessert—fresh berries and cream (unsweetened.)

DINNER—Individual roast of lamb, steamed chicory, steamed vegetable oysters; Salad — cucumber and radish with mayonnaise dressing; Dessert—pineapple ice.

FRIDAY

BREAKFAST — Sour cream whole wheat waffles, maple syrup, butter, black coffee.

LUNCH—Tomato bouillon, steamed beets; Salad—pineapple and cottage cheese with mayonnaise dressing; Dessert—Apple sauce (unsweetened.)

DINNER—Broiled fish or roast beef, steamed green peas, steamed asparagus; Salad—diced tomato and orange sprinkled with chopped nuts with mayonnaise dressing; Dessert—ice cream.

SATURDAY

BREAKFAST—Orange juice, milk.

LUNCH—Cream of spinach soup, steamed string beans; Salad—tomato, cucumber with mayonnaise dressing; Dessert—fresh pears.

DINNER—Baked potato, steamed carrots, steamed endive; Salad—shredded cabbage, green peppers and radishes with oil dressing; Dessert—whole wheat date cake.

SUNDAY

BREAKFAST—Whole wheat pancakes, maple syrup, butter, black coffee.

DINNER — Relish — celery; broiled chicken with vegetable dressing, steamed vegetable oysters, steamed spinach; Salad—tomato with mayonnaise dressing; Dessert—apricot sherbet.

LUNCH—Crisp fat bacon and lettuce sandwiches on whole wheat toast or date and honey sandwiches on rye bread; Dessert—custard with maple syrup.

MONDAY

BREAKFAST—Orange juice, milk.

LUNCH—Cream of onion soup; steamed green peas; Salad—orange, pineapple, grape with mayonnaise dressing; Dessert—lemon ice.

DINNER—Asparagus on whole wheat toast, steamed beets, steamed kale; Salad—head lettuce with whipped cream; Dessert—black mission figs with cream.

TUESDAY

BREAKFAST—Whole wheat muffins, honey, butter, black coffee.

LUNCH—Cream of spinach soup, baked tomato; Salad—sauerkraut and grapefruit with mayonnaise dressing; Dessert — fresh peach with whipped cream(unsweetened).

DINNER—Broiled beef fillets, steamed cauliflower, steamed broccoli; Salad —cucumber, radish, apple, tomato, shredded, mayonnaise dressing; Dessert—pineapple whip.

WEDNESDAY

BREAKFAST—Orange juice, milk.

LUNCH — Tomato puree, steamed green string beans; Salad—head lettuce with mayonnaise dressing; Dessert—cherries with cream (unsweetened.)

DINNER—Broiled mushrooms on whole wheat toast, steamed endive, steamed celery; Salad — shredded lettuce, carrots, tomato and cucumber, oil dressing; Dessert—maple ice cream.

THURSDAY

BREAKFAST—Whole wheat waffles, maple syrup, butter, black coffee.

LUNCH —Parsnips and cauliflower soup, steamed beets; Salad—shredded cabbage and celery with mayonnaise dressing; Dessert—pears.

DINNER — Scalloped potato with onion, steamed green peas, steamed okra; Salad—sliced tomato and shredded carrots, no dressing; Dessert—date ice cream.

FRIDAY

BREAKFAST—Orange juice, milk.

LUNCH—Pea puree, steamed parsnips; Salad—asparagus tips on lettuce with mayonnaise dressing; Dessert—Baked apple with raisins (unsweetened.)

DINNER—Broiled fish or roast beef, baked tomato, steamed celery; Salad—shredded cabbage and carrots with mayonnaise dressing; Dessert—orange cream sherbet.

SATURDAY

BREAKFAST — Whole wheat toast, honey, butter, crisp fat bacon, black coffee.

LUNCH —■ Cream of celery soup, steamed green peas; Salad—shredded celery, carrots and radishes with mayonnaise; Dessert—apple sauce with whipped cream (unsweetened.)

DINNER—Potato whip, steamed cabbage, steamed spinach; Salads-small string beans with sliced onion, with oil; Dessert—ice cream.

SUNDAY

BREAKFAST — Unsweetened grapefruit, milk.

DINNER—Relish—ripe olives, celery hearts; vegetable broth; broiled chicken, steamed asparagus, steamed beets Salad—tomato, cucumber and green pepper with mayonnaise dressing; Dessert—strawberry whip (unsweetened.)

LUNCH—Steamed endive; Salad— sauerkraut and pineapple with mayonnaise dressing; Dessert— lemon gelatine with whipped cream —unsweetened.

MONDAY

BREAKFAST — Sour cream whole wheat waffles, maple syrup, butter, black coffee.

LUNCH—Cream of asparagus soup, steamed endive; Salad—fresh fruit with mayonnaise dressing; Dessert —pineapple gelatine with whipped cream (unsweetened.)

DINNER—Stuffed egg plant, steamed chicory, baked onion; Salad—head lettuce with oil dressing; Dessert— maple ice cream.

TUESDAY

BREAKFAST—Orange juice, milk.

LUNCH—Cream of celery soup; steamed kale; Salad—tomato stuffed with unsweetened crushed pineapple with mayonnaise dressing; Dessert—fresh fruit with whipped cream (unsweetened.)

DINNER—Roast lamb, steamed broccoli, steamed vegetable oysters; Salad—celery, apple and green pepper with mayonnaise dressing; Dessert—fruit gelatine with whipped cream (unsweetened.)

WEDNESDAY

BREAKFAST—Whole wheat pancakes, maple syrup, butter, black coffee.

LUNCH—Vegetable soup, steamed string beans; Salad—shredded cabbage with mayonnaise dressing; Dessert—apple whip.

DINNER—Cauliflower, tomato, cheese casserole, steamed spinach, steamed carrots; Salad—pear stuffed with cottage cheese, sprinkle with chopped nuts, with mayonnaise dressing; Dessert—ice cream.

THURSDAY

BREAKFAST — Unsweetened grapefruit, milk.

LUNCH—Vegetable soup, steamed kale; Salad—cucumber and radish with mayonnaise dressing; Dessert —fresh peaches with cream (unsweetened.)

DINNER—Stuffed baked potatoes, steamed cauliflower, steamed spinach; Salad—small string beans and sliced onions with oil; Dessert —black mission figs with cream.

FRIDAY

BREAKFAST — Whole wheat toast, honey, butter, black coffee.

LUNCH —Tomato bouillon, steamed beets; Salad—asparagus tips on lettuce with mayonnaise dressing; Dessert—fresh fruit with whipped cream (unsweetened.)

DINNER—Broiled fish or lamb chops, steamed tomatoes, baked onions; Salad — pineapple, orange and grapefruit with mayonnaise dressing;

SATURDAY

BREAKFAST—Orange juice, milk. LUNCH—Cream of onion soup; steamed string beans; Salad—shredded cabbage with mayonnaise dressing; Dessert—fruit gelatine with whipped cream (unsweetened.)

DINNER—Carrot loaf, steamed endive, steamed okra; Salad—tomato and cucumber with oil; Dessert— maple ice cream.

SUNDAY

BREAKFAST—Whole wheat muffins, crisp fat bacon, butter, black coffee.

DINNER—Relish—Ripe olives; vegetable broth; broiled chicken, steamed broccoli, steamed beets; Salad—diced pineapple, pear and orange with mayonnaise dressing; Dessert—lemon ice.

LUNCH—Tomato, cucumber, green pepper salad with oil; bacon, lettuce sandwich on whole wheat toast; Dessert—ice cream.

MONDAY

BREAKFAST—Orange juice, milk.

LUNCH—Cream of celery soup; steamed endive; Salad—asparagus tips on lettuce with mayonnaise dressing; Dessert—orange ice.

DINNER —• Broiled lamb chops, steamed peas, steamed carrots; Salad—tomato stuffed with celery, peas, onion, string beans with mayonnaise dressing; Dessert — loganberry whip (unsweetened).

TUESDAY

BREAKFAST—Whole wheat pancakes, maple syrup, butter, black coffee.

LUNCH—Cream of asparagus soup, steamed green peas; Salad—sauerkraut and pineapple with mayonnaise dressing; Dessert—cherries.

DINNER—Baked potato, steamed kale, steamed vegetable oysters; Salad—sliced tomato without dressing; Dessert — custard with maple syrup.

WEDNESDAY

BREAKFAST—Orange juice, milk.

LUNCH—Vegetable soup; steamed kale; Salad — shredded tomatoes, carrots, celery, cucumbers with mayonnaise dressing; Dessert — apricot whip.

DINNER—Roast beef, creamed cabbage, baked tomato; Salad—pineapple, orange and grape with mayonnaise dressing; Dessert — strawberry whip (unsweetened.)

THURSDAY

BREAKFAST—Whole wheat toast, butter, crisp fat bacon, black coffee.

LUNCH—Cream of celery soup; steamed green peas; Salad—tomato with mayonnaise dressing; Dessert—fresh fruit with whipped cream (unsweetened.)

DINNER — Baked potato, steamed onions, steamed spinach; Salad—shredded carrots, green peppers and cucumbers with oil dressing; Dessert—ice cream.

FRIDAY

BREAKFAST—Orange juice, milk.

LUNCH —Tomato bouillon; baked onion; Salad—tomato and cucumber with mayonnaise dressing; Dessert—apricots.

DINNER —Broiled fish or steak, steamed chicory, steamed carrots; Salad—shredded cabbage, onion, radishes with mayonnaise dressing; Dessert—lemon ice.

SATURDAY

BREAKFAST—Whole wheat muffins, honey, butter, black coffee.

LUNCH—Cream of carrot soup; steamed celery; Salad—pineapple, pear and grape with mayonnaise dressing; Dessert—lemon fluff.

DINNER—Broiled lamb chops steamed cauliflower, steamed kale; Salad—sauerkraut and grapefruit with mayonnaise dressing; Dessert — fresh peaches with cream (unsweetened.)

It will be noted in the preceding menus that the number of articles is extremely limited, though the quantities of the various articles are unlimited, so that with the limited variety at one meal one may still satisfy himself thoroughly by increasing the amounts to any desired scope.

Thus, the salad may with advantage represent a soup plate well filled with the things mentioned as going well together, and such a salad, dressed with any one of the usual dressings allowed, all of which are made without vinegar or sugar or mustard or pepper, is in itself a fair meal, and one that gives to the body the things most necessary for its replenishment.

Dessert at the end of a meal of poorly selected and combined members is a very dangerous thing; but to take the place of the foods left out we are in the habit of listing two dessert meals a day, the dessert in this case supplying much of which the body stands in need.

If every one now on wrong diet would eat once or twice each day a very large green vegetable salad, this alone would do very much to lower acidity, and adding to this large amounts of fresh acid fruits would achieve a very noticeable improvement in very many acid states.

It will be further noted that the concentrated foods are very limited in such menus as the preceding, for the very good reason that all of these are highly acid-forming in tendency.

It is very largely the too free use of these very concentrated things, together with so much refinement of many, especially if eaten in wrong combination, that makes so great a proportion of the

acid conditions, the degenerations especially, as these are end-results of years of acid formation and retention.

When going at once to such a standard as outlined above, the average person who has fed largely on wrong foods in wrong combination will feel poorly fed, or almost as though not fed at all. Almost all will lose weight at first; but persistence in this type of feeding will eventually raise the weight of the thin and will bring down the weight of the fat, and all without any real self' denial, except during the first very few days after the change of diet is made.

On first glancing over such a menu, the average person who is used to the usual hotel table d'hote menu will fail to see a satisfying meal, but this is wholly due to the highly complex character of the usual table d'hote meal, which is one of our great national mistakes, and has caused many an otherwise comfortable existence to become a living hell of indigestion and constipation and sick headaches and biliousness.

To people in public life, the unmarried ones who are dependent on the hotel chef for dietary guidance, there is little prospect of either continued health or very long life, and yet it is the public that makes the hotel menu what it is.

If the public will interest itself in foods enough to demand the things that are good and in proper arrangement, the hotel menu can be altered very quickly, for it is the aim of the host always to please his customers, and the late Col. Statler said: "The guest is always right."

The only way out is through the great public itself, and until it knows its danger and knows that this can be obviated very easily, nothing will be done, for the hotels are still continuing to furnish the things for which the public calls, and they will always continue to do so.

Attempts are being made, in different cities by some restaurants, to educate the public to the better plan of eating, but these reach but a few of the thousands who daily fill up on incompatible comestibles that would keep the stomach of the average goat very busy, and it is never suspected that the many ailments originate in the character of the food or the manner of its preparation and combination.

CHAPTER XXV

EVERYONE HIS OWN PHYSICIAN

All of the foregoing is the result of twenty-four years of experience in the application to every sort of diseased condition of the simple plan of treatment founded on the right selection and combination of foods, wholly without remedies of any kind whatever, the entire object being to arrest the formation of acids of adventitious character in the body, through such selection and combination of the ordinary foods as would accomplish this result. During the entire twenty-four years there has never been a time when the writer could consider going back to the medical or surgical treatment that he finally and definitely discarded this rather long time ago.

Being a medical man, he is of course fully licensed to use any "remedies" he may think best for his patient, and also any operation that he seeks to perform he is legally licensed to undertake, but he has definitely turned his back on both the administration of drug or serum remedies, and the attempted correction of internal conditions by means of surgery.

Had he continued in medicine he would have earned and squandered much money, and his decision to drop both was not a hasty one, for he realized fully that the departure from the beaten path would cost him not only a large part of his yearly income but at the same time place him in a peculiar position with his medical brethren.

He adheres to his connections with organized medicine, even though completely out of sympathy with its aims and its practices, so is still a regular physician in good and regular standing.

Having dropped both medicine and surgery for what he considers a much more effective form of treatment it must be evident that there are no dishonest motives back of this change.

His results through these twenty-four years have been such that he could not honestly renounce the present line of practice for something that he has discarded because valueless in the treatment of so much of the disease present in every practice, so he makes no pretense toward either medicine or surgery, being wholly content to eradicate the causes of all disease as he sees them, and he believes that he has done more actual good in every single year of this period than in the entire sixteen years that preceded this time.

His entire efforts are toward making each one of his patients wholly independent of him, and when this is accomplished he feels that he has done this case real and permanent good.

After four years of experiment and study following his own breakdown, when he was forced finally to the conclusion that each body is composed merely and truly of what enters it daily through the digestive canal, it then became impossible for him to continue his former line of work, and he began to separate his very large practice into those who would without question follow his directions, and those who would not.

Those who would not were refused service in every case, and of course took their troubles to someone else; and those who would follow directions soon did not need his services any further, so they too were off the list of contributors to his expense budget.

This was serious business, for the meal ticket had been punched at both ends at once.

But among the rather spectacular recoveries of chronic disease in his obedient patients were many that influenced friends at a distance to come for treatment, and it was the influx of these that kept the wolf from the door for a time, and as the number of these patients from a distance grew rapidly it became necessary to open a sanatorium for their care.

This was twenty years ago last February, and never since that time has there been any dearth of patients from a great distance to keep the old wolf away from the door.

This business has not come through any form of advertising, as there never has been any attempt in this direction beyond one announcement several years ago of special care at the sanatorium for hay fever cases, the only mistake of this kind ever made, and one to which no business was ever traced; so it was a completely wasted gesture.

Surely the business that comes in wholly through successful treatment of cases may fairly be called legitimate business, and should not be charged to unfair means.

Yet, any physician who steps aside from the beaten path in any particular is spotted as a suspicious character, and, as a rule, his presence in medical circles is not craved.

This is all due to the entire misunderstanding of the whole situation by the medical men themselves, for there is nothing concealed, nothing the result of advertising or other questionable methods. Practically every patient treated is one on whom every sort of medical or surgical treatment has been tried, and he is never sent for; he comes of his own volition or is referred by some friend who has himself been treated by the sensible methods of stopping the cause and paying no attention to the end results.

The writer has for several years been instructing several other physicians in his methods, and these men report the same results, which have been so uniformly good that they have, as a rule, forsaken altogether their former line of practice and are removing the acid causes of disease exclusively, with great satisfaction to themselves and deep appreciation on the part of their chronic patients.

Is it not evident that any form of treatment that will bring the chronic sufferer back to the normal will much more easily prevent the same disease from occurring?

The writer has experienced a keen satisfaction in seeing a case of chronic disease swing back into the health column, but this satisfaction is not to be compared with what comes from a wholesale effect on those not yet afflicted with chronic disease, but who wish to prevent it and are willing to take the few simple steps necessary to avoid it.

In every case he has found that all that was necessary to prevent the advent of chronic conditions, that were already showing the infallible indications of their approach, was to so change the dietary habit as to stop at once all acid formation.

For four years he has been importuned to put into book form the things that are necessary to prevent disease, and for just the same length of time he has found it impossible to escape long enough from the arduous duties of sanatorium and private practice to accomplish this object.

Hence, the present exile, when in a month this record and simple directions are to be compiled for the guidance of those who realize that disease is a preventable condition, and who are seeking means to escape it.

This little book will not appeal to those who are not afraid of disease, those who do not see its approach; but to those who know that they will go the way of all flesh sooner than they wish, unless something different is done to prevent it, there will be much to cause interest in this record.

The writer has to see at least a thousand new cases each year, else he could never make a living, for each case is seen on the average but two to four times, and the cases treated by mail require but the same number of letters, so the income from this very transient and fleeting practice would be pitifully small were it not for the large numbers of patients who come or write for consultation in matters of health.

The writer does not treat disease, in the strictest sense of the word, but seeks only to build health on whatever foundation remains at the time this is undertaken; so he cannot ever say that he cured a single disease in his whole medical practice, nor does he believe that anyone else ever did.

He seeks merely to remove from each case the visible obstacles to Nature's unhampered function, and he knows that this is all that the smartest man in the world can do. Nature alone makes the cure, if it is ever made or to be made.

His entire effort in the practice of his profession for the past twenty-four years has been directed toward making everyone his own physician.

His success in this respect is best attested by the fact that those who have been treated seldom require any medical or surgical care, and by the further fact that cases have been coming in increasing numbers for this entire period from every state in the union, from the most remote provinces of Canada, and from many foreign lands; even from far-away South Africa.

This testifies that the form of practice must be doing good; it must be reaching cases that have failed to get relief at home; yet he does not take to himself one atom of credit, but gives it all to Nature, who does the work.

Most systems of self-treatment are so complicated, have so many strings to the kite, that to undertake to follow them is too discouraging. So many exercises, each of which is supposed to be of especial benefit, so much to watch in the daily care, so many things to be done, each of which is supposed to have some especial bearing on either prevention of or recovery from established disease, that it is small wonder that few adherents of the many systems of cure are to be found. Yet all of these do a great deal of good, as they are almost always a great departure from custom toward Nature, and their adherents, though small in numbers, are usually enthusiastic, as they should be.

All of the systems extant have been studied by the writer, most of these very minutely, and through them all has run the cord of natural foods. No matter to what was attributed their especial effectiveness, whether a system of bathing, bare-foot walking in the early morning dew, certain food selections, yet in one particular, every system that showed effectiveness in the recovery from established disease has had this evidence of the natural foods as its motivating cause of cure.

This realization came to the writer after careful perusal of the more prominent so-called natural methods of cure of the various authors and schools that seemed to have been most successful in treating disease along natural lines, and he began to concentrate on the use of what he considered vital foods in their unchanged condition, often preceding diet with a fast of sufficient scope to rid the system fairly well of the bulk of accumulated toxins.

The farther his studies in foods have carried him the closer has he been forced back to the ancient Edenic standard, . . . the vegetables, the fruits, the nuts, . . . till he now regards anything else as unnatural in the very strictest sense, not that one can not eat some very unnatural food and still retain health, but that ideal health can not be attained with any other line of foods than those outlined by God to Adam and Eve in the Garden of Eden.

These, when analysed, represent in toto the things that the body requires every day for its maintenance, and whether we eat the other things or not, we at least must depend on the foods produced by Nature just as she produces them.

These will seem highly restricted to one who has not studied foods, but to one familiar with the endless variety offered by this list there is infinite change in prospect, and no one need feel that he is not getting every day the things he can enjoy most, and in variety enough to please the most fastidious taste, after it has been for a sufficient time trained to this very primitive standard.

In the Sun-Diet Health Service we are trying to compromise with convention and at the same time eradicate the acid development that habitually occurs from a misunderstanding of the most primal laws of food.

In the menus printed herewith there will be found many evidences of this attitude, as dishes are compounded of articles not all natural, but these are so arranged as to prevent their interference one with the other. Therefore no arrest of digestion occurs through wrong chemistry, and the result is a cessation of acid formation.

Of the various foods that go to make up the usual diet, or lack of diet, the carbohydrates, comprising all of the starchy foods of every kind, and all the sugars of every kind, make up the element of chief danger from fermentation, as they require alkalin conditions throughout the entire digestive tract, and acid at any stage of their digestion will permanently arrest this, for it cannot be resumed once it is arrested.

When we realize the extent to which bread is eaten, the blind dependence placed on this supposed staff of life by almost the entire world, it is not strange that there is so much fermentation and consequent acid formation in the average digestive tract.

Knowing the alkalin requirements in this class of foods we are each under a very personal responsibility to see to it that in our

particular stomach no fermentation through arrest of this tricky food shall occur.

We can do this in two ways: we can either refrain wholly from the use of acid fruits or other acids when bread or potato or other starchy food is eaten, as also from concentrated proteins, as meat, eggs, fish; or we can erase these very risky foods entirely from the bill, which we can do without loss, if we are eating a sufficient variety of vegetables and fruits.

In this way we can escape perhaps the commonest of all sources of fermentation and acid formation, yet of all the restrictions to eating, that in relation to bread seems to be the hardest for most people.

The writer has seen children scolded, threatened, or even sent from the table because they were unwilling to eat more bread, or to eat it with every other article of food on the table, under the parental misunderstanding of the old idea that "bread is the staff of life."

Is is not the staff of life, and in its refined form it is verily the staff of death, for its use in this form, white, denatured, emasculated thoroughly, is one of the surest and the quickest roads to acidosis, the fatal alkalin deficiency that is the great cause of disease.

Whole grain bread can be used, even to some advantage, by the laborer, if taken in such combination as will allow it to digest without the usual fermentation, but it is never necessary even to the laborer, and to the desk worker it is a continual and immediate source of danger.

Catarrhs depend for their presence on this fermentation of starches and sugars almost wholly, as is easily proved by the sufferer from catarrh, if he will omit all forms of starch or sugar from his daily bill.

All disease is in a sense catarrh, or an evidence that the body is seeking through the mucous membranes to extrude toxins, and these toxins are from the carbon family, whose whole source is carbon foods.

Every inflammation of every organ of the body is a catarrh, so catarrh is the great evidence of disease.

Yet you will be told that catarrh is incurable except by high altitudes. But high altitudes do not cure, they merely suppress the evidences of catarrh, by drying up the discharge as fast as it appears; covering up the thing, but never eradicating it. Any sufferer from catarrh knows that when he ascended to high altitudes his discharge disappeared, but when he returned to a low altitude this was already present, just as before he went up, showing it to have been present all the time, but dried by the dry and rarefied air of the higher altitude.

The asthmatic knows the same thing, for if he gets relief on the top of Pike's peak his asthma returns as soon as he again reaches the plain, not the next day, but at once.

A great sufferer from asthma told the writer many years ago that on his way to Denver, where he was forced to live, apart from his family in the East, he always dropped all asthmatic symptoms at Chicago, and on his returns to visit his family he always picked the symptoms up in Chicago, just where he had left them, and in the night he knew when he reached Chicago for this reason.

The rarefied air of Denver gave him great relief, and continued to do so for ten years or more, but asthma finally got him even

there, for his causes were building up all the time, and no rarefication of the air would, after a time, suffice to dry up the catarrh of his bronchial tubes.

The writer has many times since regretted that he did not then know what the cause of asthma was or he could have soon eradicated it, so that this sufferer could have lived East with his family and enjoyed life, for they would not live in Denver with him; and it was pathetic to see him return every year and suffer agonies just to be near his family for even the few weeks that his strength held out.

Any case of asthma that cannot breathe comfortably in his uncongenial surroundings is not cured; likewise any case of hay fever that cannot bury his face in his particular bete noir without sneezing is not cured; and the fact that such people can do this very thing after discontinuing acid-forming habits of diet is the best proof in the world that their disease came from these internal toxins of acid character, and never from the protein pollens to which the disease is attributed.

These are but the excitants, the real cause being always the internal condition of the patient himself.

Some pollens are specifically irritating to certain individuals, but if these are determined for this year, and if vaccination with these is practiced, and if some relief occurs, there is no feeling of certainty that next year the particular proteins chiefly causative will not be found among an entirely different group, as I am sure everyone who has submitted to the multitudinous sensitization tests can testify.

This is not the way to treat asthma, for it does not touch or contemplate the cause. Rather it is more to the point to remove from the system those irritating acids that cause the sensitization of the bronchial or nasal mucous membrane, then the thing will die of its own weight with nothing to support it.

This would be a big thing for the writer to say were he not in possession of such irrefutable evidence of cure through the many recoveries in which no effort was made to do anything but stop this adventitious acid formation.

But twenty-four years and many hundreds of cases of both asthma and hay-fever can testify to full and complete recovery that shows in ability to live in their former impossible surroundings without the least evidence of their old troubles.

Cases of a deep type and of twenty-years history have submitted themselves to this form of treatment, and in very many of the cases of spasmodic asthma there has been complete relief in a few days with no sign of return after many years, though the deeply catarrhal cases require a longer time.

If hay-fever sufferers will start in early in the spring they can almost positively avoid the August attack, and surely by the next year even the worst of these will be free from all symptoms of the trouble.

This is sufficient reward, surely, for the slight care necessary in diet, and if you do not believe it to be, just ask some former sufferer who has recovered what he thinks of it.

It is a great pity to see a spasmodic asthmatic wheezing his life away, when all the time, if he but knew it, but a few days or weeks separate him from a most heavenly relief.

All disease is from acid formation and retention, else all are wrong who are attributing to acid the role in disease formation that ranks so far first that men like Dr. George W. Crile can say that there is no natural death, that all deaths from natural causes, so-called, are merely the end-point of a progressive acid saturation.

Seneca was wrong when he said: "Men do not die—they kill themselves."

Sir William Arbuthnot Lane was wrong when he said: "After all there is but one disease—deficient drainage."

The very same thought differently expressed—but are all of these really great men wrong?

From the writer's standpoint these men are great prophets; those who have seen a great light and are not afraid to tell the world of it. His experience fully confirms the statements of all three men: we do kill ourselves through this continual manufacture and retention of toxins; there is but this one disease, when we consider the thing broadly; and there is no natural death, surely, if these things are true.

In order that every man be his own physician it is necessary that he know why he gets sick and just what to do about it.

When he knows this he will know far more than the entire medical profession, for they are still saying that the causes of disease are a great mystery, and if they are so, then how is it possible to know what to do effectively for such a mysterious condition?

The causes are so plain that he who runs, and runs fast, may read with one eye shut, for they are written all over the body of the sufferer, as well as all over the entire face of Nature.

Believing a thing a mystery will never solve its causes nor will it help one iota in its management.

The causes of disease are the causes of acid accumulation, from the four sources outlined previously, all of which are intrinsic sources, therefore, subject to intrinsic control; self-caused, therefore self-controllable, always.

This is the lesson that each must learn if he aspires to be his own physician, and once he has learned this lesson well, he then lacks only the will and initiative to put the whole program to the test, which will thoroughly convince him of the truth of the entire proposition.

Let no man who is wounded try to do without the surgeon, for this is his legitimate field, nor should one who is deformed try to do the same thing, for this also is surgery's legitimate field, in both of which surgery has shown its worth; but if one has a pain anywhere in his insides let him stay away from the surgeon, if he wishes to die whole, for he may die otherwise in various sections serially.

Until the writer sees at least one case of appendicitis die "naturally," whether this be a simple catarrhal and uncomplicated case or a perforated case with abdominal abscess, he is sure to be excused for not taking this condition as seriously as it is painted by the surgeon, who knows nothing but the operative treatment of this really simple condition.

Until he finds a case of asthma that cannot be reached through diet alone, here again he should be excused for not taking seriously the statement that the cause of asthma is unknown, and its management fruitless of results, beyond change of altitude. Until he

finds one case of either gastric or duodenal ulcer, below the stage of actual cancer, that fails to respond to a short fast and corrected diet, he is still further to be excused for not boosting the surgical treatment of this condition.

And so he can go through the list of unmanageable conditions, disbelieving in the accepted view of either causation or treatment, till he is surely somewhat excusable for believing that if each man were actually his own physician he could hardly make a worse job of it than is already the case.

CHAPTER XXVI

A MEDICAL MILLENNIUM

Whether or not we realize it, we are living continually under an awful handicap of fear—fear of death, fear of illness, fear of poverty, loss, accidents—and there is nothing so palsying to effort as fear.

Any means that will remove this fear is surely of great value to the human race, and as fears are inborn affairs we can begin to see where these are created through our own physical condition.

Remember the hotel legend before referred to: "I am an old man and have seen much trouble, most of which never happened."

If all our anticipated troubles materialized, what a mess we would be in!

Now troubles and fears and all sorts of apprehensions are born of our own physical condition, and as this is a self-created state we have the control of fear within ourselves.

Horace Fletcher, after his own condition improved so very strikingly under better dietary habit, noted the fact that whereas dental work had been a terror to him, and the suffering very acute and prostrating to his nerves, now he faced dental work without dread; and while suffering was still disagreeable, it had no after effect on him, and his dread of the dentist disappeared almost entirely.

The reason was obvious, for his own physical state was entirely different after several months of improving internal conditions.

His ideas of food were erroneous, but his habit of very thorough chewing and insalivation of his foods undoubtedly took care of the former starchy fermentation, for he had been a heavy eater, a banqueter, and undoubtedly was in a very toxic state for years before he reformed his habits.

From being greatly overweight and soft, refused life insurance at forty-eight years of age, he developed such endurance that he outdid young men thoroughly trained in athletics.

Even this improved condition did not save Mr. Fletcher, however, for he died before reaching seventy years, entirely too young to die, if one knows how to live.

His thorough chewing and tasting of the foods did so much to improve his state that it is to be regretted that he did not classify his foods better, and he overlooked the fact that too thorough chewing of his foods is a disadvantage if the thing eaten happens to be a concentrated protein, as cheese, of which he was very fond.

He told the writer on his first appearance at Chautauqua, about twenty years ago, that his bowels moved on an average of about once in each two weeks, and his breath attested this fact. He had a deep seated catarrh that must have come from his much too high consumption of both starches and sugars, and it was a fact that these foods entered into his diet very largely.

He apologized for the catarrh but seemed unaware of the halitosis that made talking with him at short range anything but pleasant.

Had he used the daily enema to keep the colon clear he would have escaped this handicap of bad breath, but he did not believe in rendering any assistance to Nature even when some one of her body tasks has broken down through her inability to overcome a handicap that is always removable.

This same Nature worship has stood in the way of other such teachers, and is seriously interfering with the success of many years of natural methods in the treatment of their patients.

Many conditions are so easily removable, if we render to the body a little assistance along indicated lines, that it is not fair to withhold this assistance from it in its struggle to keep itself clean inside.

If Mr. Fletcher had used the enema daily till the torpid colon had been cleared entirely of debris his breath would not then have been offensive, and surely this would have done no harm, as Nature struggles at all times to keep up colon activity, and Mr. Fletcher made this difficult because with his system of eating he rejected everything that was not reduced to a liquid state before swallowing, thus leaving no bulky residues on which the colon could act.

We continually forget that elimination is not the only function of this sewer, for into the entire digestive tract is thrown waste of various sorts from the blood stream, and absorption goes on continually from this whole system. So when the colon goes on strike and no more debris is eliminated from it, an absorption begins that shows again Nature's effort to take care of this and excrete it by other channels.

When the digestive tube is not busy with the digestion of foods it then becomes an eliminative organ, wastes from the body being thrown into it during the intervals of digestion, and if we quit eating anything at all we still get a stool every day, if we use the enema to remove this.

Surely, then, it is wholly in the interest of a cleaner body to remove this debris mechanically, when the body fails to carry this out unaided, for we are only working in line with the body's indicated efforts, as the thing the body is continually trying to do is to keep itself clear of all debris, and fails only because of the handicaps which we put in the way of its carrying through this intention.

So the enema has a real place in hygienic care of the body, and it only remains to prove that this assistance does no harm to the colonic function.

Fifteen years ago the writer was called to see a lady from Indianapolis who was visiting relatives in the town where he was engaged in practice, and having decided that a cold or slight influenza acquired on the trip was the condition present he asked as to the condition of the bowels, and was told that they had moved that morning, as they did every morning, through the use of a daily enema.

Asked how long this practice had been kept up the patient replied that it was now twenty-two years since she had begun the use of the daily enema, and that it was never missed unless when traveling.

The history was interesting, for she had twenty-two years before been a poor invalid, a sufferer almost continually from sick headaches and so-called bilious attacks.

She had taken so many cathartics in such large and increasing doses that they would no longer act on the bowels, and she began to use the enema for the immediate relief it gave her. She was warned by her physicians, of whom her own brother was one, that this would paralyse her colon and she would never again have normal movements; but she replied that already the colon was well paralyzed, and she did not believe anything would or could further deplete its function. So she kept on with its use, and was at sixty-five years of age much younger looking than are most women of fifty years. She never had any more sick headaches or bilious attacks, and said that if the enema was missed one day the bowels always moved voluntarily, something they never did while depending on laxatives.

Five years later she was again seen on the street, still looking as young as ever, and saying the enema had saved her life and continued to keep her in health.

Now surely this patient did herself no harm with even this very protracted use of the enema, and her history showed that the colon was much more active after twenty-two years of this assistance than when it was first used.

Careful fluoroscopic examination of the colon after varying periods of the enema's use in a wide variety and age of patients has definitely proved to the writer that the use of the enema daily is a beneficient affair, not in any way interfering with the normal function of the colon, and of great assistance to a colon behind with its work.

Surely it is more closely in line with Nature to remove this decaying mass than to allow it to remain and continue to putrefy and ferment, distributing the debris of this through every part of the body, even showing in the breath.

Both halitosis and bromidrosis, that is, both foul breath and foul body odors, originate in the character of this uneliminated debris found in the usual colon, for experiments before referred to showed that the average length of residence in the colon of debris is seventy-two hours, in those who are blessed with one stool every day, and who do not for this reason class themselves as constipated.

Food eaten today must be voided entire tomorrow, else we are to this extent constipated, even if we have two stools a day, for every hour after twenty-four allows too great opportunity for this fermentation and putrefaction to augment, till the condition of the average colon is that of a foul sewer.

The remedy for this is under immediate control with no harm to the body from such control, and as the enema is merely doing for the colon what it is trying to do for itself but cannot, it should be considered a natural proceeding, instead of being decried as it is in all medical circles.

Now just what has this to do with a medical millennium?

Everything that removes from the body fears and depression and all hampering thought is hastening the day when fear will be banished from the earth, and a proper and enlightened understanding of the body and the processes by which it retains its efficiency, or loses it through disease, will predominate.

As said before, we do not fear what we fully understand, and when we understand disease properly we will cease to fear it.

Life insurance then will not mean so much to any, but accident insurance will always be advisable, or life insurance from the standpoint of the savings account, as it is surely a good institution from this viewpoint even if we never expect to die.

Can you imagine what sort of world this would be if all fear were removed?

Financial panics would be past; fear of ill health or death would cease to crimp our plans for the future; we would plan and expect to carry through things from which we now shrink, and the work of the world would at once be on a greatly advanced plane.

This in itself is a millennial thought, but from the medical standpoint a millennium is an end to fears of illness and death, due to a proper understanding of the causes that lead up to both.

The public carries continually a great fear of germs, a dread of contagion, of contacts with disease-producing foci or agencies, that is born of a complete misunderstanding of the means by which we acquire disease.

When we thoroughly understand this there will be no thought of immunization against disease of any kind, for we will know that in the very nature of the thing there can be no immunization except through our own heightened resistance, from a normal body in full function.

Evidence of the efficiency of serum immunization is still entirely lacking, for we have no way of knowing whether one supposedly immunized against any form of disease would ever take such disease under even extreme exposure.

We do know that not every one does take the communicable diseases, and there must be some form of natural protection, an immunity to these diseases, that the body carries habitually, and that is lost on occasion by certain of these, thus opening the way for infection from the outside.

This natural immunity is nothing more than normal functional efficiency, health, and cannot be created artificially by any means of any kind, being a strictly personal matter.

Speaking of fears in connection with deficient health, the writer recalls a very striking case that illustrates the effect which a cleaner and better body has on fixed fear.

A little lady from New York City, who was staying at the sanatorium with her husband, and who was epileptic, had a fixed and nearly life-long fear of thunder-storms, and when one of these occurred, her husband would generally find her under the bed or in a dark closet.

After she had been nearly four weeks there a tremendous thunder storm broke one afternoon, and she stood with her husband on the front porch and laughed at it, all fear of it being gone.

She was constipated and toxic, her epilepsy coming from this cause, as is generally the case, and after the colon was brought up to date and kept there she had no more convulsions, nor even the petit mal, or little sickness, that indicates the tendency to epilepsy.

With the epilepsy went the fears, for both were caused by the lowered condition of body tone due to the very toxic state.

Reports from this case several years later were that neither the epilepsy nor the fear of storms returned, evidence that she was

adhering pretty closely to the directions for food selection and combination, and also that she had evidently used the enema for a long enough time to permit the corrected dietary to restore the missing colonic action.

Substandard states of the health are the cause of senseless and useless fears, and every one can recall cases that are afraid of everything—driving, walking, even staying at home, for whom everything hides an imaginary danger. What women, especially, suffer from these useless fears is enough alone to create bad states of the body.

Here again we have the vicious cycle in full operation, for fears depress function, including the function of elimination; retained waste creates still greater fears, till there is often a breakdown of the nerves; and the same old argument starts all over again as to whether the nerve state causes the toxic condition or vice versa.

If the body is not allowed to begin this accumulation of toxins there will be no starting point for an intoxication that makes the depressing fears, so as we can easily control the toxic manufacture we are in a position to prevent the advent of the vicious cycle.

If all fears of disease were removed what would become of the doctor? He might have to seek other employment, which would be wholly evil from his standpoint, but from the standpoint of the patient this is mixed with at least some good.

Never to need the doctor is far better than to need him and recover through his ministrations, surely; and when we understand what makes disease of all kinds we will then appreciate better the fact that the doctor has little or nothing to do with this, as it is self-created and can be controlled in no other way than through self.

There is a very evident awakening on this subject of the self-created causes of disease, and it looks now as though it would be no great while till people come to accept their individual responsibilities in disease prevention, and when that day dawns it will surely be the beginning of a true medical millennium.

When everyone realizes that he or she can be well or sick through the manner in which the food is selected, prepared and combined, then surely there will be some attention paid to this most vital part of our daily care of the body.

If the food is right the body will be right, not most of the time but all of the time, and exercise can safely be left to take care of itself.

Exercise is natural to the well body; it is unnatural to a body less than well, and very many are wrecked by forcing exercises when unable to profit by these, when the exercise still further exhausts and depletes a body desiring rest above everything else.

The writer has frequently been called an idealist and dreamer for taking such optimistic view of disease, but the experiences of the past twenty-four years have proved conclusively to him that disease is so perfectly easy to control through a few simple cares daily that he can see no reason for gloom, and he verily believes that the time is not far distant when a realization of these very things will be quite universally in evidence.

We have a glorious country, we live in a wonderful age, we are in a position such as never was enjoyed before by any nation in any age to accomplish things of lasting benefit to humanity; yet we are

forestalled in much of our planning and endeavor by ill health in some form, either in our own person or our families or employees. If we could realize all the great change that would come into our lives by this understanding of disease we would then take every means to further the teaching of such doctrine as is here held forth.

There are more and more large employers of labor who are discovering that a little attention paid to the health of those under their care pays large dividends. They are organizing playgrounds, gymnasia, bathing pools, to assist their help in taking care of their health. But a much more direct means toward this end would be a cafeteria or restaurant at which were served only those foods that are best for the body, and in such combination as would preclude the possibility of the usual fermentations.

Any employer following out this idea intelligently would be astonished by the great change in efficiency in his employees, and in a surprisingly short space of time.

The proper restaurant, selling foods that are real food, is here, it has come to stay, and it is the forerunner of much business along the eating line, for so many are waking up to the fact that their health, happiness and efficiency depend almost wholly on what is eaten each day, that the army of those who will patronize nothing but a proper restaurant is bound to grow to such proportions that the market for foods of this character will soon reflect the desire.

If the government would only interest itself in the prohibition of processing of foods, there would be much accomplished at once toward a lessening of the deficiency evil in our land. The government is fully cognizant of the facts of nutrition, as many feeding experiments were conducted in the Section of Foods, Department of Agriculture; even the feeding experiments before referred to as occuring in the Rockefeller Institute were duplicated in this section, with comparable results.

So Uncle Sam is a party to the demineralization of our national foods by not forbidding it.

Part of very big business, the millers and bakers, is interested in the denaturing of foods, and Uncle does not like to offend big business, for he has found that it does not pay.

He watches the composition of the feed for calves and chickens, and is very severe on any one who sells corncob meal for these innocents, but he does not interest himself in the feeding of the future citizens in the slightest.

This is not as it should be, of course, but what can we do about it? Big business needs the money so we will have to continue to eat of the emasculated food products which they are allowed to sell to us, and which Uncle Sam helps them to advertise under very misleading statements.

It is too much to expect that this state of affairs will ever change itself, and there seems to be but one thing that we can do about it, and that is personally to refuse everything that is in any way processed or refined, and when enough are doing this there will be forced a change in the whole system of preparing and marketing foods.

This is our individual part, and it is probably all that we will ever be able to do to help correct this great evil.

If people knew what they do to their bodies when they take any considerable amount of the refined starchy or sugary foods they

would hesitate, for the number of voluntary suicides is rather small, unless we include those who are actually insane.

Surely no one in his or her right mind would take into the body something that does great harm, when there is always something just as good and that will give us as much pleasure and at the same time do no harm to the body.

Now what will bring about a medical millennium?

Only the better understanding by the individual of the causes of disease and how to avoid them.

This is the very thing that is now happening, and it is most encouraging that speakers on such themes always get a hearing and much sympathetic attention wherever they speak. One patient from Florida said only a few days ago that when an address on any phase of health or foods is announced at any hotel of the many wintering places, there is almost surely a crowd that will pack the audience room to the doors.

Not so many years ago such an announcement would not attract a corporal's guard for audience; now the tendency is toward a better interest and understanding in health matters, as these apply to the individual.

If every one were to take even the menus here outlined for one month, there would be noticeable a change for the better in general health that would astonish any one who has not so far interested himself in the subject.

These are not by any means ideal diets, but are intended to apply to those who have not before dieted to any extent, and are more in the nature of a compromise between conventional habit in eating and the ideal diet for one who has gone far with food study.

The writer does not hesitate to promise that if even such changes in eating as are indicated by these menus were put into effect they would practically end all deficiency and acid conditions, for the complete absence of fermentation from the use of such menus would open the eyes of any one who has previously suffered much from this cause of acid states.

The proof of the pudding is in the eating, and if any reader is inclined to take issue with the statements heretofore in this little book he is requested before making up any fixed opinion on the subject to adhere faithfully to the indicated diet of the earlier chapter for one month, till he has gone through to the end of the four weeks, and then he is allowed to form his own conclusions, and no one will quarrel with his decisions.

Any such must remember that in adopting such diet for even four weeks he is starting a changed body chemistry, and symptoms may be noted that are not at first pleasant, but these are always incidental to better states of the body, as function is freed more and more from the depression of acid formation and again rises to heights that may mean a reaction, when some form of acute housecleaning takes place.

If such should occur it is only necessary to go right on, for this means very much better conditions of health in the near future.

If every one could be induced to adopt at once a non-acid-forming habit of food selection and combination, the wished-for medical millennium would already be well launched, and there would then be no further difficulty in securing the full cooperation of any in the spreading of this information broadcast.

When each child, down into the grades even, is taught the necessary fundamentals of foods, again this medical millennium will be well launched, and better conditions in sight for the coming generation than we have ever known.

We have it in our power to speed this day, if we have such outcome really at heart.

TALK HEALTH!

The dreary, never changing tale
Of mortal maladies is worn and stale.
You cannot charm, or interest, or please
By harping on that minor chord, disease.
Say you are well, or all is well with you,
And God shall hear your words and make them true.

Ella Wheeler Wilcox.