



Control
Your
Cravings

Natural Appetite Suppressants

for Safe, Effective Weight Loss

MIKE ADAMS & DANI VERACITY

Natural Appetite Suppressants for Safe, Effective Weight Loss

MIKE ADAMS & DANI VERACITY



All information contained in this book is copyright © 2005, 2006, 2007, 2008, 2009 by Truth Publishing, Inc. All rights reserved. All information contained in this publication may not be copied, published, distributed, broadcast, posted on the internet, or otherwise used for any purpose whatsoever without the prior written consent of Truth Publishing, Inc. All persons doing so will be prosecuted within the fullest extent of the law.

CAT 213592

For information regarding this and other Truth Publishing books,
please contact Truth Publishing International, Ltd:
www.TruthPublishing.com/Contact

Disclaimer: This book is offered for information purposes only and is protected under freedom of speech. It is not medical advice nor should it be construed as such. Nothing in this book is intended to diagnose or treat any disease. Always work with a qualified health professional before making any changes to your diet, prescription drug use, lifestyle or exercise activates. This information is provided as-is, and the reader assumes all risks from the use, non-use or misuse of this information. The information in this book is not supported by conventional medicine or most physicians. It is, however, the truth.

Table of Contents

An important message from the Health Ranger	1
Why you need natural alternatives to diet pills and weight loss drugs	7
Your appetite: What it is and how to control it	9
Water: The natural, healthy, zero-calorie appetite suppressant	11
Fiber: Feel "full" without the extra calories	12
Appetite suppressant foods, herbs and other supplements	14
Appetite suppressant amino acids	18
A note on the FDA's ban of Tryptophan in 1989:	21
"Smell therapy"	22
How to control your appetite and boost your metabolism at the same time	23
Appetite suppressant and metabolism-boosting herbs and extracts	23
More natural substances that boost your metabolism and curb your appetite	28
Green tea: So healthy, it's in a category of its own	28
Vitamins and minerals that may provide additional weight loss help	29
Exercise: The best way to control your appetite and boost your metabolism	30

How to incorporate exercise into your life	31
Fighting food cravings	33
Vitamin and mineral deficiencies	33
Common food cravings, their associated mineral deficiencies and solutions	34
How to prevent mineral-based food cravings in general	35
Emotional eating	35
Depression	36
How to protect yourself from clinical depression:	37
Can color affect appetite?	39
Weight loss eating plans and strategies	41
Raw food diet	41
A low GI (glycemic index) diet	43
Taking control of your blood sugar and your weight with Chia and Salba	43
Tips for incorporating Chia and Salba into your diet	44
Block your body's absorption of carbs with Swanson Health Products' Ultimate Carb Control Supplements	45
Can hormone supplements safely help you lose weight?	46
DHEA	46
Synthetic human growth hormone (HGH)	48

Less common hormone supplements	49
Fluid retention (Edema): An inside guide	50
Pinolenic acid	51
How pinolenic acid works	53
Calorie restriction	55
An A-to-Z guide to weight loss aides and terms	58
Research on natural alternatives to diet pills and weight loss drugs	66

An important message from the Health Ranger

This is Mike Adams, the Health Ranger, with an important message about losing weight with appetite suppressants. It's a seductive idea—losing weight by simply turning off your hunger—and today there are many supplements available to help accomplish that. But there's something missing from such a simplistic view of weight loss, and this is the urgent message I'd like to communicate to you in this book.

People living in our modern Western culture tend to be overfed and malnourished at the same time. It means we are eating far too many calories, but too few actual nutrients. It's because the food companies process out most of the nutrition in order to create their manufactured or processed foods. For example, a grain of wheat straight out of the ground contains measurable levels of magnesium, healthy oils, protein, bran and a number of vitamins and minerals, including B vitamins. But by the time it is processed by a grain milling company and turned into bleached flour, it is missing as much as 98 percent of the original nutritional content of certain minerals. In fact, the byproduct of processing foods for human consumption is fed to cattle and other animals, and that byproduct is what contains the vast majority of the nutrition, including bran, protein, healthy oils, B vitamins, calcium, magnesium, zinc, chromium and other nutrients. By the end of the processing, humans are being fed the nutritionally worthless parts of foods, while animals are fed the parts highest in nutrition.

Molasses, for example, is the byproduct of sugar processing. Molasses contains all the vitamins and minerals naturally found in sugar, whereas white sugar is almost nutritionally worthless. It's a big question, really: Why are we feeding our animals all of the nutrients from our food while we are feeding ourselves and our children foods that lack nutrition? The answer is that no one makes money when animals get sick, but it's big business to treat diseases like diabetes, obesity, heart disease and cancer. The ongoing consumption of nutritionally depleted foods actually ensures the continuation of these chronic diseases in the population.

So, now we understand how many people actually begin dieting in a state of malnutrition, and we understand why cravings are so high in the first place. It's not sufficient to simply turn off your appetite using supplements and then eat whatever you want; that is not a healthful or responsible way to approach weight loss. Ask yourself instead, "Why do I have these cravings? Why do I crave carbohydrates or chocolate?" The answer to that is almost always that your body currently exists in a state of extreme malnutrition, especially when it comes to minerals. A craving for chocolate is often a craving for magnesium, because the cacao bean from which chocolate is made is naturally high in magnesium. So by craving chocolate, your body is telling you to eat more magnesium. Craving carbohydrates is often a craving for other vitamins and minerals as well. Our brains tell us to keep eating until we finally accumulate sufficient quantities of minerals, and that's why so many of us who are not following a healthy diet suffer from never-ending cravings. It's the body's way of trying to get you to accumulate the vitamins, minerals and phytonutrients that you need. But since our food lacks these elements of nutrition—thanks to depleted soil, food processing and shelf life—we are not able to accumulate those nutrients through eating alone. Any person who continues to follow the standard American diet and does not supplement with vitamins, minerals and other nutritional elements, will never be able to turn off the cravings, even if they follow the appetite control supplements covered in this book.

So step one is to enhance your nutrition before you try to turn off your appetite. This is a crucial message if you want to succeed in controlling your appetite. It means supplementing with both macro minerals and trace minerals. The products I recommend for mineral supplementation are the Multiple Mineral Liquid Concentrate found at www.Eidon.com, and the Catalyst Altered Trace Minerals found at www.BaselineNutritionals.com. Another company, Trace Minerals Research, offers a variety of mineral products, including one called Complete Foods Multi, and you can find them at www.TraceMinerals.com. I definitely recommend their products, as well.

No matter what supplement you take, you've got to get minerals back into your body. You can do that by eating plants grown in mineral-rich soil. Eating mineral-rich plants is actually the best way to get minerals back into your body. One way to do that is to grow your own foods and treat your soil with concentrated ocean water. Ocean water, as opposed to tap water, is naturally rich in a variety of minerals. If you don't live near the ocean, you can purchase ocean water from www.OceanGrown.com. That's what I do in my own garden. I wouldn't advise it if your soils suffer from excess salt, but for most soils, you can certainly add ocean minerals without putting in too much salt. It won't raise the salt content of the produce you grow in your garden, either; it just boosts the full spectrum of

minerals. So, whether you are getting supplementation through vitamins, capsules, tablets, foods, powders, liquids or other forms, it is crucial to get these minerals back into your body if you want to end your cravings.

In order to digest these minerals and actually assimilate them, you need a highly acidic environment in your stomach, which means high hydrochloric acid production. Because we've followed such a poor diet for so many years, many Westerners cannot generate sufficiently acidic hydrochloric acid to effectively absorb the minerals they need, so I strongly recommend supplementing with digestive enzymes that include HCl, or hydrochloric acid. This will help you absorb the minerals. It's also a good idea when you take mineral supplements to also take some vinegar. You can just drink some apple cider vinegar, take black vinegar supplements, or just drink a little bit of regular white vinegar. This vinegar is acidic and will help the digestion of minerals. Even though we often talk about the importance of an alkaline diet, when you are attempting to absorb and assimilate minerals, you need a highly acidic environment.

Superfoods are also a great way to boost your nutrition, and that means taking supplements made from whole foods and nutrition-dense foods such as germ and bran products, raw nuts and seeds, spirulina, chlorella, goji berries, blueberries, pomegranates, hemp, hemp seeds, sprouts of any kind and so on. These nutritionally dense superfoods give you far more nutrition per ounce than common foods, such as hamburgers, salads, regular fruits and vegetables, and so on. Remember: It is important to get high-density nutrition into your body.

Many minerals, especially calcium, cannot be absorbed into your bloodstream without the presence of another nutrient in your body called vitamin D. Vitamin D should probably be called a hormone rather than a vitamin. It's something that is generated in your skin in response to exposure to ultraviolet light. When your skin is exposed to the sun, vitamin D gets circulated throughout your bloodstream and certain organs like your liver and kidneys, where it is metabolized into a form that is useful to other organs in your body. When vitamin D is present, you can easily absorb and assimilate calcium, but when vitamin D is deficient in the human body, calcium absorption is greatly impaired.

This is why so many people suffer from weak bones, and also why osteoporosis is such a prevalent disease in the Western world. It's not because people aren't getting enough calcium; it's because people are chronically deficient in vitamin D. The farther north you live in latitude—that is, the farther away from the equator you live—the less sunlight you get, and the less vitamin D you get. If you live in a rainy area like Seattle, you just don't get that much sunlight. To make it even

worse, many people also put on sunscreen every time they go outside, and as a result, they do not have vitamin D in their body. As a result of the deficiency, they may suffer from osteoporosis, cancer, diabetes, heart disease, gum disease, schizophrenia, depression and many other disorders that are directly caused by chronic vitamin D deficiency. We have children being born today with rickets, a disease that it is caused by a vitamin D deficiency, which means both the mother and the child are deficient. This is a disease that should've been eradicated a hundred years ago. The cure is simple, but the disease still exists because people do not have access to information about sunlight and how important it is to their health.

Sunlight will do several things. It will not only boost the absorption of calcium, which will help boost your nutritional density and reduce cravings, but it is also a mood enhancer. It's better than antidepressant drugs, it's free and has no side effects. So if you make sunlight part of your diet and treat it like a vitamin that you need to get a certain amount of on a regular basis, then you will have far greater success. Once you begin remineralizing your body through supplementation and eating organic produce, which is higher in minerals and vitamins than conventional produce, and getting sunlight, then you'll be well on your way to success with any diet.

But there's one more factor that's important to mention. There are some foods and beverages that actually strip nutrition out of your body. These are what I call "negative nutrition foods." They include things like sugar and high-fructose corn syrup—the sweeteners found in cereals. These simple sugars actually require more nutrition to process than they provide, actually sucking vitamins and minerals right out of your body as they are processed. It's important if you want to be successful with weight loss efforts to stop consuming negative nutrition foods and beverages. Those include soft drinks or any kind of beverage that involves sugar—even coffee. In fact, caffeine itself can be a depleting element, so be sure to minimize your consumption of caffeine in all its forms. Also avoid white flour or any kind of processed, milled grain, along with fried foods and anything made with hydrogenated oils. These foods contain carcinogenic chemicals that your body must defend against, using your valuable nutrients.

You are best off not eating anything that has been baked or fried at very high temperatures, including all snack chips, cookies, crackers and just about every kind of baked good. You may not be able to eliminate these completely, but be aware that these foods are working against you. Losing weight successfully and safely is not merely about turning off your appetite. Your appetite is not your weight problem, but a symptom of an underlying problem. Turning off your appetite sounds like a great strategy, and it can be, but only if you have adequate nutrition.

To summarize, you must first remineralize your body with outstanding nutritional supplements. You need more vitamins, minerals and superfoods that contain phytonutrients. That alone may help you start losing weight, even without any of the other strategies. Second, avoid those foods classified as "negative nutrition foods" because they will keep you in a state of nutrient deficiency, which will promote cravings. Third, begin to explore and use the natural appetite suppressants revealed in this book. The appetite-regulating nutrients can help you stay on track with your dietary effort so that it becomes a success rather than a failure. Fourth, physical exercise is a necessary component of any successful diet. There is no such thing as weight loss without exercise, unless you are ill. If you want to achieve healthy, safe weight loss, that means physical exercise, even if it's walking three days a week for 20 minutes. That is far better than sitting on the couch doing nothing. Exercise is the missing piece of the puzzle that simply must be present in order for weight loss to work.

Finally, drink plenty of water during any kind of weight loss effort . Most people are chronically dehydrated. They don't have enough water and they are afraid to drink more because they think it's going to cause them to weigh more on the bathroom scale. But, your body is already 75 percent water, and water is necessary to metabolize fat, remove toxins and circulate the appetite-suppressing nutrients that you need in order to achieve long-term weight loss. Most people need more water, not less water. Instead, they are drinking diuretic substances like sodas and coffee, which remove water from the body. Water will actually help you lose weight in the long term, even if it causes water retention in the short term. What you're trying to lose in the long term is actually body fat, not water. Body fat can only come off when you burn more calories than you take in. If your fat metabolism is working correctly, it requires water, so don't be afraid to drink water. Drink as much as you want, and probably a little bit more. If you stay hydrated, physically active and well-nourished, you will have significantly greater success with your weight loss efforts than 90 percent of the people out there.

So how do you measure your success once you have put all of these steps into action? Do not use a bathroom scale. The best way to measure your success is with a pair of fat calipers. You can buy them on www.Amazon.com or just about any place online. Fat calipers tell you how much fat you have in certain key locations on your body, and those locations differ for men and women. It only takes about 20 seconds to measure your body fat with the caliper. It's very easy to do yourself, and you can track your body fat loss without the crazy emotional roller coaster of the bathroom scale. Remember, you're not just out lose weight; you want to lose body fat. A typical bathroom scale is useless for measuring body fat.

Please take all of this information to heart. If you are serious about losing weight, you must be aware that you are probably in a state of malnutrition right now. You probably lack vitamin C, zinc, magnesium, calcium and other vitamins and minerals, so you must restore your nutrition before you can have any kind of successful weight loss. Once you do that, you can move on and began to use the appetite-suppressing supplements described in this book. Keep yourself well informed, listen to your body and only move forward with this information under the direct supervision of a qualified health practitioner, preferably a licensed naturopathic physician.

Why you need natural alternatives to diet pills and weight loss drugs

If you're like most weight-conscious consumers, you're curious about the FDA's approval of low-dose Xenical (orlistat) as the nation's first over-the-counter (OTC) weight loss drug. Maybe you've always wanted to try a pharmaceutical weight loss aide, but have been afraid to ask your physician for a prescription, or maybe you want to try a "magic pill" alternative to diet and exercise.

The fact is, there is no "magic pill" for weight loss. Pharmaceutical drugs often have uncomfortable, and possibly even downright dangerous, side effects, regardless of whether or not you need a prescription for them. Over-the-counter diet pills like GlaxoSmithKline's Xenical, which will be marketed under the OTC name Alli, is no exception.

When you take Alli with meals, it works by blocking the absorption of about one-third of the fat you consume, so you can eat that slice of pizza or bowl of ice cream and only take in one-third the fat you normally would. It sounds too good to be true, right? In a way, it is, because this fat blockage has some negative consequences. The fat your body isn't absorbing has to go somewhere and it does—out. For this reason, Alli's side effects include:

- Loose or oily stools
- Gas
- Oily spotting on underpants
- Incontinence

Around 50 percent of Alli users experience these side effects, and about 7 percent experience bowel incontinence. This means that, if you take Alli, you have a 50-50 chance of experiencing gas and dirty underpants, and a 7 percent chance of needing adult diapers. These side effects (especially the last one) may negatively affect your job, your health and your social life.

However, Alli's side effects may not end with digestive problems. Just because the FDA approved

Alli for OTC use does not mean that they know the long-term effects of unsupervised, OTC use. In the 1990s, after a University of Rochester-based study demonstrated that a combination of fenfluramine and phentermine ("fen-phen") was more effective than exercising and watching calories, millions of people flocked to their doctors, looking for a "magic pill" way to lose weight. At first, everything seemed alright: The FDA had, after all, approved phentermine for short-term ("a few weeks") use as a weight loss aide in 1952, and they approved fenfluramine for use as an appetite suppressant in 1973. A combination of the two drugs seemed perfectly safe—that is, until fen-phen users started to experience heart valve damage and a potentially fatal lung disease called primary pulmonary hypertension, which led to the FDA's ban of fen-phen in 1997. Will Alli eventually meet a similar end? The fact is that no one knows for sure.

Glaxo estimates that Alli will cost consumers \$12 to \$25 per week, totaling at least \$1.5 billion a year in retail sales, while simultaneously emptying purses, wallets or bank accounts. In other words, the OTC diet pill's side effects extend to your finances.

If you've been struggling with your weight for years, you might just be weighing the pros and cons and deciding that All is worth a try despite these negative consequences. If this sounds like you, then you're not alone; an estimated 5 or 6 million Americans a year would buy Alli as an OTC drug, according to its maker's figures.

But what these potential Alli consumers don't know is that they don't need an OTC medication with life-inhibiting consequences to help them lose weight. Nature provides us with safe alternatives to drugs like Alli. These natural substances can help anyone lose weight safely and naturally, and keep it off. Best of all, these natural diet aides come without the high price tag and the side effects. In fact, you can find many of them in your local grocery or health food store.

Your appetite: What it is and how to control it

For many dieters, appetite control is an uphill battle. Have you ever noticed that the more you try to limit what you eat, the hungrier you feel? Though this phenomenon may seem frustrating and cruelly ironic to dieters, it is actually the result of centuries of evolution. "The urge to eat reflects a very complex system that has evolved to help humans deal with food shortage," Dr. Michael T. Murray writes in his 2004 *Total Health* article "Key Triggers of an Increased Appetite and a Natural Solution." As our ancestors evolved, "survival of the fittest" meant survival of the fattest. Putting extra body fat on during times of food abundance was our ancestors' equivalent to the modern motto of "saving money for a rainy day." This stored body fat decided life or death during food shortages.

Obesity expert Stephen Bloom says, "We are machines designed to live through famine. In the days when we evolved, there would be a good harvest for six years and a bad harvest in the seventh year. And the only people who lived through the seventh year were the ones that were overweight. So, if you were able to watch your weight very nicely, you aren't here anymore. We are survivors of the obese. All we need is a plentiful supply of food and we gain weight. That's the way we are made."

However, thanks to grocery stores and the fast food restaurants on every corner, most of us now have too much access to food—most notably, unhealthy food. We will probably never experience food shortages, but our bodies don't know that. So, our appetite control systems tell us to consume more calories than we need to support our daily requirements, and then our bodies naturally store those excess calories as fat. As Dr. Murray says, the human body "is extremely biased toward weight gain." In other words, our bodies are still saving the excess fat we consume at meals for a "rainy day" when food is scarce, but that rainy day never comes.

For decades, researchers have been studying the human appetite control system in an effort to understand it and, in a sense, control it. Scientists have long known that a part of the brain called the hypothalamus is the main appetite regulation organ and that the neurotransmitter

serotonin is responsible for feeling "full" rather than hungry, but recent research has demonstrated that serotonin isn't the only player involved in the hypothalamus' elaborate appetite control system.

You can blame the extra food cravings you experience when dieting on a recently identified hormone called ghrelin. Your stomach produces this appetite-stimulating hormone when it is empty and when you limit the amount of calories you take in per day. This is bad news for dieters of all shapes and sizes, and even worse news for people who are clinically obese, as clinically obese people tend to have elevated ghrelin levels to begin with.

Ghrelin is so essential to the appetite control system that some endocrinologists are now calling it the "hunger hormone." It and approximately four-dozen other chemicals travel around the human body in a complex message relay system from the gastrointestinal tract to your brain; most of these hormones and other biochemicals are minor players. Take a look at the major elements behind a dieter's ice cream binge:

- At only 5 feet tall and 300 pounds, "Cathy" is obese. Her New Year's resolution is to finally lose weight, so on Jan. 2, she begins counting calories and trying to limit them to only 1,200 per day.
- Since her body is taking in fewer calories than it is used to, her stomach responds as if a famine was beginning and produces excess ghrelin.
- This large quantity of ghrelin then travels through the bloodstream to the brain and tells the hypothalamus that Cathy needs to eat otherwise she'll starve, even though she has eaten more than enough calories to support her body's energy needs.
- The hypothalamus then produces an intense desire to eat, which Cathy responds to by eating a pint of ice cream.
- Since Cathy's stomach is full, the ghrelin levels in her blood should go down, but high-fat foods, like ice cream, lower ghrelin levels slowly and only by about 50 percent, according to a study conducted by University of Washington researcher David E. Cummins (Raloff). This means that, even though Cathy ate a whole pint of ice cream, her hypothalamus is "realizing" that she ate much more slowly and less than if she would have eaten a high-protein snack, like nuts. According to Cummins' research on mice, high-protein meals create

a rapid, 70-percent drop in ghrelin levels, so Cathy would have felt full much more quickly after eating less if she had chosen a high-protein snack instead of a high-fat snack.

- Now that Cathy has eaten, her intestines should be producing an appetite-suppressing hormone called peptide YY 3-36 (PYY) in amounts directly correlating to the amount of calories she consumed. Since an entire pint of ice cream has a tremendous amount of calories, her intestines should be producing vast quantities of PYY. Unfortunately, since she is obese, Cathy's intestines don't produce as much PYY as people within a normal weight range, so even though she consumed many calories, not very much PYY is traveling through her bloodstream and to her hypothalamus (Raloff).
- Due to this, Cathy's hypothalamus still isn't sure if she ate enough, so it isn't producing very much serotonin to create a feeling of satiety, the message to stop eating, and so Cathy eats three chocolate chip cookies.
- Realizing that she broke her diet, Cathy begins to feel sad and worthless and looks for "comfort food" to fix the negative emotions she is feeling. When she was a child, cookies always seemed to make everything "okay," and so she now finishes the whole package of chocolate chip cookies.
- In less than an hour, Cathy has eaten much more calories than her body could possibly use in a day, so her body takes the excess calories and stores them as fat, worsening Cathy's obesity.

Does this sound familiar? Have you ever wondered why you're the hungriest when dieting? Ghrelin is to blame and, according to Cummins' research, the longer you restrict your calories, the more ghrelin your stomach produces. It's "as if the body is attempting to regain the pounds," Janet Raloff explains in her *Science News* article "Still Hungry?"

Water: The natural, healthy, zero-calorie appetite suppressant

Want an all-natural, healthy, calorie-free appetite suppressant? Just turn on your faucet or open a bottle of water. For decades, dieters have known that drinking water naturally reduces your appetite by filling your stomach, yet most dieters still don't drink even the minimum amount (eight to 10 glasses) of water their bodies need each day to keep healthy.

To get the maximum appetite suppressant benefits from water, *Staying Healthy with Nutrition* author Dr. Elson Haas recommends drinking two or three glasses as soon as you wake up in the morning, several glasses in between meals and two glasses 30 to 60 minutes before dinner.

Tips on getting enough low- or no-calorie fluids per day:

- Drink cold water instead of warm or hot water. According to Dr. Haas, your body will burn calories warming it.
- Flavor your water with lemon juice.
- Drink herbal teas. Many herbal teas—such as yerba mate and red raspberry leaf tea—also act as natural appetite suppressants and metabolism boosters.
- Try mixing herbal tea with unsweetened fruit juice for a refreshing, filling, low-calorie drink. These mixtures can do the trick when hunger pangs strike between meals, according to the book *Prescription for Nutritional Healing*.
- Instead of calorie-dense, sugary soft drinks, drink sparkling water flavored with unsweetened fruit juice.
- Steam-distilled water with minerals added can fill you up, so you're less tempted to overeat.
- Carry a water bottle with you wherever you go.
- Don't use alcoholic beverages to fulfill your daily fluid requirements. They're high in calories and, according to Mark Mayell's *Off the Shelf Natural Health*, they actually lower your body's metabolism of calories.

Fiber: Feel "full" without the extra calories

The typical Western diet is laden with foods that, while high in calories, do not make you feel "full." Eating a bowl of healthy oatmeal will make you feel fuller than eating a pint of ice cream, but that single bowl of oatmeal nevertheless provides you with more nutrients and less calories than that entire pint of ice cream. Fiber is the reason behind this apparent paradox. By providing bulk to your diet, fiber fills you up without the extra calories you don't need, making it a natural appetite suppressant.

Experts agree that fiber is a truly remarkable weight loss aide, as it can help you lose weight in not one, but six ways:

1. It makes you eat slower. It takes most people a lot longer to eat a bowl of bran flakes than one brownie (Murray).
2. Since it provides bulk in your intestines, fiber makes you feel "full," so you'll want to eat less. According to a research study reported in *Gentle Cures and Natural Medicines*, people who drink even just one glass of orange juice with pectin before meals feel fuller and eat less (the editors of FC&A Medical Publishing).
3. It stimulates your body to release natural appetite-suppressing hormones like cholecystokinin (Murray).
4. By helping your body transport fat and calories through your digestive system, fiber actually increases the amount of calories you excrete in your feces. The fewer calories you let in; the fewer calories you put on your body as fat (Mayell, Murray).
5. Soluble fiber, such as psyllium, coats your intestinal tract, reducing the amount of fat your body absorbs (Haas). In this sense, psyllium does the same job as the OTC diet pill Alli, without the embarrassing side effects.
6. Soluble fiber slows down your body's release of glucose, so you'll feel hungry less often; this also prevents the onset of type 2 diabetes (Whitaker).

With all these benefits, adding more fiber to your diet just may be one of the most important steps you take to achieve your weight loss goal, maintain a healthy body weight and improve your general health. It's also one of the easiest steps you can take. Health food stores, and even your neighborhood grocery stores, are jam-packed with foods high in soluble and insoluble fiber. How many of the following high-fiber foods do you already have in your home?

Insoluble fiber

- Whole grains (such as bran, buckwheat and bulgur)
- Whole grain bread (as opposed to white bread)
- Vegetables (especially peels and skins)

- Fruit pulp (such as a glass of "homestyle" orange juice)
- Glucomannan supplements (obtained from konjac root) taken with water right before meals

Soluble fiber

- Fruit and vegetables (especially apples)
- Legumes
- Oatmeal
- Nuts (such as almonds, psyllium seeds and sunflower seeds)
- Guar gum tablets

If you don't already have these items stocked in your refrigerator or pantry, then go out and buy several right now. Start your weight-conscious and healthy eating plan today.

Appetite suppressant foods, herbs and other supplements

Avocado extract

Imagine looking at a candy bar or a bowl of ice cream and not wanting to eat it. Imagine feeling an absolute aversion to sugary foods. Well, according to both human- and animal-based research studies, avocado extract tablets make this dream a reality.

Avocado extract tablets have helped some people lose significant amounts of weight, even when they are not making a conscious effort to diet. These people report that, though they were not purposely dieting, they ate fewer calories than they normally would, simply because they weren't hungry. Though most people lose weight by taking two avocado extract tablets per day, the Life Extension Foundation reports that you can take more when you feel hungry, so as to eat even fewer calories daily, or limit yourself to only two tablets and eat a healthy, sensible meal. You can buy avocado extract tablets online or at your local health food store.

Chá de bugre (*pomngaba*): Can It Really Get Rid of Cellulite?

For women worldwide, it's the subject that nightmares are made of. We're talking about the dreaded "c word"—cellulite. Cellulite occurs when subcutaneous fat protrudes into the dermis layer of the skin, creating a "cottage-cheese- or orange-peel-like" appearance to the body. According to Wikipedia, between 85 and 98 percent of post-pubertal females have at least some cellulite, so even women who are not necessarily overweight can have "cottage cheese skin."

As many women know all too well, cellulite is extremely difficult to get rid of. Simply cutting back on calories or following a fad diet will not take away your skin's dimpled appearance, and liposuction is completely ineffective against cellulite. Though the cosmetic industry markets a myriad of "miracle cellulite cures," they too are largely ineffective. In fact, many experts agree that only following a well-balanced diet and exercising regularly can truly get rid of cellulite.

On the other hand, many Brazilians believe that the rainforest herb chá de bugre both suppresses appetite and actually rids of the body of existing cellulite, making it extremely popular at Brazil's famous beaches. "Chá de bugre products are highly commercialized as a weight loss aid in Brazil, where tea bags, fluid extracts, and tinctures of chá de bugre are commonly seen in pharmacies, stores, and even in the beach-front eateries and refreshment stands along Rio de Janeiro's beaches," Leslie Taylor explains in *The Healing Power of Rainforest Herbs*.

You don't have to go to Rio de Janeiro to get chá de bugre. Its popularity has extended to the internet, so you can buy it in many forms, including a tea infusion.

Chickweed

Some experts believe that the common "weed" chickweed acts as a natural appetite suppressant, according to Dr. Elson Hass' book *Staying Healthy with Nutrition*. It is widely available online.

Cumin

This flavorful spice not only adds a little pizzazz to any dish, it also acts as a natural appetite suppressant, according to *Asian Health Secrets*.

Dahlia roots

Dahlia roots contain a natural fructose polymer called inulin, which helps reduce your appetite by slowing carbohydrate metabolism. The *Anti-Aging Manual* recommends that you eat one serving per day, alternating between raw and cooked, or just use the juice rather than the peel.

Evening primrose oil

According to Professor Gary Null's *Complete Encyclopedia of Natural Healing*, if you take 500 milligrams of evening primrose oil in the morning, it may help reduce your appetite all day long.

Fennel

Fennel seeds, stalks and bulbs act as a natural appetite suppressant, according to *Prescription for Nutritional Healing*. Plus, they make a great garnish, giving any dish their special flavor.

Gamma-linolenic acid (GLA)

Gamma-linolenic acid is the active component of flaxseed and flaxseed oil, primrose oil and blackcurrant seed. By helping to control the metabolism of fats, GLA is a natural appetite suppressant.

German chamomile tea

Many people in Costa Rica use German chamomile tea as an appetite suppressant, but the trend hasn't caught on elsewhere yet.

Grapefruits

As many dieters around the world already know, grapefruit is the quintessential diet food. As Dr. Haas points out, grapefruits are so low in calories that the energy it takes to eat one of them most likely burns off all the citrus fruit's calories. Plus, grapefruits are a natural appetite suppressant.

Gymnema Sylvestre

Imagine what it would be like to be unable to taste sugar. Would you still want to eat that cookie, bowl of ice cream or candy bar? Several studies have confirmed that the herb *Gymnema sylvestre*, which remarkably reduces and even eliminates the taste of sugar for up to 90 minutes when taken before meals, significantly suppresses appetite. In India, doctors have been using it for centuries to treat diabetes, and Western physicians are beginning to recognize its ability to "tame the sweet tooth." It is widely available online in supplement form.

Hawthorn berries

In traditional Chinese medicine, hawthorn berries are believed to act as a natural appetite suppressant and also aid in the digestion and assimilation of nutrients. Many Western practitioners of alternative medicine use the herb for cardiac health and circulation, so hawthorn berries are widely available in tablet form.

Jerusalem Artichokes

Like dahlia roots, Jerusalem artichokes contain inulin, a natural fructose polymer that curbs your appetite by slowing down carbohydrate metabolism. *Anti-Aging Manual* author Joseph B. Marion recommends eating one serving per day, alternating between raw and cooked, or just using the juice rather than the peel.

Nuts

Fact: Not all fat leads to body fat. Many dieters avoid nuts because they're high in fat and calories, but they're actually good for you. Nuts like almonds, walnuts, pecans, filberts, macadamia nuts, and sunflower and pumpkin seeds may be high in calories, but their fat-to-carbohydrate ratio is so high that they'll naturally suppress your appetite, which will lead to you eat fewer calories overall.

Peppermint tea

Drinking peppermint tea helps some people reduce their appetite, according to Dr. Hass' book *Staying Healthy with Nutrition*.

Plantain (*Plantago ovata*)

Not to be confused with the bananas known as plantains, this so-called common "weed" suppresses appetite with a bulking action similar to fiber, but even more significantly, scientists in Italy, Russia and several other countries believe that plantain actually naturally reduces the absorption of lipids in the intestines. Plantain may also lower triglyceride and cholesterol levels, and it is available online in leaf or powdered form.

Spirulina

This potent cancer-fighter and immune-booster can help you lose weight by satisfying your appetite with nutrients rather than empty calories. In one double-blind study, 16 overweight people lost a small amount of weight after eating only 2.8 grams of spirulina three times per day for four weeks. Experts are still unsure exactly how spirulina reduces hunger. One theory is that its high content of phenylalanine affects the hypothalamus (see "*Appetite Suppressant Amino Acids*" section). Another theory is that spirulina raises blood sugar levels enough to cause the hypothalamus to suppress hunger pangs. Known as a "superfood," it is widely available online in tablet, powder, bar and capsule form.

Stevia

Unlike avocado extract or *Gymnema sylvestre*, stevia is not reported to reduce your desire for sugary foods or your ability to taste them; however, studies show that it does promote weight loss. For one, it is a natural calorie-free sweetener, so you can use it as a sugar substitute without getting the calories of refined white sugar or the potentially harmful side effects of chemical sweeteners such as aspartame. Second of all, people report that taking 15 to 20 drops of stevia before meals makes them eat less because they feel less hungry, so stevia may also work as a natural appetite suppressant. For weight loss and blood sugar control, use stevia in place of sugar and artificial sweeteners in baking, and flavoring drinks and foods.

Appetite suppressant amino acids

As the building blocks of proteins, amino acids are also the building blocks of life, so deficiency in even one amino acid can cause severe physical and psychological conditions. Phenylalanine deficiency, for example, is believed to contribute to the onset of schizophrenia. Some amino acid deficiencies play a role in overeating and weight gain, as regulatory organs such as the thyroid gland need them to function properly. You can buy many amino acids OTC, and they can have a much more positive effect on your body than OTC diet pills such as Alli, so let's look at the major players in weight control.

Phenylalanine (L-Phenylalanine)

When it comes to weight control, phenylalanine is truly remarkable. Your body needs it to form another amino acid called tyrosine, which your thyroid gland needs to produce the hormones that control metabolism. If you are deficient in phenylalanine, then you're most likely deficient in tyrosine, which means your metabolism—the rate that your body converts calories to energy—is not operating as it should and unburned calories equal stored body fat.

In addition to keeping your metabolism in order, phenylalanine also plays an important role in appetite control. Again, your body needs it to produce tyrosine. According to *Off the Shelf Natural Health* author Mark Mayell, "Tyrosine is also the first link in the production of certain neurotransmitters, including dopamine, noradrenaline, and adrenaline, that are suspected of playing important roles in controlling appetite."

However, phenylalanine's influence on appetite control doesn't end with tyrosine, this essential amino acid also triggers the release of cholecystokinin (CCK), which makes you feel "full" and lets you know that it's time to stop eating. Because of this satiety effect, the *Vitamin Diary*

believes that taking phenylalanine supplements before meals can actually make you lose weight *daily*. "An intake of half a teaspoon of L-phenylalanine powder 30 minutes before each meal, can lead to a loss of as much as 100 to 200 grams of weight a day," they write. That equals about six-and-a-half pounds per month, just by taking half a teaspoon of powder before meals.

On the other hand, be careful not to take too much phenylalanine in an effort to lose weight faster. Too much of this essential amino acid can cause high blood pressure, insomnia and irritability. Pregnant women and people with high blood pressure, anxiety, diabetes, phenylketonuria (PKU) or preexisting pigmented melanoma should not take supplemental phenylalanine at all. For others, according to the *Vitamin Diary*, the recommended daily dose (combination of supplement and food sources) of phenylalanine is:

- 16 milligrams for adult men and women
- 22 milligrams for children
- 132 milligrams for infants

On this note, food sources of phenylalanine include:

- Whole grains
- Pistachio nuts
- Almonds
- Piyal seeds
- Groundnuts (peanuts)
- Leafy vegetables
- Poultry
- Cow's milk
- Cottage cheese

Tyrosine

As a precursor to the neurotransmitters dopamine and norepinephrine, tyrosine deficiency can lead to depression and consequent emotional overeating, but that isn't the only reason why you need this amino acid to lose weight. Many nutritional experts agree that tyrosine, which is made from phenylalanine, acts as a mild appetite suppressant because it stimulates the production of the appetite-suppressing hormone cholecystokinin (CCK). Plus, it helps to reduce body fat, helping you to consume fewer calories and cut down on that body fat plaguing your problem areas. As if those benefits weren't enough, tyrosine also acts as a mild antioxidant;

aids in the production the important amino acid phenylalanine (see above); is necessary for proper functioning of the adrenal, thyroid and pituitary glands and stimulates the production of natural, metabolism-boosting human growth hormone (please see the chapter on hormone supplements for more information on human growth hormone).

Tryptophan (5-HTP)

Your body needs the amino acid tryptophan to produce serotonin—an important neurotransmitter that plays a role in everything from depression and anxiety to overeating. Some experts believe that cravings for carbohydrate-rich "comfort foods" are a form of self-medication. "It is possible that some overweight or depressed people over-consume dietary carbohydrates, using these foods as though they were antidepressant drugs to increase their serotonin levels," Dr. Richard Wurtman explains.

According to *Off the Shelf Natural Health*, tryptophan both directly and indirectly works to decrease your appetite and help you keep your weight under control. The amino acid:

- **Directly:**
Increases your serotonin levels. Serotonin helps the hypothalamus signal the sense of "fullness," reducing your appetite.
- **Indirectly:**
Like phenylalanine, tryptophan signals the intestinal tract to release the hormone CCK into the bloodstream, giving you the sense of being "full." Additionally, there is some evidence that CCK signals the pituitary to release a fat-burning hormone.

However, according to the *Vitamin and Mineral Encyclopedia*, studies evaluating tryptophan's overall affects on weight loss have been mixed in regards to how much is effective. One study demonstrated that the amino acid reduces appetite in lean people, but a study done in obese people showed the same amount of tryptophan (three grams) had no effect. Based on these results, the researchers conducting the latter study theorized "that these extremely obese individuals may require doses higher than three grams per day, since doses in that range did, in fact, seem to have appetite-suppressing effects in lean individuals, as noted above, and, to some extent, in more mildly obese people" (Hendler).

Studies on the most easily utilized form of tryptophan supplement, 5-HTP, have been more positive. Earl Mindell reports on an Italian study in which patients taking 5-HTP experienced

less carbohydrate cravings and felt "full" quicker while eating. Furthermore, *The Textbook of Natural Medicine* details an extremely favorable 5-HTP study in which 5-HTP alone made the female test subjects lose weight:

"The daily dosage of 5-HTP used in the study was 8 milligrams per kilogram of body weight. Patients were given either the 5-HTP or a placebo 20 minutes before meals for five weeks, and after a one-week interval were switched to receive the other treatment. No dietary restrictions were prescribed because the researchers wanted to answer the question, 'Does 5-HTP reduce appetite and promote weight loss without any conscious effort?' To make sure that the women actually took the 5-HTP, researchers measured the level of the serotonin breakdown product ... in the urine ... These results with 5-HTP were achieved without the women making any conscious effort to reduce food consumption. The average amount of weight loss during the five-week period of 5-HTP supplementation was a little more than three pounds, compared with less than one pound of total weight loss during the placebo period" (Pizzorno and Murray).

So, if you're considering giving 5-HTP a try, how much should you take? Dr. Whitaker recommends a dosage 50 to 100 milligrams three times a day, taken 20 minutes before meals; however, he warns that your appetite will return very voraciously as soon as you stop taking 5-HTP, so it should be part of a low-fat diet and exercise regimen, rather than a sole diet aide. If 100-milligram doses of 5-HTP aren't working for you after a six-week trial period, you can try increasing the dose to 200-mlligrams taken three times per day as long as you do not exceed 900 milligrams total per day, according to *Nature's Medicines* by Gale Maleskey. Also, you should not take 5-HTP if you take prescription antidepressants, since they also affect serotonin levels.

A note on the FDA's ban of Tryptophan in 1989:

If you're worried about the safety of tryptophan, you have nothing to fear, according to Dr. Julia Ross, author of *The Diet Cure* and *The Mood Cure*. The FDA pulled tryptophan in 1989 because of a bad batch that caused horrible long-term side effects. Ross believes that this bad batch made by a disreputable company was really just the excuse the FDA had been waiting for, and that the real reason why they pulled the supplement completely off the market was to increase the sales of Prozac, which had been released in 1988 but was not making any money. Either way, now every batch of tryptophan is okayed by the FDA before it is made available to the public, so the l-tryptophan and 5-HTP you'll find in your local health food store is perfectly safe.

"Smell therapy"

"Smell therapy" may be one of the most unique, yet perfectly safe and easy, approaches to appetite suppression and weight loss. In 1993, Dr. Alan R. Hirsch of the Smell and Taste Treatment and Research Foundation in Chicago performed a groundbreaking research study on 3,193 overweight subjects. They discovered that people with a good sense of smell lost up to 18 pounds per month, just by inhaling a blend of banana, peppermint and green-apple scents via an inhaler each time they felt hungry. According to *Off the Shelf Natural Health* author Mark Mayell, "The researchers believe that inhaling foodlike odors somehow tricks the brain into equating the smell with the actual food, promoting a feeling of fullness and suppressing appetite." Try this experiment for yourself by keeping fresh bananas, mint leaves and green apples in your kitchen.

How to control your appetite and boost your metabolism at the same time

Do you know that you can control your appetite and boost your immune system *at the same time*? Many herbs and other natural substances work to both suppress your appetite and boost your metabolism, so they promote weight loss in two ways. Not only will you experience fewer food cravings, your body will also naturally burn—that is, metabolize—calories at a faster rate than normal. Since our metabolisms naturally slow as we get older, hence middle-aged weight gain, these metabolism boosters may make all the difference in helping you fit into that old pair of jeans that you wore while you were in your 20s.

Appetite suppressant and metabolism-boosting herbs and extracts

Stimulants increase your energy and mental alertness, suppress your appetite and help your body burn fat by increasing your metabolism. Sounds great, right? The problem is that caffeine and other stimulants can also cause high blood pressure, heart palpitations, behavioral changes and even cardiac arrest, especially in people who are sensitive to caffeine, or who have high blood pressure, arteriosclerosis, or glucose intolerance. Due to these dangers, it is important to consult with a physician, preferably a naturopath, before you start any natural stimulant regimen.

Ephedra

Ephedra, also known under the Chinese name ma huang, has been the subject of immense controversy over the past few years. Its proponents cite its remarkable ability as a natural weight loss aid. "Many people, particularly women who have a history of chronic dieting, can benefit from this herb as it helps to stabilize and enhance their metabolic rates," Goldberg writes in *Alternative Medicine*. Caffeinated substances like green tea and coffee enhance ephedra's ability to simultaneously suppress appetite and boost metabolism, as does the herbal antidiarrheal St. John's wort. In fact, the combination of St. John's wort and ephedra is so popular that it is widely known as "herbal fen phen," in reference to the famous diet pill of the 1990s.

Ephedra's ability to boost metabolism and suppress appetite is more than just a myth. As Dr. Robert S. McCaleb writes in his *Encyclopedia of Popular Herbs*, clinical studies prove these effects and demonstrate the mechanisms by which they work:

"Clinical studies show that ephedrine increases the metabolic rate by stimulating the release of noradrenaline from the sympathetic nervous system. Whereas thin people experience up to a 40 percent increase in thermogenesis (heat production) after eating a meal, overweight individuals may only have an increase of 10 percent or less. This means more food is stored as fat rather than converted to energy (heat). People taking ephedrine have experienced a 10 percent increase in thermogenesis compared with control groups. Researchers now believe that ephedrine increases thermogenesis primarily in skeletal muscle rather than in brown adipose (fat) tissue. Ephedrine may also help suppress the appetite because blood is diverted away from the digestive tract to the limbs."

On the other hand, ephedra's stimulant properties—precisely what makes it such an effective weight loss aid—are also what make it potentially dangerous for people at high risk for heart disease. Overweight individuals tend to have a high incidence of hypertension (high blood pressure), and a powerful stimulant like ephedra and high blood pressure are a potentially lethal combination. According to Dr. Mary D. Eades, author of *The Doctor's Complete Guide to Vitamins and Minerals*, people with heart disease, anxiety or insomnia, or those who are on an MAO inhibitor, should stay away from ephedra. Similarly, in his *One Earth Herbal Sourcebook*, Alan Keith Tillotson advises that taking ephedra "should be done under the guidance of a professional with experience about safety and dosage."

However, based on current national legislation, the decision to take ephedra is no longer an option for Americans. In April 2004, the FDA officially banned the sale of all dietary supplements containing ephedra because it was linked to 155 deaths in the United States. Though these 155 deaths are undoubtedly tragic, some experts question the FDA's motives behind banning products that contain ephedra, especially considering the fact that FDA-approved prescription drugs injure 2.2 million people per year—including 100,000 deaths, and FDA-approved OTC painkillers like ibuprofen cause 40,000 deaths per year due to gastrointestinal hemorrhaging. These figures make the FDA's ban of ephedra and continuing support of potentially deadlier pharmaceuticals seem more like a money matter rather than concern for public health and well being, as Health Ranger Mike Adams writes in his 2003 www.Newstarget.com article, *Prescription Drugs Kill Thousands of Times as Many People as Ephedra*:

"The war against ephedra is nothing more than a smokescreen to distract people from the far more dangerous effects of prescription drugs. If prescription drugs and over-the-counter drugs were measured by the same yardstick, more than half of all drugs would be banned outright ... [N]obody in Congress is calling for these drugs to be pulled off the market, and the FDA mysteriously allows their continued sale, knowing full well that the number of deaths caused by prescription drugs is enormous. Ephedra has admittedly resulted in the deaths of a handful of people. Ibuprofen has killed hundreds of thousands, even according to medicine's own research as published in *JAMA* and other 'scientific' journals. If this is really about science and protecting the public, as is claimed by supporters of the ban, then why not protect the public from dangerous pharmaceuticals at the same time? The answer, of course, is that profits must be protected first."

The future of ephedra is still unclear. In April 2005, a federal judge in Utah ruled that the FDA couldn't ban products with low-doses of ephedra. This led Jonathan Emord, the lawyer for the nutritional supplement company under trial, to assert that the judge's decision completely overthrew the FDA's earlier ban on ephedra. However, the day after the ruling, the FDA asserted that the ruling does not have such broad implications. "The agency interprets the judge's language to mean that the ban remains in effect for products containing higher dosages of ephedra. The FDA is considering all options for its next steps," FDA spokeswoman Kimberly Rawlings told the media.

As time has demonstrated, these "next steps" are definitely anti-ephedra. On Jan. 12, 2006, upon request from the FDA, U.S. marshals seized \$16,000 worth of products containing ephedra from ATF Fitness Products in Pennsylvania. It seems that the Utah-based federal ruling has done nothing to change the nationwide stance on the herb.

Garcinia cambogia / Hydroxycitric Acid (HCA, Citrin)

Dr. Linda B. White's *The Herbal Drugstore* calls *Garcinia cambogia* (*Garcinia*) "the primary herb sold for enhancing weight loss and boosting your amount of lean muscle." *Diabetes Cure* authors Dr. Vern S. Cherevatenko and Paul Perry write that it "eliminates even the sharpest cravings, similar to the positive effects of fen-phen and Redux." Sabinsa Corporation thought *Garcinia*—also known as Indian berry, hila and bridal berry—was important enough as a remedy to isolate and then trademark a standardized herbal extract—hydroxycitric acid (HCA), known under the trademarked name Citrin—from the dried rind of the *Garcinia* fruit.

So, what makes Garcinia so special? Experts believe that Garcinia can help you lose body fat and achieve a healthy body weight on many different levels, helping prevent both obesity and heart disease. It can:

- Act as a natural appetite suppressant, since it helps the body convert excess glucose to glycogen, which sends the "full" signal to the brain (Marion). Studies show that HCA supplements reduce the quantity of food people eat by 10 percent (Goldberg).
- Increase your metabolism, so that your body burns more of its fat for energy and stores less of it as body fat.
- Inhibit the formation of cholesterol and other fats in your liver. In his book *Off the Shelf Natural Health*, Mark Mayell explains how and to what extent HCA actually inhibits your body from forming fat:

"The mechanism has been traced to glucose metabolism. High blood-sugar levels cause the body to convert glucose to glycogen for storage in the liver and muscles. When these bodily stores have no room for additional glycogen, glucose is broken down and converted in a number of steps into fatty acids and cholesterol for storage elsewhere in the body. Researchers have found that HCA temporarily inhibits the enzyme (ATP-citrate lyase) necessary for this glucose-to-fat conversion. Two studies on animals determined that HCA reduces the synthesis of fats by 40 to 70 percent for between 8 and 12 hours following a meal."

However, as the *Textbook of Natural Medicine* cautions, it is important to maintain a low-fat diet while taking HCA, otherwise HCA will not work, as HCA only stops the conversion.

If you are obese, and especially if you are at high risk for heart disease, Garcinia may do wonders to better both your appearance and your health. In a recent research study, 22 obese people lost 11 pounds each after only two months of combining a low-fat diet with 250 milligrams of HCA and a 100-milligram chromium supplement—both taken three times daily. Similarly, *Smart Medicine for Healthy Living* recommends "an extract of this herb (Garcinia) that supplies 50-percent hydroxycitric acid (HCA) and (to) take 500 to 750 milligrams three to four times daily." Best of all, HCA has no known side effects, according to *The Diabetes Cure*.

Guarana

Guarana is a South American berry that contains the caffeine-like alkaloid guaranine, and two closely related alkaloids called theobromine and theophylline. Added together, these three alkaloids give guarana powerful capabilities as a weight loss aid, both suppressing appetite and increasing metabolism. Additionally, according to the Life Extension Foundation, it may also act as a diuretic and muscle relaxant, and due to its stimulating effects on the central nervous system, increase mental and physical performance in general. However, like any stimulant, guarana may also cause anxiety, insomnia and even addiction, as Dr. Andrew Weil points out. You may even rapidly gain back all the weight you've lost when you stop taking guarana, according to Dr. Weil. In its native South America, guarana is a common ingredient in soft drinks, chocolate bars and chewing gum; worldwide, it is available in supplement form and in energy drinks like "Rock Star" and "Hype."

Hercampure

Like chá de bugre, hercampure is a rainforest herb. Since it both speeds up metabolism and reduces appetite, many experts believe that hercampure is a natural remedy for both obesity and high cholesterol. It is widely available online by itself, and it is an ingredient in many weight loss formulas.

Red raspberry leaf tea

What could you want more than a drink that tastes good, acts as a natural diuretic, keeps your appetite under control and boosts your metabolism? Look no further than red raspberry leaf tea. Though, be warned, drinking this energy-enhancing tea right before bedtime will lead to a sleepless night.

Yerba mate

This popular South American drink acts as both an appetite suppressant and natural stimulant, which means that it both reduces fatigue and speeds up your metabolism. Many people drink it as an herbal tea.

More natural substances that boost your metabolism and curb your appetite

Kola nut

Popular cola beverages get their name from Kola nuts, which are seedpods of evergreen trees native to Africa. Alternative medicine experts in the United States and across North America recommend Kola nut extract and whole Kola nuts for their natural stimulant ability to boost your metabolism, suppress your appetite, reduce fatigue, act as a diuretic, and enhance mental and physical performance.

Pyruvate

Pyruvate naturally occurs in the body, where it is synthesized in the cells. According to animal studies, pyruvate aids in weight reduction plans by increasing metabolism. Human studies evaluating pyruvate's effectiveness doing so are overwhelmingly positive. In a study of 26 overweight men and women, for example, researchers gave the test group only 6 grams of pyruvate daily, and the control group a placebo; both groups did 45 to 60 minutes of aerobics three times per week. After only six weeks, the group receiving pyruvate experienced a significant loss in body weight and BMI compared to the control group. Pyruvate supplements are available in tablets, capsules and as a powder.

Green tea: So healthy, it's in a category of its own

Green tea has enormous health benefits, so its ability as a weight loss aid is just the tip of the iceberg. Drinking a cup of green tea 20 minutes before a meal helps you eat less by reducing your appetite and helping you to feel "full." Additionally, research studies demonstrate that drinking green tea twice per day helps both curb appetite overall and even helps reduce the formation of fat cells. Many scientists believe that the flavonoid epigallocatechin gallate (ECGC) makes green tea an effective weight loss aid and, because of this, ECGC (also called green tea extract on ingredient labels) is a common ingredient in weight loss supplements, such as One-A-Day's Weight Smart Formula.

If you decide to make green tea or green tea extract part of your weight loss regimen, keep in mind that, like the other metabolism-boosters, green tea contains a stimulant, which in this case is caffeine. Though green tea contains less caffeine than coffee, for example, its caffeine content can cause high blood pressure, heart palpitations, behavioral changes and even cardiac arrest, especially in people who are sensitive to caffeine, or who have high blood

pressure, arteriosclerosis, or glucose intolerance. If you have any of the above conditions, or if you have experienced a strong negative reaction to caffeine or other stimulants in the past, be sure to consult a physician, preferably a naturopath, before adding green tea or green tea extract to your diet.

Vitamins and minerals that may provide additional weight loss help

Some vitamins and minerals can also help you lose weight by acting as natural appetite regulators and/or by stimulating your body's metabolism of fat. Proper nutrition, i.e. obtaining proper levels of these nutrients, is essential to any weight loss program.

Chromium

The trace mineral chromium plays a large role in the human body's proper production and utilization of insulin, so many experts tie chromium deficiency to the onset of type 2 diabetes. Due to its link to insulin, chromium also plays a large role in appetite control, especially the desire to eat sugary foods. As Mark Mayell writes in *Off the Shelf Natural Health*, "When insulin secretion is working as it should, blood-sugar levels are regulated, and the brain properly signals satiety or hunger. Poor insulin activity can lead to reduced energy levels and increased cravings for sugar." In other words, by influencing the role of insulin in your body, chromium helps stabilize blood sugar, control appetite, and speed up metabolism.

The B Vitamins

- **Vitamin B6**—aids in fat and protein metabolism, as well as the brain's conversion of tryptophan to serotonin, a neurotransmitter that plays an important role in appetite control and wards off emotional eating (Goldberg).
- **Vitamin B12**—can help dieters control appetite (Haas).

Zinc

Studies show that eating zinc-rich foods and taking zinc supplements raise levels of the hormone leptin in the blood. High leptin levels are associated with weight loss and reduced appetite. By contrast, zinc deficiency results in low leptin levels and a consequential preference for fatty foods. In the words of *Food and Mood* author Elizabeth Somer, "The solution here is clear: Increase your daily intake of zinc-rich foods, such as extra-lean meat, oysters, whole-grain breads, or cooked dried beans and peas, and/or take a moderate-dose multiple vitamin and mineral supplement that contains at least 15 to 20 milligrams of zinc."

Exercise: The best way to control your appetite and boost your metabolism

There's a way you can naturally suppress your appetite and boost your metabolism with *no* negative side effects. It's called regular exercise, which means exercising five to seven times per week, not just intermittently.

As *Smart Medicine for Healthier Living* explains, exercise actually affects the hypothalamus' appetite control system:

"The appetite-control center of the body is the hypothalamus, or 'appostat,' the portion of the brain that tells the body when it is hungry and when the stomach is full. The appostat's hunger signals are triggered by specific levels of certain substances in the blood, including glucose, serotonin, noradrenaline, adrenaline, and dopamine. Physical activity reduces the levels of the hunger-stimulating chemicals that cause the appostat to start the stomach growling for food, and increases the levels of the chemicals that signal to the appostat that the body is humming along at peak efficiency and doesn't require food. In fact, research indicates that exercise can inhibit hunger for as long as six hours after a high level of physical activity" (Zand, Spreen and LaValle).

This means that you won't have to ignore painful hunger pangs or tempting food cravings because, with regular exercise, you won't have them as often.

Along with helping you cut the amount of calories you put in your system, exercise can also help you burn the body fat that you already have by increasing your metabolism. Unlike stimulants, which increase your metabolism at a price of jitteriness and sometimes even heart palpitations, exercise naturally boosts your metabolism both while you're doing it and even when you're resting, so you'll be burning more calories even when you sleep. How is this possible? Exercise builds muscle, which naturally burns more calories at rest than fatty tissue. Plus, muscular thighs and abs look better than fatty thighs and abs, so exercising enhances your physical appearance as well.

Despite exercise's numerous, proven benefits, many people still try to avoid it as much as possible. If you're one of those people who think of exercise as some sort of physical torture or chore, try the following tips.

How to incorporate exercise into your life

1. Take a brisk walk with a friend. You'll be so busy chatting that you'll forget you're exercising.
2. Exercising doesn't have to be boring. Remember all the fun things you used to do as a kid? Did you like to ride your bike? Roller skate? Ice skate? Play sports? Swim? Well, those were all physical activities. As a child, you were exercising all the time, but you didn't think of it as exercise. You thought of it as fun. Do some of the physical activities that you used to like as a child and relive the fun that you used to have.
3. Go out dancing at nightclubs, ballrooms or other venues. Most dance clubs have a wide variety of music. If ballet, tap, or ballroom dance is more your style, take classes or join a dance group. Many parks and recreation centers have dance classes and groups with very little or no membership fees.
4. If you'd like to do yoga or aerobics, but are too self-conscious to go to a class, buy or rent some home instructional videos. Your public library may even have some.
5. Listen to upbeat music while exercising at home, running, or walking. It will make you move faster, which will burn more calories.
6. Think of exercise as a mandatory daily activity, like brushing your teeth or combing your hair (Virtue).
7. Park far away from entrances. You'll help protect your car from parking lot accidents—like getting hit with a nearby car door or moving shopping cart—plus you'll burn some extra calories.
8. As long as you don't have a heart or breathing problem, take the stairs instead of escalators and elevators as much as possible.
9. If you have a desk job, be sure to take breaks and move around often. If possible, do some of your work standing up.
10. Allot at least 20 minutes of your daily schedule to exercising.

Just remember, exercise can be fun, but you have to make it that way. Incorporating exercise into your life can be one of the most positive steps toward losing weight, improving your overall health, reducing your risk for chronic disease, having more energy, feeling better about yourself, relieving stress and anxiety, and improving your physical appearance, so get more active today.

Fighting food cravings

What are your frequent cravings—sugary soft drinks, chocolate, salty french fries or chips, perhaps pizza? We crave foods for a number of reasons, both emotional and physical. When we crave these junk foods, we're really craving something else. When we crave chocolate, for example, we might really be craving either magnesium, because we're deficient in the mineral, or craving comfort because we're going through emotional distress. The key to fighting food cravings is to understand what we're really craving and satisfying that need rather than our whims.

Vitamin and mineral deficiencies

Some health experts believe that food cravings are a symptom of mineral deficiency, rather than a signal that you actually desire the food you're craving. As Health Ranger Mike Adams explains in his upcoming book on food cravings, your body continues to crave foods long after you've consumed enough calories, because the foods you ate obviously didn't fulfill the mineral requirements that your body needs to be healthy:

"Your body craves minerals, not just calcium, but also magnesium, zinc, chromium and all of the trace minerals. Minerals cause your body to tell you to keep eating. Why does your body want you to keep eating? Because you don't have enough minerals yet, and your body says to keep eating until you get the minerals you need. That's why you have cravings for snack chips, ice cream, doughnuts and chocolate cake. In fact, a craving for chocolate is really a craving for magnesium, and once you get magnesium into your body in sufficient quantities, your craving for unhealthy chocolate—that is, processed chocolate—will disappear" (Adams).

If you have persistent cravings for particular foods, chances are that your body is really craving a specific mineral or even several minerals. Take a look at these common food cravings and the mineral deficiencies they may be symptoms of, and then try the solutions listed. If the solutions don't get rid of your food cravings in a few weeks, then your food cravings may be linked to emotional eating, covered in the next section.

Common food cravings, their associated mineral deficiencies and solutions

Common Cravings	Associated Mineral Deficiencies	Solutions
Chocolate	Magnesium	Raw cacao (rich in magnesium, great chocolate taste, no refined sugars and no milk fat) and magnesium supplements (Adams); raw nuts and seeds (Huber)
Salty foods Potato chips, salted nuts	Chloride	Sprinkle sea salt on healthy foods (Huber)
Sugary foods Candy	Chromium, Carbon, Sulfur, Tryptophan	Chromium—chromium supplements, brewer's yeast (the dietary source of chromium), apples and bananas; carbon—fresh fruit; sulfur—garlic and onion, or garlic supplements; tryptophan—5-HTP supplements, sweet potatoes, spinach (Huber)
Red meat Steaks, hamburgers)	Iron	Iron supplements, spinach (Huber)
Oily, fatty foods French fries, pizza	Calcium	Broccoli, mustard or turnip greens, legumes, or calcium supplements (Huber)
Carbonated soft drinks	Calcium	Broccoli, mustard or turnip greens, legumes, or calcium supplements (Huber)

How to prevent mineral-based food cravings in general

- Grow your own organic fruits and vegetables in re-mineralized soil by buying sea kelp concentrates or seaweed concentrates and mixing it in with your soil. Some fruits and vegetables absorb nutrients better than others. Wheatgrass offers the best absorption (Adams).
- Take Trace Minerals Research "Complete Food Multi" supplement, which is a whole food concentrate (Adams).

Emotional eating

Sometimes we eat to satisfy emotional needs, rather than to satisfy biological requirements for nutrients and calories. This is called emotional eating and it has sabotaged many earnest diets.

Emotional eating also has many shapes and forms. Sometimes childhood events, messages, and circumstances leave a child with unfulfilled emotional needs that last until adulthood, when the now-adult child tries to fill this chronic emptiness inside with temporary satisfaction gained from food. Other times, anxious people will "binge eat" as an outlet for their nervous, compulsive behavior. Whatever the root, emotional eating can lead to health, social, and self-image problems that only intensify the underlying emotional problems. In other words, emotional eating never has positive results.

In her book *Constant Craving*, Professor Doreen Virtue recognizes emotional eating as a major factor in food cravings, and prescribes the following five steps whenever you start to experience a craving:

1. **Wait 15 minutes** before eating anything and, during that time, perform the next four steps, so that when you do eat after the 15 minutes have passed, you'll be less likely to overeat.
2. **Avoid being near food**, since emotional eating often involves "absent-minded eating," when you don't even realize how much food you are eating.
3. **Drink a glass of water.** Drinking water ensures that you're not confusing thirst with hunger. Plus, it fills your stomach, so you'll be less likely to overeat when the 15 minutes are over.
4. **Ask yourself whether you're feeling fear, anger, tension/anxiety, or shame and why.** If these emotions persist, try visiting a therapist or support group to talk about and work

through your feelings. Please also read the next section on depression, if you feel that you may be depressed.

Depression

Before you even read this section, take a look at the following symptoms of depression, as defined by the National Institute of Mental Health:

- Persistent sad, anxious, or "empty" mood
- Feelings of hopelessness, pessimism
- Feelings of guilt, worthlessness, helplessness
- Loss of interest or pleasure in hobbies and activities that were once enjoyed, including sex
- Decreased energy, fatigue, being "slowed down"
- Difficulty concentrating, remembering, making decisions
- Insomnia, early-morning awakening, or oversleeping
- Appetite and/or weight loss or overeating and weight gain
- Thoughts of death or suicide; suicide attempts
- Restlessness, irritability
- Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders and chronic pain

Do these symptoms apply to you? If many of them do, then you may have clinical depression. Please see a naturopath or therapist for proper diagnosis.

Depression plays a large role in overeating because of the emotional eating you read about in the last chapter. Research shows that treating underlying depression often also treats the symptomatic eating disorder that results from it. According to Elizabeth Somer's book *Food and Mood*, people suffering from seasonal affective disorder (SAD), which is depression associated with dark and gloomy weather, report "reduced appetite, slowed weight gain, reduced food

cravings, elevation in mood, and improved sleep habits" after receiving light therapy, the typical treatment for the disease.

If you suffer from depression, don't worry, as you're not alone and you do not have to rely on pharmaceuticals for treatment. Take a look at these natural, practical solutions to depression, adopted from Truth Publishing's *Real Safety Guide to Disease Prevention* by Dani Veracity and Mike Adams.

How to protect yourself from clinical depression:

Note: To read more information on depression, please read *The Real Safety Guide to Disease Prevention*, available exclusively through Truth Publishing (www.TruthPublishing.com).

- **Eat a diet high in B vitamins (thiamin, magnesium, riboflavin, and niacin).** B vitamins are essential to a healthy, depression-free brain. Your body needs vitamin B6, for example, to produce serotonin, an important neurotransmitter in the prevention and treatment of depression. *Solutions: Eat foods high in B vitamins [crimini mushrooms, tuna, salmon, chicken, asparagus, avocados, broccoli, eggs, sunflower seeds, whole grains (especially wheat germ), pork, dried beans and peas, soy and soy products, cashews, almonds, brown rice, millet, avocados, bananas and dried apricots] or take B-vitamin supplements.*
- **Eat more dark-green vegetables:** Vegetables like peas and spinach are high in folic acid, which is essential for serotonin production. *Solutions: Eat foods high in folic acid or take it in supplement form.*
- **Make sure you get enough natural sunlight:** Seasonal affective disorder (SAD) is a type of depression associated with winter-related lack of sunlight, but spending too much time indoors, whether at work or at home, can result in vitamin-D deficiency and consequently depression, no matter the time of year. *Solutions: Try to spend at least one hour a day total outdoors without sunscreen, even if it means just going on several brief walks while you're at work. If you live in a climate where it's difficult to obtain natural sunlight, consider light therapy [see below].*
- **Light therapy:** If you live in a cloudy climate, or just spend too much time indoors, you're probably deficient in vitamin D, which is a major risk factor for depression. *Solutions: Buy light therapy bulbs and install them in your home; encourage your employer to do the same.*

- **Eat more molasses:** This "waste product" from the sugar refinement process is actually more nutritionally valuable than the goal product, white sugar. Along with many other nutrients, molasses is high in uridine, which helps fight depression.
- **Eat foods rich in tryptophan:** The brain converts this important amino acid to serotonin. *Solution: Eat more foods high in tryptophan (tuna, soybeans, turkey, almonds, cabbage, kidney or lima beans, oats, pistachios, poppy seeds, pumpkin seeds, spinach, and wheat).*
- **Exercise:** Lack of exercise will make you more prone to depression. *Solution: Adopt a basic exercise program.*
- **Eat more vitamin-E-rich foods:** Studies show that people who have severe depression are usually deficient in vitamin E, suggesting a link between vitamin-E-deficiency and depression. *Solutions: Food sources of vitamin E include almonds, peanuts, turnip greens, mayonnaise, dandelion greens, mango, and broccoli. You can also choose to take vitamin E supplements.*
- **Increase the amount of phenylalanine in your diet:** This amino acid crosses the blood-brain barrier and stimulates the production of the natural mood-boosting neurotransmitters dopamine, adrenaline, and noradrenaline. *Solution: Eat more phenylalanine-rich foods (almonds, avocados, lima beans, peanuts, and seeds).*
- **Eat "happy foods":** When an animal is slaughtered, it feels fear and anxiety, causing it to secrete adrenalin and other hormones that imprint these negative emotions on the meat that consumers will eventually ingest. Similarly, the water in fruits and vegetables grown in greedy, profit-driven environments transfer this negativity to the consumers who eat them. *Solutions: Eat only organic fruits and vegetables and either little or no animal products, or only organic, free-range animal products.*
- **Read *Depression-Free for Life* by Gabriel Cousens, M.D.:** Dr. Cousens shows you how to beat depression the natural way in his five-step program of mood-boosting natural substances, vitamin and mineral supplements, and a mind-enhancing diet and lifestyle.
- **Use zizyphus seeds (available in many tonics) to fight anxiety:** Depression and anxiety often go hand-in-hand. Zizyphus seeds have a calming effect on the emotions and nervous system.

- **Create a support system:** Isolation leads to depression. *Solution: Make a conscious effort to socialize and, if needed, talk to a therapist or counselor.*
- **Learn yoga:** Studies show that yoga lowers levels of cortisol, the stress hormone. *Solution: Begin attending yoga classes or learn yoga through instructional videos and DVDs.*
- **Have fun:** Always make time for recreation and relaxation. *Solution: Remember the activities that make you feel good or calm you down and always make time for them.*
- **Help others:** Helping others will make you feel good about yourself. *Solution: Do volunteer work, if you have time, or even just help others in small ways.*
- **Keep busy:** Helps you to avoid dwelling on negative thoughts. *Solution: Exercise or pick a craft or hobby.*
- **Learn coping skills:** Learn to handle emotions like anger, sadness, guilt and anxiety. *Solution: Learn coping skills through self-help books and DVDs.*
- **Practice "self talk":** Use it when you feel negative emotions or think negative thoughts. *Solution: Learn to "self talk" through self-help books and DVDs.*
- **Set realistic goals:** Goal-orientated people are happy people, but make sure the goals are realistic. Unrealistic goals lead to disappointment and depression. *Solution: Learn goal setting through self-help books and DVDs.*

You *can* naturally break free from depression and emotional eating. Begin these natural solutions to clinical depression today and let it be the first day of the rest of your life.

Can color affect appetite?

Graphic and interior designers know that color affects mood. There's a reason why prison and mental hospital walls are never painted red; the strong color provokes violence and the fight-or-flight response. As emotional eaters know all too well, appetite and illusions of hunger are profoundly affected by moods. This link has led many experts to believe that a little color psychology can go a long way in helping dieters to achieve their weight goals.

Violet

Relaxing and soothing violet is a natural appetite suppressant, according to *The Natural Way to Heal* and *Prescription for Nutritional Healing*. Painting your kitchen or dining room walls violet or using a violet tablecloth creates a peaceful and relaxing eating environment for yourself, your family, and your guests, calming your appetite and your nerves.

Black

You may not want to paint your kitchen walls black, but using a black tablecloth on your dining room or kitchen table may naturally suppress your appetite, according to *Prescription for Nutritional Healing*.

Luckily, nature provides you with many safe ways to curb your appetite with herbs and other natural substances, as well as lifestyle changes. It's just a matter of knowing what to use and how. As Dr. Murray writes, once you understand how your appetite control system works to suppress your appetite, you can adjust the system to work for you:

"The solution to combat the tendency to eat more than we require is to accentuate the normal physiological processes that curb the appetite. A very elaborate feedback system exists that is supposed to tell the brain when the body requires more food as well as when enough food has been consumed. Fortunately, we can use this system to our advantage in the battle against the bulge."

Weight loss eating plans and strategies

Weight loss plans and strategies aren't just limited to Atkins—which has its own associated health problems—and other similar diets. Incorporating the appetite suppressant foods, herbs, and other supplements described in previous sections into your diet is a weight loss strategy in itself, as is incorporating metabolism-boosting foods and herbs if stimulants don't pose a problem for you. If you'd like a comprehensive plan, see if any of the following diets fit your tastes and lifestyle.

Raw food diet

A large number of people have decided to "go raw," and that number is growing every day. "Going raw," means not eating foods that have been heated above 110 to 120 degrees Fahrenheit. As you might imagine, for most people, this means following a vegan, organic diet—completely avoiding all animal products, including milk and cheese. However, some "raw foodists" are willing to consume dairy products as long as they are unpasteurized and unhomogenized, and an extremely small percentage consume some amounts of raw animal flesh.

Though raw food is becoming increasingly popular worldwide, partly thanks to the celebrities who have "gone raw," it is still a controversial diet. To decide whether following a raw food diet is right for you, take a look at the following pros and cons.

Raw food: Pros and cons

Pros

- A raw food diet will almost definitely make you lose weight by eliminating unhealthy, processed food from your diet and eating more high-fiber, low-calorie foods (Vartan, Tallmadge).

- Raw foodists say the other benefits of eating raw food include clear, healthy-looking skin, more energy, better digestion, and even reversal of chronic disease (Vartan).
- It is better for the environment because all foods, and even inedible food scraps (peels, seeds, etc.), are biodegradable (Vartan).
- Raw foodists say that cooking foods at temperatures exceeding 116 degrees Fahrenheit destroys the healthy enzymes in the food (Tallmadge).
- Recent research suggests that roasting, baking and frying starchy foods at temperatures ranging from 120 to 248 degrees Fahrenheit creates a chemical called acrylamide in the food. The FDA says that acrylamide may cause cancer in humans and damage DNA and the central nervous system. Both the FDA and the World Health Organization (WHO) call acrylamide's presence in food "a major concern." Of course, people who eat only raw food don't run the risk of consuming this chemical (Vartan).

Cons

- Following a raw food diet can make it difficult to eat at other people's homes or out at restaurants, especially in cities that are slow to catch onto raw food.
- Opponents say that most legumes and grains (both major sources of protein in vegan diets) are indigestible unless cooked at high temperatures, so a raw, vegan diet is too low in protein to keep humans healthy (Tallmadge).
- Claudia Gonzales, a spokesperson for the American Dietetic Association, says that our bodies make the enzymes we need, so it's irrelevant that cooking destroys the natural enzymes in food (Vartan).
- Some healthy food components—like the lycopene in tomatoes, for example—are actually enhanced through cooking (Tallmadge).

If you decide to go raw, there are a number of raw food recipe books to help you make the transition from cooked to uncooked food. Truth Publishing's Natural Health Library (NaturalHealthLibrary.com) offers a free online book called *Raw in 10* by Brian Au. Au's book is full of quick, easy-to-prepare recipes for raw versions of all your favorite foods, including RAWinkies, RAWeos, meatless "steak" and "chicken," and more. Nutritionists also recommend that you supplement your raw food diet with a multivitamin and especially extra vitamin B12.

A low GI (glycemic index) diet

Following a low glycemic index (GI) diet is all about carbs—the good, the bad, and the ugly. Proponents believe that not all carbohydrates have the same effect on the human body and rank them in terms of their effect on blood sugar. Foods with high GIs—such as candy—cause a sharp spike in blood sugar, leading to hunger pangs, food cravings, dizziness, and lightheadedness when that sharp rise suddenly drops. People then usually respond to these hypoglycemic symptoms by consuming another food or beverage with a high GI, such as a soft drink, for a quick "pick-me-up." The cycle then repeats, causing blood sugar levels to fluctuate widely throughout the day and leading to weight gain and increased risk for obesity, type 2 diabetes, and other chronic diseases.

Eating foods with low GIs—whole grain bread and pasta, starchy vegetables, unrefined cereals, brown rice, and beans—will help reduce your hunger pangs and food cravings and finally beat the bulge. Since your body digests these foods more slowly, they cause much more gradual increases in blood sugar, so that your level fluctuates in even waves rather than wild, erratic spikes and dips throughout the day. On this note, as you'll see next, the mucilaginous grains chia and salba keep blood sugar fluctuations in check extremely effectively due to their gel effect.

Taking control of your blood sugar and your weight with Chia and Salba

Many nutritional experts regard chia, a grain used by the ancient Aztecs, as a superfood due to its high content of insoluble fiber, omega-3 fatty acid, minerals and complete, plant-derived proteins. Chia normally grows as roughly 95-percent black seeds and 5-percent white seeds, which are nutritionally superior to the black chia seeds. Recently, the Toronto-based Salba Research and Development Corporation used natural, selective plant-breeding techniques to reverse this ratio, creating a greater abundance of the more nutritious white form of chia and resulting in a trademarked superfood called Salba.

In the words of Salba developer Larry Brown, "In Salba, you've got everything." Salba really is a nutritional powerhouse. Just 100 grams (3.53 ounces) of it contains:

- 34.5 grams of fiber (31 grams insoluble, 3.5 grams soluble), equivalent to more than three pounds of broccoli

- 21.2 grams of protein, or as much as nearly four ounces of all-bran cereal
- 20.3 grams of omega-3 fatty acids, or the equivalent to 28 ounces of salmon
- 5.9 grams of omega-6 fatty acids
- As much antioxidants as more than two pounds of oranges
- Complete, plant-derived protein
- And "every amino acid you can imagine," says Brown.

However, Salba's unique effect on blood sugar levels makes it a truly amazing, natural appetite suppressant. Dr. Vladimir Vuksan, associate professor of endocrinology and nutritional medicine at the University of Toronto, and a team of researchers ran a series of clinical tests on Salba and discovered that the supergrain has a long, steady, "curved" carbohydrate effect on blood sugar. It does this because, when you eat Salba, it forms a gel in your digestive tract that slows the absorption of not just its own carbohydrates, but also the absorption of any other starchy or sugary foods you might eat with it.

By slowing down your body's absorption of carbohydrates, Salba prevents itself, and other foods you eat with it, from creating a huge spike in blood glucose levels, which is what normally happens after you eat white flour or white sugar. As mentioned in the previous section on glycemic index, these spikes in blood sugar lead to hunger pangs and food cravings—as well as increased risk for obesity, type 2 diabetes, and other chronic diseases—so chia, and especially Salba, acts as a natural, extremely healthy appetite suppressant.

Tips for incorporating Chia and Salba into your diet

- Keep whole chia and Salba in a cool, dark spot.
- Grind it with a coffee grinder before using in baking or as a garnish.
- Keep ground chia and Salba refrigerated, so that it stays fresh.
- Try using chia and Salba as a garnish for yogurt, hot and cold cereals, and more.
- Substitute a portion of flour with chia or Salba when baking breads, muffins, and pastries.

Block your body's absorption of carbs with Swanson Health Products' Ultimate Carb Control Supplements

Swanson Health Products' Ultimate Carb Control C-120X Supplements block amylase, the enzyme your body needs to break down carbohydrates. If your body can't break down carbohydrates, it can't store them as body fat on your waistline, hips, thighs, and other problem areas. Ultimate Carb Control supplements are so effective that they actually block up to 75 grams of carbohydrates from being digested, if you take only one supplement with a meal. These undigested carbohydrates then just pass through your gastrointestinal tract, much like fiber.

Best of all, these supplements are completely natural. They're simply made from phaseolamin, which is extract from purified white kidney beans. To order Ultimate Carb Control C-120X Supplements, please visit Swanson Health Products online at www.SwansonVitamins.com.

Note: Truth Publishing is in no way affiliated with Swanson Vitamins and receives no advertising or publicity money, or rewards from Swanson Vitamins.

Can hormone supplements safely help you lose weight?

Now that ephedra and fen-phen are no longer an option, many adults are turning to hormone supplements to help them lose weight. This trend is based on the belief that hormone levels decline as people get older, especially after menopause for women and after andropause for men. As Null writes in *Power Aging*, "[Due to hormonal decline] each year after the age of forty, a pound of fat replaces a pound of muscle. This means that by the time you are fifty, ten pounds of your muscle have been replaced with ten pounds of fat." If you're 40 or older, you've probably already experienced this phenomenon yourself and are wondering what you can do to stop it.

Maybe you've heard that hormone supplements are the remedy you need to counteract age-related weight gain. If you've been considering adding hormones to your supplement regimen, many questions are probably forming in your head: Are hormone supplements safe? Do they work? What are the side effects? To answer your questions, we'll go through some of the most common weight loss hormones one by one.

DHEA

DHEA, or Dehydroepiandrosterone, is an important steroid hormone made in the adrenal glands from cholesterol. Unfortunately, like many adrenal hormones, DHEA declines with age. As the Life Extension Foundation writes, "DHEA levels are known to fall precipitously with age, falling 90 percent from ages 20 to 90. DHEA is like the hub of a wheel and is the central hormone that is a precursor to the numerous sex hormones (including estrogen and testosterone)." If you're experiencing menopausal or andropausal symptoms, you can blame your falling DHEA levels for them.

Likewise, declining DHEA is also partly to blame for middle-age weight gain. According to a Temple University-based researcher, DHEA helps people keep their body fat under control by blocking an enzyme known to produce fatty tissue. Additionally, Dr. Dharma Singh Khalsa

believes that DHEA acts as a natural appetite suppressant and boosts metabolism. For these reasons, "the body mass index (BMI), a measurement of obesity, [is] higher in those with low DHEA-S levels," according to the Life Extension Foundation. If low DHEA levels are associated with high body fat, then restoring DHEA levels to normal should logically drop your BMI down to the level you had when you were younger.

Many DHEA studies have tested this premise on animals with overwhelmingly positive results; however, human-based DHEA studies are often contradictory: Some studies find that DHEA does in fact help people lose body fat, while others show little or no effect. In the Temple University-based research study, for example, DHEA supplements helped men lose 31 percent of their mean body fat with little or no change in weight in 28 days. These results suggest that DHEA can help you lose what you don't want —body fat, while not affecting lean muscle mass.

On the other hand, according to *PDR for Nutritional Supplements*, DHEA is an ineffective weight loss remedy and may also cause dangerous side effects in women: "A report in 1988 that high-dose DHEA could favorably affect lipids and induce weight loss in young males was not confirmed in two subsequent trials. In another trial, using the same 1,600-milligram daily dosage of DHEA used in the 1988 study but this time in women, there was, again, no weight loss. The women subjects suffered androgenic effects and developed insulin resistance and adverse changes in lipoprotein."

This apparent discrepancy between research findings may be the fault of the research questions being asked rather than the scientific answers that the researchers arrive at. Are DHEA supplements a "quick-fix" cure for middle-age weight gain and obesity? No. There are no quick-fix cures. Can DHEA supplements restore DHEA levels back to normal? Most likely, but will this normalization equal body fat loss? It *could*, but it won't always.

If you're wondering why DHEA isn't 100 percent effective in combating age-related weight gain, ask yourself this: Young adults presumably have high DHEA levels, so are there zero obese young adults? No, of course not. There are unfortunately many obese young adults worldwide. Obviously, there are many factors in weight gain and obesity; DHEA supplementation only reverses weight gain and obesity that is specifically caused by a DHEA deficiency. Keep that in mind, as you decide whether or not you should choose DHEA supplements as an alternative to OTC diet pills.

Synthetic human growth hormone (HGH)

Throughout our lives, our pituitary glands naturally make human growth hormone (HGH), which supports our growth during childhood and continues to play an important role keeping our metabolism efficient in adulthood. Unfortunately, as we age, our HGH levels decline, resulting in weight gain and other symptoms and conditions we associate with getting older.

In 1986, Eli Lilly produced the first true synthetic HGH. A year later, exercise physiologist Douglas Crist tested HGH on young, healthy adults with amazing results. In this University of New Mexico School of Medicine-based study, Crist and his colleagues gave five men and three women, ranging in age from 22 to 33, synthetic HGH injections three times per week. After only six weeks, "these young adults—already in good shape—had nevertheless gained an average of close to three pounds of muscle while losing an average 1.5 percent of their body fat. Their overall ratio of muscle to fat—a key sign of being well conditioned—improved by an average of close to 25 percent," writes Ronald Klatz and Robert Goldman in *Stopping the Clock*.

Then, in 1990, Dr. Daniel Rudman and other scientists at the University of Wisconsin published a groundbreaking research study in the *New England Journal of Medicine*. After giving 12 men aged 61 to 80 HGH injections for only six months, the researchers found that the men had lost an average of 14 percent of their body fat and had gained an average of 8.8 percent lean muscle mass. Additionally, thanks to HGH, the men had stronger bones, improved sexual performance and even fewer wrinkles. This led Dr. Rudman to conclude, "The overall deterioration of the body that comes with growing old is not inevitable. These injections appear able to reverse 10 years of aging with one year of treatment."

Can synthetic HGH really be such an elixir of youth? Some scientists believe so, yet others are still skeptical. These experts argue too little is known about the long-term effects of synthetic HGH to justify strongly touting it as an "elixir of youth" or a no-effort solution to weight loss. Luckily, you don't have to rely on expensive and possibly dangerous injections to experience the benefits of HGH. Your body naturally produces it in large quantities on its own after anaerobic exercise, such as strength training.

Less common hormone supplements

Calcitonin

This thyroid-produced hormone is necessary for calcium and phosphorus metabolism. Some experts believe that calcitonin supplements can help stabilize overall metabolism in postmenopausal women. It is only available by prescription.

Estradiol

This form of estrogen is often prescribed to postmenopausal women as part of hormone replacement therapy. In addition to relieving the common symptoms women experience after menopause, estradiol also helps keep appetite under control.

Fluid retention (Edema): An inside guide

Ever wonder how in the world you can get on the scale and seem to have gained an extra few pounds in one day, or why your jeans just don't seem to fit right today? No, that piece of chocolate cake you ate yesterday is not to blame, because it's not a matter of calories; it's a matter of fluid retention, also known by the medical term “edema.”

Our bodies retain water for a number of reasons—from eating too much sodium, to premenstrual syndrome (PMS), to heart and kidney disease. If your fluid retention is a result of serious heart or kidney disease, then those illnesses are of course your priority. However, if water retention is primarily a cosmetic issue for you, then working on losing that excess water is a great way to look and feel thinner.

One of the best ways to stop retaining fluid is to drink more of it. When you are dehydrated, your body retains the water that it does have and bloating sets in. For tips on adding more water to your diet, please see the preceding section *Water: The Natural, Healthy, Zero-Calorie Appetite Suppressant*.

Additionally, experts have identified a number of herbs that act as diuretics and also help the body detoxify. These herbs include **juniper berry**, **kola nut**, **parsley**, and **red raspberry leaf tea**.

Pinolenic acid

The next big thing in natural appetite control supplements has emerged: pinolenic acid. It's a natural acid found in pine nuts, specifically Korean pine nuts. Pinolenic acid has been tested and shown to offer surprisingly good results in turning off the appetite without causing any negative side effects whatsoever. It stimulates the production of hormones that tell the hypothalamus you're full, so you stop eating. But before I get to the scientific details of the pinolenic acid and why it has promise as an appetite suppressant, let me tell you how I discovered pinolenic acid.

It all started in 2005 in Patagonia, Ariz. I was visiting the Tree of Life Rejuvenation Center, which is a raw food retreat run by Dr. Gabriel Cousens, and there I learned to make a number of fascinating recipes for the raw foods diet. That's where I learned how to make almond milk, for example, which I still make today to replace cow's milk and soy milk. I also learned some nut cheese recipes, and after reading the book "Raw in 10 Minutes" by Brian Au, I learned the recipe for pine nut nacho cheese. You make this by grinding pine nuts, turmeric and a few other spices in a blender and blending it up until you create a cheese-like texture, and it actually tastes a lot like cheese. You then slice some red cabbage into triangle shapes to make the "nacho chip," and then coat the cabbage slices with this pine nut cheese.

Well, it didn't take long for me to realize that you couldn't eat very much of this stuff. For some reason, after a few bites of this pine nut cheese, you would get surprisingly full. It was as if there was something in the cheese that was filling you two or three times faster than normal foods. I shared this food with several people and they noticed the same thing; that no one could eat much of this cheese, even though it tasted very good. There was definitely something in the pine nuts that was causing us to lose our appetite, and as a result, eat less.

Fast-forward to a year later, and research in Korea has been published showing that the pinolenic acid in the pine nuts stimulates the production of CCK—an appetite suppressant hormone. This CCK travels to the brain, specifically to receptors on the hypothalamus, and tells

the brain to turn off your hunger, so you naturally stop eating. The study in Korea showed that participants exhibited a 36 percent lower perceived hunger following the ingestion of just 3 grams of pinolenic acid before a meal. As a result, those in the study ate less and lost weight.

This way of losing weight is called calorie restriction. If you turn off your appetite, you will consume fewer calories, eventually reducing body fat. These programs are very successful if they are followed. They not only result in a rapid loss of excess body fat, but they also improve insulin resistance and insulin metabolism. They greatly improve cardiovascular health and blood lipid profiles, as well as extend longevity and increase bone density, nervous system function, immune response, and cognitive function. There are so many benefits from calorie-restricted diets that if they could be made easier to follow, almost everyone would pursue this diet. The only reason people don't is because it's so difficult to just eat less. Hunger kicks in and drives people nuts, so they give in and eat more.

That's why this pinolenic acid is so promising: It's able to naturally and powerfully suppress the appetite using a commonly available fatty acid in a food that we already know is safe, to naturally and powerfully suppress the appetite, thereby leading to lower caloric consumption. You can also get the effect of pinolenic acid just by eating 3 grams of pine nuts, because the pine nuts contain fiber, protein, carbohydrates, and things other than just fatty acid. But you will find the fatty acid alone acts as an appetite control supplement.

The other big appetite suppressant supplement growing in popularity is *hoodia gordonii*, but even though the actual plant itself may be very effective for appetite control, the industry is plagued by frauds and con artists. As much as 80 percent of the *hoodia* being sold in the marketplace is counterfeit *hoodia*, so people aren't having much success with it—not because the *hoodia* didn't work, but because most of what was sold was counterfeit. Even so, demand is extremely high for natural weight loss and appetite suppressant supplements. Sales of *hoodia* have reached into the tens of billions annually, and may get larger still. But I think much of that demand will probably shift over to pinolenic acid, because pine nuts are more commonly available, are better known by people and just really work well.

Let's take a closer look at the scientific studies backing the use of pinolenic acid as a supplement. Pinolenic acid was first introduced at the American Chemical Society in the spring of 2006, when the results of a randomized placebo-controlled study testing pinolenic acid were revealed. Overweight women were given 3 grams of either pinolenic acid or a placebo before eating breakfast, and after eating, the blood was taken at regular intervals up to four hours later in

order to determine the levels of circulating hormones in the blood. The two hormones that were monitored were CCK, also known as cholecystokinin and GLP-1, which is gouchgon-heptitide-1. These two hormones are known for regulating appetite as well as altering the speed with which food moves through the digestive system, most notably the upper stages of the small intestine. The desire to eat was also measured in the test subjects as well as their "prospective food intake." This was a subjective measure asking the women to rate how hungry they felt and how much food they thought they would consume later.

The results showed that circulating levels of CCK were significantly higher in women consuming pinolenic acid than women taking the placebo. In fact, four hours after taking the pinolenic acid, the test subjects showed a 60 percent increase in CCK circulating in their bloodstreams, compared to those who did not take the pinolenic acid. It also had a prolonged effect, continuing to boost the circulating levels of these hormones for at least four hours in the study. Similarly, the circulating levels of GLP-1 were shown to increase by 25 percent over four hours compared to the ones who took the placebo. The women rated their desire to eat as 29 percent lower, which is quite an impressive number, especially considering that if the desire to eat is lower, food intake will naturally decrease, as well.

Because pinolenic acid reduces the desire to eat for such a long time, it may become a very useful tool in helping people follow a calorie-restricted diet, which is the best way to lose body fat, boost insulin sensitivity, decrease insulin resistance, enhance heart health and lower blood pressure and LDL cholesterol, as well as achieve many other metabolic and physiological goals that are associated with increased health and longevity. Credit for much of this research belongs to the Life Extension Foundation, whose article in the July 2006 issue provided many of the facts you're reading here. You can find them at www.LEF.org. The Life Extension Foundation does sell a new supplement based on pinolenic acid, which they also explain in their article, however, I personally don't sell such products, nor do I make commissions or affiliate fees of any kind, so I do not profit from this in any way.

How pinolenic acid works

Now, both CCK and GLP-1, as I mentioned, are intimately involved in appetite control and the regulation of food through the digestive system. CCK not only stimulates the gallbladder to relieve bile, which is important for the digestion of food and dietary fats, but it also slows what's called gastric emptying, which means it reduces the rate at which partially digested food matter leaves the small intestine. When the small intestine is not emptying, you feel full

longer; this is one way that CCK suppresses the appetite and prevents us from eating more. GLP-1 also promotes a feeling of fullness, because the food is not entering your bloodstream as quickly. GLP-1 acts as a braking mechanism to smooth out the curve of conversion of food into energy. That's a good strategy to not only control appetite and lose weight, but also to reduce glycemic—or blood sugar—spikes, and thereby steady the blood sugar curves and slow insulin release. Excess insulin promotes insulin resistance, which leads to type 2 diabetes, and it is also known to aggravate cholesterol and raise LDL cholesterol. Excess insulin causes wild swings in cognitive function and is associated with Alzheimer's disease and many other different degenerative diseases of the body.

Many prescription drugs are also now known to interfere with blood sugar metabolism. In fact, new research has just come out showing that antidepressant drugs actually promote type 2 diabetes by unbalancing blood sugar metabolism. If you're on antidepressants, you may gain weight more easily, which can lead to type 2 diabetes or other blood sugar disorders such as hyperinsulinemia or hypoglycemia. This is something that pine nuts or pinolenic acid can help with—they give you steady energy while minimizing the spikes in the blood sugar and insulin production that would normally follow.

There are some other dietary supplements available that are either straight CCK or a precursor to CCK, but it's not known whether they work directly when introduced as an external hormone through the digestive tract. It seems to be more effective if the body produces these hormones on its own in response to the consumption of certain dietary macronutrients. In this case, we're talking about pinolenic acid from Korean pine nuts. The natural production of CCK and GLP-1 seems to be the most effective way of producing hormones in your body. The injection of hormones might work, but that's impractical for most people and that would turn these hormones into a drug, requiring a physician's approval and the use of a lot of needles, which is not acceptable to most consumers.

So the ability to actually consume pinolenic acid either through supplements or through pine nuts is a great convenience. It is also a readily acceptable form of introducing this fatty acid. The taste is actually neutral or good depending on if you like pine nuts, and we also know that the safety factor in consumable pine nuts is very high because this is one of the foods that has been traditionally consumed for literally tens of thousands of years by our ancestors, and there are no known toxic effects of consuming these naturally plant-based fats. Certainly you can overdo pine nuts just like you can overdo anything, but you would probably feel full long before you could possibly overdose on them. As I shared earlier,

when I tried to consume a fairly large amount of pine nuts in the form of nut cheese, I got extremely full and just had to stop eating.

Calorie restriction

Now, let's move on to some of the studies shown in the *Journal of the American Medical Association* that are concerned with calorie restriction. In one study, subjects were put on a calorie-restricted diet for six months and at the end of that time, their total body weight decreased by 10 percent. More interestingly, body fat decreased by 24 to 25 percent. That's a significant reduction in stored body fat over a six-month period of time, but also a very reasonable loss of body fat. I think that in future studies of calorie restriction, pinolenic acid supplements may prove to be extremely useful. They are healthy and come from a completely natural source, and have been traditionally consumed in large quantities by countless people over the ages, so its mechanism is well understood. It suppresses appetite by enhancing the production of appetite-suppressing hormones, CCK and GLP-1, so there really aren't mysteries about how it works. If you eat fewer calories, the body will begin to metabolize body fat for energy, shedding excess body fat and achieving the weight loss goals.

The interesting thing about calorie restriction is that it offers significant benefits to many other organs and systems in the metabolic process, resulting in long-term enhanced longevity. It also promotes greater cognitive function and lowers LDL cholesterol, blood pressure, fasting insulin levels, body weight and body fat storage, and many other healthful biological or physiological effects.

There's no question that a calorie-restricted diet is a beneficial strategy for weight loss and enhancing the lifespan. However, there are two important points to mention: Calorie restriction without nutrition is of course a dangerous way to lose weight, because if you reduce your calories but you do not increase your nutritional intake, you are likely to lose weight but also put yourself in a state of chronic nutritional deficiency. Again, most people who are obese already exist in a state of nutritional deficiency. So you have to build up your nutrients and reduce intake of these nutritionally depleted foods while consuming superfoods and high-density nutritional items at the same time. That way you reduce overall caloric intake, but become healthier. So be sure to use these hand-in-hand. Don't reduce your calories unless you are increasing your nutritional density of the foods that you're consuming.

The second point is that, on paper, everybody loves a calorie-restricted diet. It's easy to show an effective way for people to lose weight using a spreadsheet. But when it comes to reality, in

nearly every case, hunger kicks in and people end up eating more than they planned to eat. This is why pinolenic acid is such a potentially great supplement for weight loss: It acts as an aid to the person trying to lose weight and sort of shoulders some of the responsibility and self-discipline. If the pinolenic acid can turn off some of the appetite, people need less self-control and less discipline in order to accomplish the same calorie restriction goals.

It doesn't mean you are lacking self-discipline if you need a supplement to help control hunger. Some days, even I can't stick to calorie restriction. I will eat something healthy and supplement with pinolenic acid, rather than going to bed hungry. It's no fun to lose weight when it's torture. There's nothing wrong with using natural health supplements to lose weight if you combine that with good nutritional supplementation so that you boost your health at the same time you are shedding body fat. There's no judgment against using suppressants as long as they are healthy and don't have harmful side effects.

Everyone would follow a restricted diet if it were easy, but it isn't easy, and evidence of that can be found just by looking around. Some people try to pursue these crazy diets and attempt to lose 10 pounds a week, and those are not healthy diets. They cannot be, because healthy, sustained weight loss only takes place if you lose only about 1 to 2 pounds a week. I'd like to add a personal note: This is one food that I can absolutely verify works as an appetite suppressant. It is something that I have consumed before, and I noticed this dramatic appetite suppressing effect well before this research. I was curious about it at the time, but didn't have the clinical research to know exactly how effective it was.

The real question concerning the supplements is, "What is the effective dosage?" In the study mentioned here, the dosage was 3 grams before every meal. If you eat three meals a day, that would mean 9 grams of this fatty acid a day, which is a very reasonable level. But it's questionable whether that is the optimal dose; the optimal dose might be 4 grams or 5 grams or something less than that. Maybe 1 1/2 grams works for most people. This is something that we don't know and that may have to be arrived at through more studies or sharing of information among people who are using pinolenic acid as a weight loss supplement.

The other thing that we don't know is how this appetite suppressant works in conjunction with certain macronutrient sources. For example, it is known that if you eat high-glycemic carbohydrates for breakfast, that will stimulate hunger a few hours later thanks to the spike and plummet of blood sugar levels due to the insulin response to refined carbohydrates. In this study, the women who were given the supplements did consume carbohydrates as part of their

breakfast, although it's not stated exactly what type of carbohydrates they ate, or what their glycemic index was. It might be very interesting to see what kinds of synergistic effects might be achieved by combining pinolenic supplements with a very low glycemic diet, especially in the first half of the day. What if your breakfast consisted of sweeteners like agave nectar, which is lower on the glycemic index than sugar? What if you didn't eat pancakes and syrup, but instead drank cucumber juice with some superfood powders? That's what I eat for breakfast. It's low-glycemic and it keeps your blood sugar stable for many hours. Also, what might be the effects of pinolenic acid when used in conjunction with other fatty acids? My guess on this, as a holistic nutritionist, is that pinolenic supplements would be better consumed by themselves, and that healthy oils should only be consumed during the meal or after the meal.

I would be sure to stick to a low-glycemic diet no matter what I take in terms of appetite suppressants, simply because the appetite-stimulating potential of the carbohydrates is so great that if you continue to eat doughnuts, cookies, cakes, crackers, or white bread, chances are that these pinolenic supplements are not going to be able to help you lose weight because the dietary carbohydrates are going to counteract the appetite-suppressing capability of this pinolenic acid. This is a supplement that needs to be used with knowledge, and you need to line up all the other elements in your diet and lifestyle to support the appetite-suppressing effect of pinolenic acid. Water itself is an appetite suppressant that, combined with pinolenic acid, is likely to double or perhaps even triple the appetite suppressant effect. So simply drinking an 8-ounce glass of water with your pinolenic acid supplement before your meal could potentially reduce your hunger by as much as 40 or maybe even 50 percent.

If you do this consistently over a period of several days, combined with even just an average amount of exercise, chances are you will find yourself losing a significant amount of body fat. If you combine this strategy with a remineralization and nutritional approach by adding superfoods and high-nutrient density foods and supplements to your diet, then you're going to turn off the cravings that fuel the appetite even more effectively. When you put all these measures together, I believe that it is possible to lose weight. This is the most promising natural appetite suppressant I have seen yet, and one I have devoted much attention to in this book. Use it wisely; use it in conjunction with nutritional supplementation, exercise, water intake and avoidance of foods and beverages that promote obesity, and you will beyond a doubt experience much more success with weight loss than you have in the past.

An A-to-Z guide to weight loss aides and terms

A

Alli: Marketed name for over-the-counter version of GlaxoSmithKline's Xenical diet pill; works by stopping the absorption of one-third the amount of fat you consume; known for its bad side effects. *See "Why You Need Natural Alternatives to Diet Pills and Weight Loss Drugs."*

Avocado extract tablets: Two tablets a day or more may aid in weight loss by reducing or completely eliminating your desire for sugary foods. *See "Your Appetite: What it is and How to Control it."*

B

Black: This color is a natural appetite suppressant; using a black tablecloth can help you cut your calories. *See "Appetite and Emotions."*

Brindall berry: Herb that works to reduce appetite, increase metabolism and lower cholesterol; available in supplement form; also called Citrin, *Garcinia cambogia* and hilla. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

C

Calcitonin: Thyroid-produced hormone believed to stabilize metabolism in postmenopausal women; available by prescription only. *See "Can Hormone Supplements Safely Help You Lose Weight?"*

Calcium deficiency: Linked to cravings for oily, fatty foods and carbonated soft drinks. *See "Fighting Food Cravings."*

Carbon deficiency: Linked to cravings for sugary foods. *See "Fighting Food Cravings."*

Cellulite: A dimpled, "cottage cheese-" or "orange peel-like" appearance to the skin that occurs when subcutaneous fat protrudes into the dermis; liposuction and/or simply cutting back on calories is ineffective against it; some people believe that the rainforest herb chá de bugre will get rid of it, though this is still scientifically unproven. *See "Your Appetite: What it is and How to Control it."*

Chá de bugre: Popular rainforest herb believed to act as both a natural appetite suppressant and even get rid of cellulite; widely available online. *See "Your Appetite: What it is and How to Control it."*

Chickweed: A common "weed" that may act as a natural appetite suppressant. *See "Your Appetite: What it is and How to Control it."*

Cholecystokinin (CCK): A hormone released by the intestinal tract when you eat fatty foods, giving you the sense of "feeling full," which is the signal to stop eating; the amino acids phenylalanine and tryptophan help trigger this release, so in this sense they reduce appetite. *See "Your Appetite: What it is and How to Control it."*

Chromium: Trace mineral that plays an important role in the body's production and utilization of insulin; chromium supplementation may help control appetite, reduce sugar cravings, and boost metabolism. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Chromium deficiency: Linked to cravings for sugary foods. *See "Fighting Food Cravings."*

Citrin (HCA): Trademarked name for a standardized herbal extract of *Garcinia cambogia*, a herb that works to reduce appetite, increase metabolism and lower cholesterol; available in supplement form; also called Indian berry, hilla and brindall berry. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

D

Dahlia root: Natural appetite suppressant. *See "Your Appetite: What it is and How to Control it."*

DHEA: Dehydroepiandrosterone. An important adrenal hormone that declines with age; believed to block an enzyme known to produce fatty tissue, act as a natural appetite suppressant, and boost metabolism; associated with menopausal and andropausal symptoms as well as age-related weight gain; DHEA supplements are popular and widely available OTC; human-based research studies are inconclusive about DHEA's effectiveness. *See "Can Hormone Supplements Safely Help You Lose Weight?"*

Diuretic: Herbs and other substances that help the body relieve fluid retention and increase urine production. *See "Fluid Retention: The Inside Guide."*

E

Edema: The medical term for fluid retention, which can make you look and feel like you have gained weight. *See "Fluid Retention: The Inside Guide."*

Ephedra (Ma huang): Herb that both boosts the metabolism and mildly suppresses the appetite; may have potentially lethal effects in people with high blood pressure or heart disease; banned by the FDA in 2004. *See*

"How to Control Your Appetite and Boost Your Metabolism at the Same Time."

Estradiol: Form of estrogen usually prescribed as part of postmenopausal hormone replacement therapy; can also help you lose weight by controlling your appetite. See *"Can Hormone Supplements Safely Help You Lose Weight?"*

Evening primrose oil: May reduce appetite throughout the day if taken in the morning. See *"Your Appetite: What it is and How to Control it."*

F

Fennel: Acts as a natural appetite suppressant. See *"Your Appetite: What it is and How to Control it."*

Fen-Phen: Combination of the prescription drugs fenfluramine and phentermine; popular in the early- to mid-1990s; linked to heart valve damage; banned by the FDA in 1997. See *"Why You Need Natural Alternatives to Diet Pills and Weight Loss Drugs."*

Fiber: High-fiber foods are essential to any weight loss diet, and any disease prevention diet in general. Fiber can help you reduce your appetite and the amount of fat and calories absorbed by your body. See *"Your Appetite: What it is and How to Control it."*

G

Gamma-linolenic acid (GLA): The active component of flaxseed and other omega-3-rich foods; it is a natural appetite suppressant. See *"Your Appetite: What it is and How to Control it."*

Garcinia cambogia: Herb that works to reduce appetite, increase metabolism and block the body's formation of cholesterol and other lipids; available in supplement form; also called HCA, Citrin, Indian berry, hilla, and brindall berry. See *"How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

German chamomile tea: Herbal tea that works as an appetite suppressant, according to Costa Ricans. See *"Your Appetite: What it is and How to Control it."*

Ghrelin: Appetite-stimulating hormone produced in the stomach; produced in larger quantities when the stomach is empty or when calories are restricted. See *"Your Appetite: What it is and How to Control it."*

Glucomannan: Appetite suppressant, water-soluble fiber obtained from Konjac Root; available in supplement form. See *"Your Appetite: What it is and How to Control it."*

Grapefruit: Acts as a natural appetite suppressant; a very low-calorie food. See *"Your Appetite: What it is and How to Control it."*

Guar Gum: A 90-percent soluble fiber; acts as a natural appetite suppressant by making you feel "full" and stabilizing your blood sugar. *See "Your Appetite: What it is and How to Control it."*

Guarana: Stimulant herb that may increase metabolism, suppress appetite, relax muscles, act as a diuretic and enhance mental and physical performance; may also cause insomnia, anxiety and addiction; derived from South American berry. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Gymnema Sylvestre: Herb that actually reduces and possibly eliminates your ability to taste sugar, making it an effective appetite suppressant that is especially good for people with a "sweet tooth" and diabetics. *See "Your Appetite: What it is and How to Control it."*

H

Hawthorn berries: Natural appetite suppressant and digestive aid, according to traditional Chinese medicine; also good for cardiovascular health. *See "Your Appetite: What it is and How to Control it."*

HCA: Hydroxycitric acid. A standardized herbal extract of *Garcinia cambogia*; works to reduce appetite, increase metabolism, and inhibit the body's formation of cholesterol and other lipids; available in supplement form; also called Citrin, Indian berry, hilla,

and brindall berry. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Herbal "fen-phen": Popular name for a combination of the herbs ephedra and St. John's wort; known to boost metabolism and curb appetite; actually contains neither fenfluramine nor phentermine ("Fen-Phen"). *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Hercampure: Speeds up metabolism and reduces appetite; touted as a natural remedy for obesity and high cholesterol. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Hilla: Herb that works to reduce appetite, increase metabolism, and lower cholesterol; available in supplement form; also called Citrin, *Garcinia cambogia*, and brindall berry. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Human growth hormone: Produced by the pituitary gland throughout life; keeps metabolism efficient; levels decline with age; synthetic injections available; injections shown to help adults lose weight, lose wrinkles, improve bone density and improve sexual performance; synthetic HGH sometimes touted as the "elixir of youth"; some experts skeptical about unknown long-term negative effects. *See "Can Hormone Supplements Safely Help You Lose Weight?"*

Hypothalamus: Part of the brain that controls appetite, as well as the sex drive, sleep cycles, emotions, etc. *See "Your Appetite: What it is and How to Control it."*

I

Indian berry: Herb that works to reduce appetite, increase metabolism, and lower cholesterol; available in supplement form; also called *Garcinia cambogia*, Citrin, hilla, and brindall berry. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Iron deficiency: Linked to cravings for red meat. *See "Fighting Food Cravings."*

J

Jerusalem artichokes: Natural appetite suppressant. *See "Your Appetite: What it is and How to Control it."*

Jumper berry: Acts as a diuretic; also helps the body detoxify itself. *See "Fluid Retention: The Inside Guide."*

K

Kola nut: Natural stimulant that may boost your metabolism, suppress your appetite, reduce fatigue, act as a diuretic, and enhance mental and physis performance. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Konjac Root: Plant found in Japan; source for a water-soluble fiber called glucomannan. *See "Your Appetite: What it is and How to Control it."*

L

Low Glycemic Index (GI) Diet: Involves eating mostly complex carbohydrates—which create slow, even curves in blood sugar levels—rather than refined carbohydrates, which make blood sugar levels fluctuate wildly; a low GI diet reduces hunger pangs and food cravings; leads to decreased risk for obesity, type 2 diabetes and other chronic diseases. *See "Weight Loss Eating Plans and Strategies."*

M

Ma huang: Chinese name for ephedra; herb that both boosts the metabolism and mildly suppresses the appetite; may have potentially lethal effects in people with high blood pressure or heart disease; banned by the FDA in 2004. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Magnesium deficiency: Linked to chocolate cravings. *See "Fighting Food Cravings."*

O

Orlistat: Diet pill made by GlaxoSmithKline; also known as Xenical and Alli; works by stopping the absorption of one-third the amount of fat you consume; known for its bad

side effects; recently gained FDA approval for over-the-counter sale under the marketed name *Alli*. See *"Why You Need Natural Alternatives to Diet Pills and Weight Loss Drugs."*

P

Parsley: Acts as a natural diuretic. See *"Fluid Retention: The Inside Guide."*

Peppermint tea: Acts as a natural appetite suppressant. See *"Your Appetite: What it is and How to Control it."*

Peptide YY3-36 (PYY): Appetite-suppressing hormone produced by intestines in direct correlation to the amount of calories consumed. See *"Your Appetite: What it is and How to Control it."*

Plantain: A weed that adds bulk to the intestines, making it a natural appetite suppressant; reduces cholesterol and triglyceride levels; believed to also block the absorption of lipids in the intestines; available online as a leaf or powder; not to be confused with plantain bananas. See *"Your Appetite: What it is and How to Control it."*

Phenylalanine: Essential amino acid necessary for achieving and maintaining a proper weight because of its effects on appetite and metabolism; it is available in supplement form. See *"Your Appetite: What it is and How to Control it."*

Pomngaba: Indian name (and marketed name) for *Chá de bugre*, a popular rainforest herb believed to both act as a natural appetite suppressant and even get rid of cellulite; widely available online. See *"Your Appetite: What it is and How to Control it."*

Pyruvate: A naturally occurring substance in the body; decreases weight, BMI, and blood pressure by increasing metabolism; available in supplement form.

R

Raw diet: A diet in which you avoid eating foods heated above 110 to 120 degrees Fahrenheit; usually this means eating only organic, vegan foods; proponents say that raw diets promote weight loss, healthy skin and better digestion, as well as reducing the risk for, and even reversing, chronic disease; opponents say raw diets lead to malnutrition. See *"Weight Loss Eating Plans and Strategies."*

Red raspberry leaf tea: Acts as a natural appetite suppressant, diuretic, and metabolism stimulant. See *"How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

S

Smell therapy: Researchers have found that a blend of banana, peppermint, and green apple scents reduce appetite if you inhale them when you start to feel hunger pangs or food cravings. See *"Your Appetite: What it is*

and How to Control it."

Spirulina: Acts a natural appetite suppressant; extremely nutritious, potent cancer-fighter; boosts the immune system; known as a superfood. *See "Your Appetite: What it is and How to Control it."*

Stevia: A natural sweetener, which can function as a sugar substitute and may help suppress appetite. *See "Your Appetite: What it is and How to Control it."*

Sulfur deficiency: Linked to cravings for sugary foods. *See "Fighting Food Cravings."*

T

Trace Minerals Research's "Complete Food Multi" supplement: Can help reduce or eliminate mineral deficiency-related food cravings. *See "Fighting Food Cravings."*

Tryptophan (5-HTP): Amino acid that the brain needs to make the neurotransmitter serotonin; may reduce appetite and make you feel "full" sooner while eating; available in supplement form as l-tryptophan or 5-HTP. *See "Your Appetite: What it is and How to Control it."*

Tryptophan deficiency: Linked to cravings for sugary foods and overeating. *See "Fighting Food Cravings."*

Tyrosine: Amino acid that the brain needs to make the neurotransmitters dopamine and norepinephrine; acts as a mild appetite suppressant; helps to reduce body fat by helping you to consume fewer calories and cut down on that body fat plaguing your problem areas; acts as a mild antioxidant; aids in the production of the important amino acid phenylalanine; is necessary for proper functioning of the adrenal, thyroid, and pituitary glands, and also stimulates the production of natural, metabolism-boosting human growth hormone. *See "Your Appetite: What it is and How to Control it."*

V

Violet: This color is a natural appetite suppressant; painting your kitchen or dining room walls violet, or using a violet tablecloth, creates a peaceful and soothing eating environment. *See "Appetite and Emotions."*

Vitamin B6: Aids in fat and protein metabolism, as well as the brain's conversion of tryptophan to serotonin, a neurotransmitter that plays an important role in appetite control and wards off emotional eating. *See "Your Appetite: What it is and How to Control it."*

Vitamin B12: Can help dieters control appetite. *See "Your Appetite: What it is and How to Control it."*

X

Xenical (orlistat): Prescription diet pill made by GlaxoSmithKline; works by stopping the absorption of one-third the amount of fat you consume; known for its bad side effects; recently gained FDA approval for over-the-counter sale under the marketed name Alli. *See "Why You Need Natural Alternatives to Diet Pills and Weight Loss Drugs."*

Y

Yerba mate: Popular, caffeinated South American herbal tea that suppresses appetite and boosts metabolism. *See "How to Control Your Appetite and Boost Your Metabolism at the Same Time."*

Research on natural alternatives to diet pills and weight loss drugs

Why you need natural alternatives to diet pills and weight loss drugs

When taken with meals, orlistat blocks the absorption of about one-quarter of any fat consumed. That fat—the equivalent of about 150 to 200 calories—is passed out of the body in stools, which can be loose or oily as a result. Other side effects include gas, incontinence and oily spotting. About half of patients in trials experienced such side effects, the company said. **"FDA Panel Approves Over-the-Counter Diet Pill" by the Associated Press, MSNBC (24 Jan. 2006).** www.MSNBC.MSN.com/id/10987529/page/2

The drug may lead to gastrointestinal side effects, stemming from its action in blocking the absorption of fat, in about half of those who take it. The side effects include the loss of bowel control in some 7% of patients—or what Dr. Wood termed "the underwear risk." Following a low-fat diet, said GSK, "maximizes weight loss and minimizes unwanted gastrointestinal treatment effects. **"FDA Advisers Give the Thumbs Up to OTC for Xenical" by Mark Bloom, MedPage Today (24 Jan. 2006).** www.MedPageToday.com/PrimaryCare/WeightManagement/tb/2540

Although the Phen-Fen mix was on the market for years, it was not until 1992 after a study at the University of Rochester showed a combination of the two appetite suppressing drugs were more effective than the traditional regime of lower calories and exercise. The Rochester study showed, across the board, that a diet and exercise plan combined with Phen-Fen yielded better results than diet and exercise alone. In the mean time, millions ran to doctors for the dynamic duo and, in a short time, reports of heart valve damage began to surface. No doubt there is a link between these drugs and heart maladies. *Everything You Need To Know About Fat Loss* by Club Creavalle Inc., page 146

The combined use of fenfluramine and phentermine for weight loss is a classic illustration of an unexpected deadly drug interaction. These drugs rapidly became known as the famous "Fen-Phen" combination that gained great popularity as a weight loss program in the mid-1990s. It is also another tragic example of physicians' "off-label" use of medications. (The FDA approved the prescription appetite suppressant phentermine for single-drug, short-term—"a few weeks"—treatment for obesity in 1959. And in 1973 the FDA also approved fenfluramine as a single

drug, with short-term use as a prescription appetite suppressant.) ***Death By Prescription* by Ray D. Strand, page 103**

In case you have not heard of the prescription diet drug commonly known as fen-phen, the drug refers to the use in combination of fenfluramine and phentermine. The drugs used in combination were approved by the FDA many years ago as appetite suppressants for the short-term weight loss. Phentermine was approved in 1959 and fenfluramine in 1973. ***Prescription Medicines, Side Effects and Natural Alternatives* by American Medical Publishing, page 32**

For example, fenfluramine, a purported appetite suppressant, was withdrawn after possibly as many as five million Americans had taken it. It seems this drug can, in rare cases, cause a potentially fatal lung disease called primary pulmonary hypertension and can commonly cause damage to the heart valves. ***Worst Pills, Best Pills* by Sidney M. Wolfe MD and Larry D. Sasich PharmD MPH, page 774**

Numerous health professionals have been warning the public about the possible dangers of the newly approved appetite suppressant dexfenfluramine, manufactured by Interneuron Pharmaceutical Inc. and sold under the trade name of "Redux." Studies have linked the drug to the potentially deadly condition pulmonary hypertension, as well as sleep disorders and depression. ***Under The Influence Modern Medicine* by Terry A. Rondberg DC, page 139**

The most recent disaster with weight loss drugs involved Redux (fenfluramine), which was designed to reduce appetite by altering levels of neurotransmitters in the brain. Many physicians prescribed fenfluramine and phentermine, another weight loss drug, in a combination known as fen-phen. This drug combination was very effective in helping people lose weight. It was also very effective in causing permanent damage to their heart valves. The FDA banned Redux in 1997. ***Syndrome X* by Jack Challem Burton Berkson MD and Melissa Smith, page 58**

In 1996, the New England journal of Medicine (NEJM) came under fire after it published an article putting the newly approved appetite suppressant dexfenfluramine (known as "Redux") in a positive light despite numerous studies showing its risks outweighed any benefits. Later, it was revealed that the pro-Redux article was written by two paid consultants to the firms which manufactured and sold the drug. ***Under The Influence Modern Medicine* by Terry A. Rondberg DC, page 140**

Fen-Phen became a dieting craze in the 1990s after research found a positive slimming effect from combining two appetite suppressants, fenfluramine and phentermine. Beals added that even the fallout caused by several deaths linked to ephedra products has hardly put a dent in the nation's hunger for weight loss pills. ***Ephedra: Fact And Fiction* by Mike Fillon, page 46**

Alli could cost consumers \$12 to \$25 a week, Glaxo said. The company estimated 5 million to 6 million Americans a year would buy the drug if offered over the counter. Those numbers could mean at least \$1.5 billion a year in retail sales. **"FDA Panel Approves Over-the-Counter Diet Pill" by the Associated Press (24 Jan. 2006).** www.MSNBC.MSN.com/id/10987529/page/2

Sixty million Americans are overweight. Recently, Western medicine has developed new drugs to reduce appetite. These only maintain hazardous addictions. What good can come from eating one junk food instead of five or ten? None of them build vitality or beauty. They only maintain weakness, so that the drugs themselves become addictions. ***Asian Health Secrets* by Letha Hadady DAC, page 171**

The new wave of weight loss medications is attempting to regulate this symphony of appetite-control chemicals. Drugs that raise CCK levels have come and gone as we have seen that the body develops a tolerance to orally administered CCK. Fenfluramine and another serotonin-boosting drug called dexfenfluramine entered the market with mixed reviews and serious side effects, such as high blood pressure. Other serotonin-regulators and medications that decrease NPY levels are now being tested, and leptin is being considered as a potential drug for treating obesity. How useful these drugs will be in the long run is questionable when you consider the complexity of our appetite-control symphony of chemicals. ***Food and***

***Mood* by Elizabeth Somer MA RD, page 29**

Leptin (from Greek "leptos thin), discovered in 1994, is produced in fat tissues and other organs in response to fat deposits, to be secreted into circulation to the brain hypothalamus suppressing appetite, to tongue taste organs inhibiting "sweet" impulse, and to fatty tissues where leptin controls fatty acid metabolism for energy, while reducing fat and appetite. Leptin reduced food consumption 60 percent in leptin-deficient mice, while increasing energy. Leptin is found in mother's milk colostrum: Large fat cells indicate leptin deficiency. Leptin-deficient obese mice lost 40 percent of body weight after one month on leptin, and reduced diabetes, eventually becoming as lean as the most athletic mice: while normal mice lost 12 percent of bodyweight. Leptin was recently found to regulate at least six Gene clusters, inhibiting fat-production enzyme Acety 1-CoA-Carboxylase, reducing synthesis of fat cells, while improving fat burning in muscle cells. (Slim Factors colostrum formula, Immune-Tree, Orem, Utah). ***Anti-Aging Manual* by Joseph B. Marion, page 10**

Your appetite: What it is and how to control it

There are many factors that contribute to the growing obesity problem, but clinically one of the key factors appears that many people seem to have faulty appetite control. The urge to eat reflects a very complex system that has evolved to help humans deal with food shortages. As a result it is extremely biased towards weight

gain. The solution to combat the tendency to eat more than we require is to accentuate the normal physiological processes that curb the appetite. A very elaborate feedback system exists that is supposed to tell the brain when the body requires more food as well as when enough food has been consumed. Fortunately, we can use this system to our advantage in the battle against the bulge. **"Key Triggers of an Increased Appetite and a Natural Solution"** by Michael T. Murray ND, *Total Health* 26:2 (Apr. / May 2004): 5 - 7.

"We are machines designed to live through famine," says Bloom. "In the days when we evolved, there would be a good harvest for six years and a bad harvest in the seventh year. And the only people who lived through the seventh year were the ones that were overweight. So, if you were able to watch your weight very nicely, you aren't here anymore. We are survivors of the obese. All we need is a plentiful supply of food and we gain weight. That's the way we are made." **"The Hunger Hormone,"** CBS News (13 Aug. 2003). www.CBSNews.com/stories/2003/03/11/60II/main543614.shtml.

Hunger results from a complex interplay of physical and emotional factors. Brain researchers have determined that appetite is affected by bodily levels of a variety of substances, including blood glucose, digestive hormones, water, protein, and certain neurotransmitters. Information on such hunger controllers is sent to the cerebral cortex and the small region of the brain known as the hypothalamus. The hypothalamus helps

to regulate various bodily functions, from sleeping patterns to appetite. *Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 360

Cummings' new research points to a related problem: Calorie for calorie, fat is less effective than other nutrients at suppressing ghrelin's hunger call. During one recent study, his team on different days infused into rats' gastrointestinal tracts equal-calorie quantities of pure sugar, protein, or fat. In the February *Endocrinology*, the group reports that sugar and protein each prompted a rapid, 70-percent drop in the concentration of ghrelin circulating in the rodents' blood. When rats instead received fat, ghrelin concentrations fell far more slowly and by only about 50 percent. **"Still Hungry?"** by Janet Raloff, *Science News* 167:14 (2 Apr. 2005): 216 - 220.

In laboratory animals, the more galanin produced, the more weight an animal is likely to gain in the future. Perhaps this is one reason obese people prefer fattier foods and, although they consume the same amount of calories as do lean people, more of those calories come from fat. Combined with a disturbance in the hormone-like compounds that usually turn off appetite—such as insulin from the pancreas and cholecystokinin (CCK) from the digestive tract—Dr. Leibowitz speculates that an excess of galanin could escalate a craving into a weight problem. What turns on the galanin system? As mentioned in chapter 1, galanin levels rise naturally as the day progresses; therefore, they are lowest in

the morning and highest from afternoon until bedtime, which corresponds to the time when most people experience cravings for fatty foods. Galanin levels also rise when estrogen levels are high, which might explain the cravings for sweet-and-creamy foods associated with premenstrual syndrome (PMS). ***Food and Mood* by Elizabeth Somer MA RD, page 75**

Unlike PYY, the stomach-derived hormone ghrelin increases appetite. Ghrelin levels are highest when the stomach is empty and during calorie restriction. Obese individuals tend to have elevated ghrelin levels; when they try to lose weight, ghrelin levels increase even higher. Part of the success of gastroplasty (stomach stapling) in producing permanent weight loss is thought to be the result of significantly reduced ghrelin levels. **"Key Triggers of an Increased Appetite and a Natural Solution" by Michael T. Murray ND, *Total Health* 26:2 (Apr. / May 2004): 5 - 7.**

Galanin is also closely connected to the pleasure response triggered by the endorphins. "Galanin and the endorphins coexist in the same nerve cells and work together," says Dr. Leibowitz. So, while galanin is triggering a craving for ice cream, the endorphins are making the experience pleasurable. Another neurotransmitter called enterostatin also interacts with galanin as a shutoff switch for fat cravings. Inject this neurotransmitter into the brains of animals, and they lose their desire for fatty foods. Researchers suspect the balance between enterostatin, the endorphins, galanin, and possibly serotonin is critical for

appetite control. In contrast, no studies have shown that any over-the-counter diet pills, such as pyruvate or hydroxycitric acid (HCA), are effective in burning fat and reducing cravings for fatty foods. Galanin works with other hormones to convert dietary fat into body fat. As galanin levels go up, so does body fat, while metabolism slows. Weight gain results. ***Food and Mood* by Elizabeth Somer MA RD, page 74**

In earlier work, Bloom's team had shown that after a meal the satiety-signaling gut hormone PYY rose less in obese volunteers than in people with normal weight. **"Still Hungry?" by Janet Raloff, *Science News* 167:14 (2 Apr. 2005): 216 - 220.**

The body also has checks-and-balances on brain activity when it has had enough to eat. CCK is released from the intestines after a meal and sends messages of satiation to the brain. It also interacts with CRH. Elevated insulin levels in the blood after a meal also switch off NPY levels and turn on CRH in the brain, which curbs appetite. In addition, leptin is released from fat tissue and tells the brain to shut off NPY and increase CRH. Estrogen released from the ovaries can turn off appetite by stimulating the release of CRH and suppressing the release of NPY as well. Of course we can tamper with these checks-and-balances by the medications we use (the birth control pill suppresses CCK; cortisone increases insulin levels), how much we exercise (physical activity helps normalize endorphin levels), how much stress we experience (stress elevates cortisol levels, which increases our

preference for fatty foods), and what we eat. ***Food and Mood* by Elizabeth Somer MA RD, page 29**

Water: The natural, healthy, zero-calorie appetite suppressant

Water is generally our best beverage, and consuming about eight to ten glasses a day (most of us will need less when we consume a higher amount of fruits and vegetables), is very helpful for weight loss and keeping the body functioning. It is best to drink two or three glasses first thing in the morning, several glasses between meals, and then a couple of glasses about 30-60 minutes before dinner to reduce the appetite a bit. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 407**

Drink plenty of water or diluted fruit juice. Liquids can help make you feel full and reduce your tendency to overeat at mealtimes. Sorry, but alcoholic beverages don't count—they're often high in calories and can actually inhibit your body's fat-burning mechanisms. ***Off the Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* By Mark Mayell, page 18**

In general, liquids drunk a while before meals can reduce our appetite and thus help prevent overeating, and lemon water is a very good choice. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 301**

Drink six to eight glasses of liquids daily. Herbal teas and steam-distilled water with trace minerals ... added are good. Taken before meals, they help to reduce your appetite. They are nonfattening fillers that also help to dilute toxins and flush them out of the body. Herbal teas mixed with unsweetened fruit juice are very satisfying low-calorie drinks and are also very filling. Use these between meals and when a desire for sweets hits you. Drink sparkling water mixed with fruit juice in place of sodas. ***Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 542**

Dr. Robertson also suggests that "water suppresses the appetite and helps the body metabolize stored fat, helps maintain proper muscle tone, clears wastes and may help relieve constipation." More water is needed by overweight people; for those who tend to retain fluid, drinking plenty of water will help rebalance the improperly distributed body fluids. During weight loss, Dr. Robertson suggests about three quarts a day, each drunk over a 30-minute period—one quart in the morning, another at noon, and a third between 5 and 6 p.m. or thereabouts, depending on dinnertime. The water should be consumed about 30 minutes before meals to help hydrate us and reduce the appetite. The water should be cool to cold, because extra calories will then be burned to warm it. This can become a lifetime habit. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 851**

Another Real Age trick is to drink as much water as possible en route. It not only reduces your appetite by filling your stomach.

***The Real Age Diet* by Michael F. Roizen MD and John La Puma MD, page 271**

Fiber: Feel "full" without the extra calories

A fiber-deficient diet is an important factor in the development of obesity. Dietary fiber plays a role in preventing obesity by: (1) slowing the eating process; (2) increasing excretion of calories in the feces; (3) improving glucose tolerance; and (4) suppressing the appetite by stimulating release of appetite-suppressing hormones like cholecystokinin and its intestinal bulking action. ***Natural Alternatives to Drugs* by Michael T. Murray ND, page 237**

One study found that people who drank a glass of orange juice with a small amount of pectin added felt fuller and ate less. Other studies have found that pectin can favorably affect blood-sugar levels and cholesterol. If you've resorted to over-the-counter or prescription appetite suppressants to control your eating habits, it's nice to know that an occasional glass of tasty fruit juice before meals could be a healthy alternative. ***Natural Cures and Gentle Medicines* by the editors of FC&A Medical Publishing, page 320**

Whether from supplements or foods, fiber in the gastrointestinal system helps to balance blood-glucose levels and thus eliminate

hunger pangs. Fiber promotes the transport of fats and calories through the digestive system, thus lowering the amounts absorbed by the blood and stored in the body. Fiber may also stimulate the release of hormones that suppress appetite. ***Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 369**

Sufficient fiber in the diet supports good colon function and helps to eliminate wastes that are released during weight loss. Especially if the diet is low in fiber foods, we may add supplemental fiber as psyllium seed husks and bran. Psyllium is a soluble fiber that will increase bulk and reduce the appetite. It has also been shown to reduce fat absorption by coating the intestinal tract. When olive oil is also used, it will help mobilize some of the toxins in the intestines and carry them out, while the psyllium will reduce the oil absorption and thus calorie intake. Insoluble wheat or oat bran fiber can also help in detoxification as well as in stimulating the colon function. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 851**

Another helpful weight loss aid is soluble fiber from diet and supplements (psyllium is a good source), which staves off hunger by causing a slower release of glucose. ***Reversing Diabetes* by Julian Whitaker MD, page 201**

Bran

Have a problem with the munchies? Always nibbling and getting fatter as a consequence? How about trying a little bran every day

to reduce your appetite for those sinfully delicious but naughty no-no's? A 1983 Swedish experiment tested bran on 135 members of a weight loss club in Stockholm, discovering that if they took an extra helping of bran just before mealtime, it greatly reduced their hunger feelings. *Encyclopedia of Fruits, Vegetables and Herbs* by John Heinennan, page 47

Psyllium

If you're looking for appetite suppression, don't forget the less glamorous herbs that provide fiber. Psyllium can help you eat fewer calories and still feel full. Plus it has other health benefits such as lowering cholesterol and fighting constipation. Be sure, though, to drink plenty of water with dietary fibers such as psyllium or glucomannan—without sufficient liquid, these can swell up in your intestine, causing the constipation that they're sometimes taken to cure. Typical dosage: Up to six 600-milligram capsules per day with a full glass of water, or up to one teaspoon of husks or two teaspoons of powdered seed in one glass of water (drink immediately). For other fiber products, follow package directions for dosage. Caution: Take 30 minutes to an hour after meals or taking other drugs. *The Herbal Drugstore* by Linda B. White MD, page 448

Psyllium, a seed high in fiber, helps create the sensation of fullness while slowing the digestion of carbohydrates. One teaspoon of powdered psyllium seed (found in health food stores) mixed into eight ounces of water

may be consumed once a day. But use this remedy with caution: Too much psyllium can interfere with your digestive system. *Uncommon Cures for Everyday Ailments* by the editors of *Bottom Line Health*, page 46

Psyllium Fiber: A common weed in southern Europe that has a rich balance of 47.9 percent soluble and 9.7 percent insoluble Fibers (equal to oat bran against cholesterol). Has cellulose, its hemicellulose content and great swelling capacities absorbs cholesterol, toxins and waste material; has lignin (like barley fiber); and hydrophilic muciloid for bulk in the intestines and peristalsis, regular bowel activity. Psyllium provides bulk that softens stools, speeds intestinal transit and colon cleansing; protects from constipation, colitis, diverticulitis, bowel cancer by moving the toxic by-products of bile and fats out of the body. Psyllium lowers cholesterol, improves the ratio of healthy High Density Lipoproteins (HDLs) to Low Density Lipoproteins (LDLs), lessening the risk of coronary heartdisease and heart attacks; for diabetes, by slowing the absorption of carbohydrates; and curbs the appetite for weight control. Has companion vitamins A, C, and E. Take one to four tablespoons daily; regarded as completely safe to take over the long term and in large doses. *Anti-Aging Manual* by Joseph B. Marion, page 9

Guar gum

Extracted from the seeds of the guar plant, guar gum is good for the treatment of diabetes and for curbing the appetite. It also has the ability to reduce the levels of cholesterol,

triglycerides, and low-density lipoproteins in the blood, and binds with toxic substances and carries them out of the body. Guar gum tablets must be chewed thoroughly or sucked gradually, not swallowed whole, and should be taken with lots of water, because guar gum has a tendency to ball up in the throat when mixed with saliva. It should not be used by individuals who have difficulty swallowing or who have had gastrointestinal surgery. Some persons with colon disorders may have trouble using guar gum. ***The A-to-Z Guide to Supplements* by James F. Balch MD, page 137**

Guar gum fiber is 90 percent soluble, 0 percent insoluble from a plant in India and Pakistan, the best anti-cholesterol agent known, seven times better than oat bran, one teaspoon a half-hour before meals lowers bile acids 36 percent, cholesterol and fats 23 percent, and blood sugar levels. Guar gum reduces appetite for two to six pounds loss per week on smaller meal portions, while feeling full longer (caution if with digestion problems or colitis). These soluble fibers absorb over 50 times their own weight in liquids, gastric juices, bile acids, lipids, and harmful bacteria; swelling to a gelatinous mass, they make one feel full, prevent overeating, and cut calorie intake. ***Anti-Aging Manual* by Joseph B. Marion, page 9**

GUAR GUM: Used in emulsions, toothpastes, lotions, and creams. From the ground, nutritive, seed tissue of plants cultivated in India, it has 5 to 8 times the thickening power of starch. Employed also

as a bulk laxative, appetite suppressant, and to treat peptic ulcers. A stabilizer in foods and beverages. No known toxicity. ***Cosmetic Ingredients* by Ruth Winter, page 229**

Konjac Root / Glucomannen

KONJAC Root (*Amorphophallus konjac*) From Japan. Has fiber glucomannen; and no calories. For blood cholesterol; arteriosclerosis; high blood pressure; hypoglycemia; with Lecithin may prevent heart disease; the pancreas and anti-stress, diabetes; rids noxious intestinal bacteria; fiber for good digestion and the colon, diverticulitis, constipation, hemorrhoids; obesity, makes one feel full and suppresses the appetite taken before meals. Has some Vitamins A, B1, B2, B3, and Vitamin C, Calcium, Magnesium, Phosphorus, Potassium, Sodium, Iron, Selenium, Zinc, Silicon, and Manganese. ***Anti-Aging Manual* by Joseph B. Marion, page 781**

Researchers at Michigan State University have reported that some breads help reduce appetite. Working with college students there, Olaf Mickelson, Ph.D., and his co-workers compared the effects of two different breads—one white and one high in fiber. The students reported feeling less hungry when they ate the high-fiber bread (12 slices daily!), and not surprisingly, those on the high-fiber bread lost about five pounds more during the two-month experiment than those who ate equal amounts of the white bread. ***The Healing Foods* by Patricia Hausman and Judith Benn Hurley, page 328**

Apples

Apple. Reduces cholesterol, contains anti-cancer agents. Has mild antibacterial, antiviral, anti-inflammatory, estrogenic activity. High in fiber, helps avoid constipation, suppresses appetite. Juice can cause diarrhea in children.

***Food: Your Miracle Medicine* by Jean Carper, page 475**

Bulk up. Dietary fiber satisfies the appetite more quickly and can keep you feeling full for a while, Dr. Steelman says. You can add fiber to your diet by eating more whole grains, fruits and vegetables. ***Symptoms: Their Causes and Cures* by the editors of *Prevention Magazine Health Books*, page 406**

Remember, too, that fiber, for the most part, does not contribute calories. Also, that it helps you feel full and encourages appetite control because it absorbs fluid, expanding and creating the satisfied feeling the dieter craves. ***Complete Guide to Health and Nutrition* by Gary Null, page 141**

High-fiber foods control your appetite by absorbing water and slowing down your digestion. This makes you feel full longer and helps you eat less. Just one cup of beet slices has almost as much fiber as a cup of cooked oatmeal and yet adds only 75 calories to your daily lineup. ***Eat and Heal* by the editors of FC&A Medical Publishing, page 80**

Adding the right type of fiber to the diet can reduce the risks of certain cancers, diabetes, heart disease, and bowel disorders such as

irritable bowel syndrome and diverticulitis. Fiber helps to lower high blood cholesterol and stabilizes blood sugar levels. It also helps to prevent constipation and hemorrhoids and can assist weight loss by suppressing appetite. ***Prescription for Dietary Wellness* by Phyllis A. Balch, page 140**

In addition, high fiber foods hold on to water in the digestive tract better than low fiber food. The presence of fiber improves digestion and increases your feeling of satiety. In this way, high fiber foods help to curb your appetite, which in turn helps you to naturally control your blood sugar and weight. ***The Good Carbohydrate Revolution* by Terry Shintani, page 92**

But apart from these benefits, fiber is an important part of the Reversal Diet for another reason: It also helps control your appetite. "When the food is very bulky, it fills you up before you get too many calories," says Dr. Ornish. ***The Complete Book Of Alternative Nutrition* by Selene Y. Craig, page 128**

The vegetables are very filling and so suppress the appetite. Because overeating is one of the more common risk factors associated with diabetes, it's easy to see why this ancient treatment is helpful. ***Natural Health Secrets* by Glenn W. Geelhoed MD, Jean Barilla MS, page 224**

Appetite suppressant foods, herbs and other supplements

Avocado extract

The most noticeable effect of taking avocado extract tablets is a reduced desire to consume high-glycemic carbohydrate foods, especially sweet desserts and snacks. By itself, this mechanism may induce some body fat loss. The effects of suppressing excess serum insulin are even more significant in preventing ingested calories from turning to body fat. Another suggested use is taking two standardized avocado extract tablets when an individual does not want to eat or wants to reduce meal portion size. Individuals on diets to lose body fat can find that avocado extract takes the edge off hunger pain, especially for sweets. The accelerated fat-loss effects induced by avocado extract can also motivate dieters to stick with a reduced-calorie program; more important, avocado extract can enable obese individuals to suppress their appetite in the evening hours when there should be no food consumption. ***Disease Prevention and Treatment by Life Extension Foundation, page 1137***

It is important to note that in most of the cases when significant body fat was lost, the individuals were not told to diet. However, many of them did report eating fewer calories because they were not as hungry. Most people will lose weight by taking only two standardized avocado extract tablets a day, while those who want to significantly reduce calorie intake may take two tablets, two or three times a day.

The amount of avocado extract consumed will be highly individualistic, mostly dictated by how long the appetite suppressing effects remain. Some people will take more avocado tablets when hunger returns or avoid them to enjoy a sensible meal. Hypoglycemic individuals may want to take two tablets of avocado extract whenever a sugar craving occurs. This could help to reduce episodes of reactive hypoglycemia in which excess sugar is consumed that elicits a hyperinsulinemic response, followed by another attack of hypoglycemia caused by the excess insulin secreted in response to the prior high sugar intake. ***Disease Prevention and Treatment by Life Extension Foundation, page 1137***

For instance, if you take the avocado sugar extract supplement every evening, your appetite will be reduced, fewer calories will be consumed, and you can expect to start losing about a pound a day. There may be social occasions when you do not want to curb your appetite because you want to eat a big meal. You may not want to take the avocado sugar extract during these occasions because it would not enable you to eat a lot of food. If fasting insulin levels remain significantly above 5, you may need to take more avocado sugar extract tablets. Avocado sugar extract also decreases excess serum insulin that causes food to convert to body fat. By reducing high serum insulin, body fat can be released from storage (fat deposition) in your body. Obese people normally have high levels of fasting insulin (unless they are advanced type 2 diabetics whose pancreatic beta cells no longer produce insulin). These

insulin-dependent diabetics would not benefit from avocado sugar extract because they are not producing enough (or any) insulin to begin with. ***Disease Prevention and Treatment by Life Extension Foundation, page 1149***

In another experiment in this series, water intake was restricted for 7 days in groups of rats. After 7 days, one group was injected with avocado extract, while the other served as the control group (injected with saline). The thirsty rats were then given free access to regular water or to water sweetened with saccharine. The results showed that the avocado extract-injected rats displayed a strong aversion to the saccharine-sweetened water, while the control group eagerly consumed the sweetened saccharine water. The scientists stated that this experiment demonstrated that "food becomes distasteful after avocado extract injection in rats." They noted that the taste aversion was more pronounced in rats fed a high-carbohydrate diet compared to a high-fat diet. This experiment showed that avocado extract suppressed appetite in rats fed a high-carbohydrate diet. The significance of this finding is that many individuals become overweight because of uncontrolled carbohydrate craving. Case history reports show that overweight humans who consume avocado extract develop an aversion to high-glycemic (sugary) foods. Some scientists believe that overconsumption of high-glycemic foods is a cause of body fat accumulation. Therefore, avocado extract shows potential as an anti-obesity agent via this mechanism alone (Langhans et al. 1983). ***Disease Prevention and Treatment by Life Extension Foundation, page 1135***

Chá de bugre (pomngaba)

Cellulite describes the orange peel or cottage cheese-type dimpling of skin, caused by the protrusion of subcutaneous fat into the dermis creating an undulating dermal-subcutaneous fat junction adipose tissue ... Between 85 percent and 98 percent of post-pubertal females display some degree of cellulite ... While harmless, the dimpled appearance is a cause of concern for some people. The cosmetics industry offers many ineffective remedies. There are no supplements that have been approved as effective for reducing cellulite. Liposuction, which extracts fat from under the skin, is not effective for cellulite reduction. Dieting does not get rid of the dimpled appearance, but balanced eating, drinking and exercising may help.

Chá de bugre products are highly commercialized as a weight loss aid in Brazil, where tea bags, fluid extracts, and tinctures of chá de bugre are commonly seen in pharmacies, stores, and even in the beach-front eateries and refreshment stands along Rio de Janeiro's beaches (where bikinis rule!). It has long been a popular weight loss product, which has been marketed as a diuretic and appetite suppressant, and believed to help prevent or reduce fatty deposits and cellulite. Several years ago, an enterprising Brazilian company re-launched a chá de bugre weight loss product, calling it by its Indian name, *pomngaba*, and market demand in Brazil has been fierce ever since. ***The Healing Power of Rainforest Herbs by Leslie Taylor, page 229***

Cumin

Cumin reduces excess stomach acid and appetite, which makes it the ideal spice for ulcers and weight loss. *Asian Health Secrets* by Letha Hadady DAC, page 273

Dahlia Roots and Jerusalem Artichokes

Jerusalem Artichokes and Dahlia roots have a natural fructose polymer Inulin that prolongs carbohydrate metabolism, for appetite control; eat one per day alternating between raw and cooked; or use the juice, not the peel. *Anti-Aging Manual* by Joseph B. Marion, page 40

Evening Primrose Oil

The body needs to balance omega-3 fatty acids with omega-6 fatty acids. Gamma linoleic acid contains omega-6 and can be found in evening primrose, borage, or black currant seed oil. Five hundred milligrams of evening primrose oil taken in the morning may help reduce appetite. *Complete Encyclopedia Of Natural Healing* by Gary Null PhD, page 268

Chromium supplementation, which can help speed up metabolism and stabilize blood sugar levels (reducing the desire to eat) has also proven helpful. Evening primrose oil has been shown to reduce appetite and contribute to weight loss in obese patients, as has ascorbic acid supplementation. Green tea has proven to be a much better weight loss

aid than amphetamines. *Get Healthy Now* by Gary Null, page 237

Fennel

Fennel removes mucus and fat from the intestinal tract and is a natural appetite suppressant. *Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 542

FENNEL Seeds, Stalks, and Bulbs ... a child sedative (like Anise and Caraway), acid stomach, diarrhea (kills bacteria), aids uric acid digestion (anti-gout), cramps (10-20 grains seed powder), anti-obesity, reduces the appetite, masks (garlic) breath odor, and is mixed with strong laxatives to counter intestinal cramps, spasms; pinworms; for weight loss (drink or broth); relieves muscle spasms. *Anti-Aging Manual* by Joseph B. Marion, page 30

Gamma-linolenic acid (GLA)

Gamma-linolenic acid (GLA), the active ingredient in borage oil, black currant seed oil, flaxseed oil, and primrose oil, helps to control the metabolism of fats. Taking at least 250 IU of GLA a day helps to control the appetite. *Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 545

German chamomile tea

Costa Ricans use German chamomile tea for the treatment of insomnia and for dieting, claiming that the tea helps curb their appetite. It is likely that they are using higher doses, which can cause nausea. Clinical studies on the sedative, hypnotic and appetite-suppressing effects of German chamomile are warranted. ***Vitamin And Mineral Encyclopedia* by Sheldon Saul Hendler MD PhD, page 289**

Grapefruits

Grapefruits are used in many diets to reduce the appetite and help digestion and utilization of foods. They are low in calories, and consuming them probably burns as many calories as they contain. Among the citrus fruits, grapefruits are an especially good weight loss food. ***Staying Healthy With Nutrition* by Elson M. Haas MD, page 301**

Grapefruit reduces appetite; useful in treating obesity. ***Prescription For Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 696**

Gymnema Sylvestre

Used medicinally for centuries in India as a treatment for diabetes, *Gymnema Sylvestre* is an herb that suppresses the taste of sugar when taken before a meal. People tend to eat less when they can't taste sugar, and several studies have confirmed that this herb can significantly reduce appetite. ***Green Tea* by**

Nadine Taylor MS RD, page 105

Gymnema is bitter in taste and cooling in action. It improves blood sugar control in diabetics, numbs the taste of sweet completely (for about 20 minutes), and decreases appetite (for about 90 minutes). ***The One Earth Herbal Sourcebook* by Alan Keith Tillotson, page 150**

Recognizing that he needed some kind of regular exercise program, Stephen started walking 20 minutes a day. He also followed my supplement recommendations, including daily doses of the herb *gymnema sylvestre*. This herb helped Stephen to control his appetite for sweets. It was just one of the tactics we used to help bring his blood-sugar levels under control. ***The Natural Physician's Healing Therapies* by Mark Stengler ND, page 251**

Hawthorn berries

The Chinese, on the other hand, have used hawthorn berries to control appetite, and aid digestion and assimilation. ***Planetary Herbology* by Michael Tierra CA, ND, page 260**

Nuts

Go a little nuts. If you're past the Induction phase, you can snack on nuts and seeds. Macadamias, almonds, walnuts, pecans, filberts and sunflower and pumpkin seeds are all good choices because they're high

in protein and fat. You'll feel more satisfied and in control of your appetite after eating a handful. ***Dr. Atkins New Diet Revolution* by Robert C. Atkins MD, page 217**

Let me just remind you of the basic principle behind this kind of eating. Macadamia nuts, for instance, may be on every conventional diet's no-no list because they are so calorically dense, but what counts is the effect they have upon your body chemistry. Because macadamia nuts have such a high ratio of fat to carbohydrate, they help control your appetite and tend to result in your eating fewer calories. Moreover, let's not forget convenience—nuts and seeds can easily be kept in your purse or pocket. If your business or travel schedule forces you to miss meals or be frequently exposed to unacceptable meals, you've got a substitute or perfect tide-me-over at hand. ***Dr. Atkins New Diet Revolution* by Robert C. Atkins MD, page 207**

Plantain

The powdered mucilaginous portion has been used for years as a bulking agent in the treatment of constipation and to control appetite. More recently it has been used to treat obesity. Of more direct interest, however, Plantain has been shown by scientists in Italy, Russia and other countries to reduce the intestinal absorption of lipids. ***Scientific Validation of Herbal Medicine* by Daniel B. Mowrey PhD, page 42**

Plantain (*Plantago ovata*) is a green with much more scientific support. The plantain fiber aids

in weight loss by reducing cholesterol and triglyceride levels, by lessening fat absorption and by its "appetite-satiating" effect. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 853**

Spirulina

Spirulina, blue-green algae, and other "green foods": clinically associated with weight loss, perhaps because their high nutritional content satiates the appetite and reduces hunger. ***The Enzyme Cure* by Lita Lee with Lisa Turner & Burton Goldberg, page 238**

Spirulina, a type of algae, is a rich source of protein, vitamins, minerals, and essential fatty acids. In one double-blind study of sixteen overweight individuals, ingestion of 2.8 grams of spirulina 3 times per day for 4 weeks resulted in a small but statistically significant weight loss. ***The Natural Pharmacy* by Schuyler W. Lininger, page 167**

This is based on the alga's content of the amino acid phenylalanine which, according to one theory, affects the appetite center of the brain. Another theory is that eating spirulina raises the blood sugar concentration enough to influence the same hunger center of the brain, causing it to suppress hunger pangs. Spirulina enthusiasts also say it's an effective treatment for diabetes, hepatitis, cirrhosis of the liver, anemia, stress, pancreatitis, cataracts, glaucoma, ulcers, and loss of hair. ***The Honest Herbal* by Varro E. Tyler PhD, page 301**

Spirulina is a blue-green alga found naturally in alkaline, warm-water lakes. It is cultivated for commercial use in specially designed algae farms. Spirulina contains concentrations of nutrients unlike any other single grain, herb, or plant. Taking spirulina in supplement form is beneficial while fasting, as it supplies the nutrients needed to cleanse and heal, while also curbing the appetite. If you have hypoglycemia (low blood sugar), you may benefit from using this food supplement.

***Prescription for Dietary Wellness* by Phyllis A. Balch, page 33**

Stevia

Because stevia contains no calories, helps to suppress the appetite, and reduces the desire for sweets, it can be very helpful in weight control. Stevia should be an essential part of the diet of anyone who wants to lose body fat or maintain current body weight. It must be noted, however, that eating stevia does not override the habit of eating sweets, nor the enjoyment thereof. However, most stevia users seem to feel satisfied with smaller portions of their favorite sweets. Use stevia products in place of all or most of the sugar or artificial sweeteners you use, either directly or in cooked or baked foods. ***Miracle of Stevia* by James A. May, page 59**

Because of its concentration, whole-leaf stevia concentrate appears to be the most effective form of stevia for appetite suppression. People have reported that taking stevia drops fifteen to twenty minutes before a meal decreases their hunger sensations, helping them to

eat less. A most interesting corollary to this comes from Tobin Watkinson, D.C., of San Diego, California. Following a visit to my office a few years ago, to learn more about stevia, he incorporated it into his practice of nutrition and nutritional research in his Scripps medical clinic. After several months he called me to report the experiences of his patients. They were eating less and losing weight. ***Miracle of Stevia* by James A. May, page 67**

Appetite suppressant amino acids

Amino acids and their derivatives have very important functions in the brain and body. When used appropriately, they can offer a number of benefits in the therapy of mood disorders, anxiety, and appetite control. The medical profession has not taken full advantage of their potential uses. ***Mind Boosters* by Ray Sahelia MD, page 147**

Protein-rich foods as cottage cheese, soy products, almonds, dry skim milk, and many more, can aid in appetite control (while nourishing the brain) if taken one hour before meals with juice or water. ***Vitamin Bible for the 21st Century* by Earl Mindell, page 137**

Phenylalanine (L-Phenylalanine)

Phenylalanine In addition to its role in promoting secretion of CCK, phenylalanine helps to control weight through its role as a precursor in the body for the amino acid tyrosine. Among other functions, tyrosine is necessary for the thyroid to produce the

hormones that regulate metabolism. Tyrosine is also the first link in the production of certain neurotransmitters, including dopamine, noradrenaline and adrenaline, that are suspected of playing important roles in controlling appetite. ***Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* By Mark Mayell, page 373**

Phenylalanine is effective for weight control because of its effect on thyroid secretion. It also plays an important role in the control of appetite. If taken before meals, it suppresses the appetite substantially. This amino acid is also essential for the efficient functioning of the kidneys and the bladder ... Phenylalanine has many therapeutic uses. It is considered beneficial in the treatment of obesity and is being successfully employed as an appetite suppressant for this condition. It has been demonstrated that in the intestinal tract, the amino acids tryptophan and phenylalanine trigger the release of cholecystokinin (CCK) which induces satiety, and a termination of eating ... An intake of half a teaspoon of phenylalanine powder 30 minutes before each meal, can lead to a loss of as much as 100 to 200 g of weight a day. **"Phenylalanine—For Weight Control," Vitamins Diary. www.VitaminsDiary.com/phenylalanine.htm**

Phenylalanine is an essential amino acid. Because it can cross the blood-brain barrier, it can have a direct effect on brain chemistry. Once in the body, phenylalanine can be converted into another amino acid, tyrosine, which in turn is used to synthesize two key

neurotransmitters that promote alertness: dopamine and norepinephrine. Because of its relationship to the action of the central nervous system, this amino acid can elevate mood, decrease pain, aid in memory and learning, and suppress the appetite. It can be used to treat arthritis, depression, menstrual cramps, migraines, obesity, Parkinson's disease, and schizophrenia. ***Prescription For Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 50**

The amino acid phenylalanine stimulates the metabolism and helps suppress the appetite. Take 500 milligrams of DL-phenylalanine (DLPA) once or twice daily for three weeks. ***Smart Medicine for Healthier Living* by Janet Zand LAc OMD, Allan N. Spreen MD CNC and James B. LaValle RPh ND, page 450**

A general L-amino acid formula can be used; Dr. Stuart Berger suggests taking it about 30–60 minutes before meals, as certain amino acids, such as phenylalanine, may help reduce the appetite. ***Staying Healthy with Nutrition* by Elson M Haas MD, page 852**

Phenylalanine is available in three different forms, designated L-, D-, and DL-. The L-form is the most common type and is the form in which phenylalanine is incorporated into the body's proteins. The D- type acts as a painkiller. The DL- form is a combination of the D- and the L-. Like the D-form, it is effective for controlling pain, especially the pain of arthritis; like the L- form, it functions as a building block for proteins, increases

mental alertness, suppresses the appetite, and helps people with Parkinson's disease. It has been used to alleviate the symptoms of premenstrual syndrome (PMS) and various types of chronic pain. ***Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 50**

PHENYLALANINE: Acts as an anti-depressant; helps suppress appetite; can function in some forms as a natural painkiller. ***Vitamin Bible* by Earl Mindell, page 122**

Phenylalanine is available in three different forms, designated L-, D-, and DL-. The L-form is the most common type, and is the form in which phenylalanine is incorporated into the body's proteins. The D- type acts as a painkiller. The DL- form is a combination of the D- and the L-. Like the D- form, it is effective for controlling pain, especially the pain of arthritis; like the L- form, it functions as a building block for proteins, increases mental alertness, suppresses the appetite, and helps people with Parkinson's disease. It has been used to alleviate the symptoms of premenstrual syndrome (PMS) and various types of chronic pain. Supplemental phenylalanine should not be taken by pregnant women or by people who suffer from anxiety attacks, diabetes, high blood pressure, phenylketonuria (PKU), or preexisting pigmented melanoma, a type of skin cancer. ***The A-to-Z Guide to Supplements* by James F. Balch MD, page 105**

It is claimed that L-phenylalanine can increase mental alertness, help control addictive-

substance abuse, promote sexual arousal and release hormones that help control appetite. ***Vitamin and Mineral Encyclopedia* by Sheldon Saul Hendler MD PhD, page 226**

L-phenylalanine, which is found naturally in such protein-rich foods as cottage cheese, soy products, almonds, dry skim milk, and many more, can aid in appetite control (while nourishing the brain) if taken one hour before meals with juice or water. ***Vitamin Bible* by Earl Mindell, page 119**

Tyrosine

Tyrosine is important to overall metabolism. It is a precursor of adrenaline and the neurotransmitters norepinephrine and dopamine, which regulate mood and stimulate metabolism and the nervous system. Tyrosine acts as a mood elevator; a lack of adequate amounts of tyrosine leads to a deficiency of norepinephrine in the brain, which in turn can result in depression. It also acts as a mild antioxidant, suppresses the appetite, and helps to reduce body fat. It aids in the production of melanin (the pigment responsible for skin and hair color) and in the functions of the adrenal, thyroid, and pituitary glands. It is also involved in the metabolism of the amino acid phenylalanine. ***Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 51**

Tyrosine is the precursor to some of our most important neurotransmitters, so it is an important part of our brain's nutrition. It is also a precursor to adrenaline, thyroid

hormones and some types of estrogen. It has been shown to lower blood pressure, increase sex drive and suppress appetite. ***Prescription Alternatives* by Earl Mindell RPh PhD and Virginia Hopkins MA, page 400**

Tyrosine is a precursor of the neurotransmitters norepinephrine and dopamine, which regulate mood, among other things. Tyrosine acts as a mood elevator; a lack of adequate amounts of tyrosine leads to a deficiency of norepinephrine in the brain, which in turn can result in depression. It suppresses the appetite and helps to reduce body fat. It aids in the production of melanin (the pigment responsible for skin and hair color) and in the functions of the adrenal, thyroid, and pituitary glands. It is also involved in the metabolism of the amino acid phenylalanine. ***The A-to-Z Guide to Supplements* by James F. Balch MD, page 108**

Although it has not been scientifically proven, some studies suggest that tyrosine may stimulate the production of growth hormone. If this turns out to be true, tyrosine may also help build muscle and reduce body fat. Tyrosine is also reputed to reduce appetite in some people. I suspect that tyrosine may not work directly on the appetite centers of the brain but rather may help uplift the spirits of those who turn to food for comfort when they are depressed. ***Earl Mindell's Supplement Bible* by Earl Mindell RPh PhD, page 202**

L-tyrosine—Precursor substance for adrenaline and thyroid hormones. Aids in

control of depression and anxiety. Suppresses appetite and has antioxidant properties. ***A Physician's Guide to Natural Health Products that Work* by James Howenstine MD, page 234**

Dopamine and norepinephrine: Because of its relationship to the action of the central nervous system, this amino acid can elevate mood, decrease pain, aid in memory and learning, and suppress the appetite. It can be used to treat arthritis, depression, menstrual cramps, migraines, obesity, Parkinson's disease, and schizophrenia. ***The A-to-Z Guide to Supplements* by James F. Balch MD, page 105**

The Proteins tyrosine and phenylalanine lower hunger pangs by stimulating appetite-controlling CCK hormone. ***Anti-Aging Manual* by Joseph B. Marion, page 45**

Tyrosine is a mild antioxidant, reacting with free radicals that can cause damage to cells. It is also thought that tyrosine promotes sexual drive. Tyrosine may also be used as a mild appetite suppressant. ***Disease Prevention and Treatment* by Life Extension Foundation, page 1229**

Like phenylalanine (from which it is derived in the body), tyrosine tends to increase energy levels and sexual desire. Some women take it to alleviate the lethargy and irritability of premenstrual syndrome. Tyrosine may also be a useful remedy to suppress appetite and to detoxify the body from cocaine and other drugs. ***Off the Shelf Natural Health: How to***

***Use Herbs and Nutrients to Stay Well* by Mark Mayell, page 55**

Tyrosine may stimulate growth hormone and can act as a mild appetite suppressant. It may also be useful in the control of anxiety or depression. Tyrosine is known as the "antidepressant" amino acid. ***Staying Healthy with Nutrition* by Elson M. Haas MD, page 51**

Physicians at Harvard Medical School have pioneered the use of a daily dose of up to 6 grams of tyrosine to decrease symptoms of medication-resistant depression with good results. Tyrosine creates so much raw energy that in extremely large doses (i.e., greater than 20 grams daily), it can reduce your appetite. However, low doses have a less consistent effect. The minimum daily tyrosine requirement is about 1,000 mg. for an average adult. Use the food list at right to increase your total tyrosine consumption in order to balance your dopamine deficiency. ***The Edge Effect* by Eric R. Braverman MD, page 85**

Tryptophan (5-HTP)

Tryptophan is the precursor to serotonin, which minimizes the brain's reaction to the stressors in the environment. It calms anxiety, lifts depression, and counteracts insomnia. It also reduces vulnerability to heart diseases. It can act as an appetite control; it decreases the desire for carbohydrates. Vitamin C, B6, and B3 are necessary to convert tryptophan to serotonin. ("It is possible that some

overweight or depressed people overconsume dietary carbohydrates, using these foods as though they were antidepressant drugs to increase their serotonin levels." Richard Wurtman, M.D., 1987.) Suggested: 500 to 1,500 mg daily. ***Feed Your Body Right* by Lendon H. Smith MD, page 217**

Normally, tryptophan must compete with other amino acids for entry into the brain, but insulin eliminates the competition, allowing tryptophan levels to rise in the brain. Tryptophan is then converted into serotonin, the neurotransmitter that regulates sleep, reduces pain and appetite, and generally calms you down and improves your mood. Some people crave carbohydrates not because they lack willpower but because they suffer from an imbalance in serotonin. ***Food and Mood* by Elizabeth Somer MA RD, page 47**

Amino acid levels in the bloodstream can have direct effects on certain neurotransmitters in the brain capable of affecting hunger and appetite. For example, tryptophan is thought to reduce appetite by increasing levels of serotonin, one of the neurotransmitters that helps the hypothalamus to signal a sense of fullness and thus reduce appetite. Tryptophan and another amino acid, phenylalanine, can also potentially affect hunger and weight loss in an indirect way. When fatty foods enter the duodenum (the upper portion of the small intestine), it releases into the bloodstream a hormone called cholecystokinin (CCK). CCK causes digestive organs such as the gallbladder and pancreas to release substances (including bile and certain enzymes) that aid digestion.

In addition, there is some evidence that CCK affects the pituitary (where it stimulates the release of fat-burning growth hormone) and the hypothalamus. Studies have found that obese people have lower levels of CCK, or reduced sensitivity to its effects. *Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 372

Because tryptophan can alleviate some forms of anxiety and depression, some assumed it could be useful in favorably altering behavior that may contribute to overeating. Studies involving tryptophan have shown appetite suppression in animals. Results in humans have been mixed. One of the positive studies utilized doses of tryptophan in the two- to three-gram range. This resulted in a subjective decrease in hunger and a short-term reduction in food intake. The subjects in this study, however, were men who were lean to begin with. In a better designed and more relevant study, markedly obese individuals were given three grams of tryptophan daily supplemented by psychological therapy and behavior modification designed to reinforce caloric restriction. Despite all this, these subjects did not lose more weight than other obese patients treated in the same way but with placebo instead of tryptophan. The researchers in this study conceded, however, that these extremely obese individuals may require doses higher than three grams per day, since doses in that range did, in fact, seem to have appetite-suppressing effects in lean individuals, as noted above, and, to some extent, in more mildly obese people.

Vitamin and Mineral Encyclopedia by Sheldon Saul Hendler MD PhD, page 231

Other studies have shown that 5-HTP not only is an effective antidepressant but can help suppress appetite, a boon for people who need to lose weight. In fact, in one Italian study, patients taking 5-HTP reduced their carbohydrate intake and felt satisfied sooner than did a group taking a placebo.

Earl Mindell's Supplement Bible by Earl Mindell RPh PhD, page 72

One natural appetite suppressant I do recommend is 5-hydroxy-tryptophan (5-HTP), which cuts cravings, particularly for carbohydrates, by balancing serotonin levels. The recommended dose is 50 to 100 milligrams three times a day, 20 minutes before meals. However, the problem with any appetite suppressant—natural or prescription—is that once you stop taking it, your appetite returns, often with a vengeance. Unless you use these aids to help you get started on a better diet and a regular exercise program, you're destined to repeat the vicious loss-gain cycle that plagues so many. *Reversing Diabetes* by Julian Whitaker MD, page 202

The daily dosage of 5-HTP used in the study was 8 milligrams per kilogram of body weight. Patients were given either the 5-HTP or a placebo 20 minutes before meals for five weeks, and after a one week interval were switched to receive the other treatment. No dietary restrictions were prescribed because the researchers wanted to answer the

question, "Does 5-HTP reduce appetite and promote weight loss without any conscious effort?" To make sure that the women actually took the 5-HTP, researchers measured the level of the serotonin breakdown product, 5-hydroxy-3-indole acetic acid (5-HIAA), in the urine. The results of the study are listed in Table 92.9. These results with 5-HTP were achieved without the women making any conscious effort to reduce food consumption. The average amount of weight loss during the five week period of 5-HTP supplementation was a little more than three pounds, compared with less than 1 pound of total weight loss during the placebo period. ***Textbook of Natural Medicine Volumes 1-2 by Joseph E. Pizzorno and Michael T. Murray, page 790***

They tend to crave high-fat carbohydrates and are less likely to receive a signal telling them that they're full. That's where 5-hydroxytryptophan (5-HTP) can help. Shortly after you take 5-HTP in supplement form, the compound travels to your brain, where it is converted to serotonin. The boost in serotonin will suppress your appetite and activate the brain signal that tells you that you've eaten enough. You'll be in better spirits, your binge eating will be under control, and you'll eventually lose weight, says Dr. Boggs. She suggests taking 50 milligrams of 5-HTP three times a day as a starting point. If you don't notice any decrease in your cravings and binge-eating episodes after six weeks, take 100 milligrams three times a day. If there is still no improvement after six weeks, increase to 200 milligrams three times a day, but don't

exceed 900 milligrams daily. You can find this supplement in health food stores. Be sure you don't take it with other medications, especially antidepressants, however, unless you talk to your doctor. ***Nature's Medicines by Gale Maleskey, page 345***

Scientists have discovered that tryptophan and phenylalanine release CCK in the gastrointestinal system and thus help to suppress appetite. ***Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well by Mark Mayell, page 373***

5-HTP acts as a good appetite suppressant and can, in combination with lifestyle and dietary changes, help in weight reduction. Although 5-HTP can help one lose weight, this nutrient should only be used temporarily (a few weeks at most) until lifestyle habits are incorporated. ***Mind Boosters by Ray Sahelias MD, page 146***

Tryptophan is an essential amino acid that is necessary for the production of vitamin B3 (niacin). It is used by the brain to produce serotonin, a necessary neurotransmitter that transfers nerve impulses from one cell to another and is responsible for normal sleep. Consequently, tryptophan helps to combat depression and insomnia and to stabilize moods. It helps to control hyperactivity in children, alleviates stress, is good for the heart, aids in weight control by reducing appetite, and enhances the release of growth hormone. It is good for migraine headaches and may reduce some of the effects of nicotine. Sufficient amounts of vitamins B(,

(pyridoxine) and C, folate, and magnesium are necessary for the formation of tryptophan, which, in turn, is required for the formation of serotonin. ***Prescription For Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 51**

Tryptophan is particularly important in the biosynthesis of a brain neurotransmitter called serotonin, thought to be an inducer and regulator of certain stages of sleep, among other things. Some preliminary research suggests that serotonin may also reduce sensitivity to pain and have tranquilizing effects. There are also claims that tryptophan is an appetite suppressor and that it can reduce cravings for alcohol and some other drugs. ***Vitamin and Mineral Encyclopedia* by Sheldon Saul Hendler MD PhD, page 229**

Interestingly, evaluation of the various self-tests indicated that appetite or degree of initial hunger did not differ between the two groups. What differed was satiety. In other words, the 5-HTP did not reduce the appetite before a meal, but after consuming an adequate amount of food the satiety centers in the brain were stimulated and the women did not feel hungry. As a result their caloric intake was dramatically reduced. The level of 5-HIAA, the breakdown product of serotonin, in the group receiving the 5-HTP increased by over 50-fold over the control group. This increase provided two things: (1) it assured researchers that subjects actually took the 5-HTP, and (2) it clearly indicated that 5-HTP increased serotonin manufacture. ***Textbook of Natural Medicine Volumes 1-2* by**

Joseph E. Pizzorno and Michael T. Murray, page 790

5-Hydroxytryptophan (5-HTP), the precursor to the neurotransmitter serotonin, has been shown in two short-term controlled studies to reduce appetite and to promote weight loss. In one of these studies, a 12-week double blind trial, overweight women who took 600 to 900 milligrams of 5-HTP per day lost significantly more weight than did women who received placebo. ***The Natural Pharmacy* by Schuyler W. Lininger, page 167**

But let's talk 5-HTP (5-hydroxytryptophan), a new supplement, very similar to tryptophan, that is also being hailed as a natural alternative to Prozac. It is a selective serotonin reuptake inhibitor (SSRI) that, like Prozac, enhances the activity of serotonin. But unlike prescription antidepressants and sleep aids, 5-HTP does not cause unpleasant side effects, such as dry mouth and loss of libido. And not only has 5-HTP been found to alleviate depression and function as a sleep aid, it's been shown to help suppress appetite as well. (For dieters, that can be a mood elevator right there.) ***Vitamin Bible for the 21st Century* by Earl Mindell, page 121**

"Smell therapy"

One of the few scientific studies to look at the relationship of smell to weight loss was done in 1993 at the Smell and Taste Treatment and Research Foundation in Chicago. Foundation director Alan R.

Hirsch, M.D., and colleagues studied 3,193 overweight subjects, predominantly middle-aged women averaging five feet five inches in height and 217 pounds. The researchers found that subjects who frequently inhaled three times in each nostril a blend of banana, peppermint, and green-apple scents whenever they were hungry lost nearly five pounds per month over six months, without making any changes to their normal dietary and exercise habits. Some individuals lost up to 18 pounds per month. The researchers believe that inhaling foodlike odors somehow tricks the brain into equating the smell with the actual food, promoting a feeling of fullness and suppressing appetite. Hirsch, a neurologist, says that the scents were more effective with people who had a good sense of smell. The researchers also determined that "the amount of weight the subjects lost directly correlated with the frequency of their use of the inhalers." They concluded "it may be possible for individuals with good olfaction, by inhaling certain aromas, to induce and sustain loss of weight over a six-month period." *Off the Shelf Natural Health: How to Use Herbs and Nutrients to Stay Well* by Mark Mayell, page 375

The smell of green apple, peppermint and banana led to reduced appetite and weight loss in his patients. The more they smelled these substances, the more weight they lost, and the average weight loss was 2.1 percent of body fat. *Constant Craving* by Doreen Virtue PhD, page 115

How to control your appetite and boost your metabolism at the same time

While suppressing appetite and increasing thermogenesis are distinct strategies for weight loss, in many cases the drugs and natural substances that help people to shed pounds have some effect on both of these actions. Increasingly natural-product companies are combining substances with multiple weight loss functions in mind. In many cases these formula products are much more promising as long-term weight loss aids than are the dated, one-dimensional pharmaceutical products such as PPA. *Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 362

Supplements that contain ephedra and caffeine-rich guarana, used for weight loss, result in significant cardiovascular and metabolic changes. These changes could be harmful in people with high blood pressure, atherosclerosis (clogged arteries), or glucose intolerance, a precursor to diabetes marked by elevated blood sugar. Guarana is an herb containing caffeine. Researchers at the University of California, San Francisco tested the effects of Xenadrine RFA (a supplement containing 25.4 mg ephedra alkaloids and 185 milligrams caffeine) and ephedra extract (23.2 milligrams total ephedra alkaloids) plus guarana (167 milligrams caffeine), compared with placebo, in 16 healthy adults. Repeated dosing of ephedra and guarana produced elevated ephedrine blood concentrations, increased heart rate and blood pressure,

and had unfavorable effects on glucose and potassium homeostasis. These effects could exacerbate obesity-related conditions such as insulin resistance and metabolic syndrome. SOURCE: *Clinical Pharmacology and Therapeutics* 77:6 (June 2005). "**GUARANA - Paullinia cupana**" by Ray Sahelian MD. <http://www.raysahelian.com/guarana.html>.

Ephedra

Ephedra, also known as ma-huang, has become a popular ingredient in natural weight-reducing formulas. Its effectiveness and ability to enhance the burning of fat, especially when taken with green tea or coffee, is due to the active ingredient ephedrine. Many people, particularly women who have a history of chronic dieting, can benefit from this herb as it helps to stabilize and enhance their metabolic rates. An over-the-counter preparation containing ephedrine can stimulate the brown adipose tissue to burn fat, which produces heat that is dissipated by the body. It also has a mild appetite suppressant action, according to Dr. Birdsall. The effects of ephedrine can be enhanced by caffeine, theophylline (a white, crystalline alkaloid derived from tea), and aspirin. These preparations offer a way to burn excess fat in patients with thermogenic deficiencies. ***Alternative Medicine* by Burton Goldberg, page 835**

Ephedrine and Caffeine Combinations in Weight Loss: Ephedrine has been shown to promote weight loss in experimental and

clinical studies. It appears to promote weight loss primarily by increasing the metabolic rate of fat tissue and decreasing appetite. In other words, ephedrine simultaneously speeds up metabolism and reduces caloric intake. Its action, however, can be greatly enhanced when it is used in combination with caffeine. ***Natural Alternatives To Drugs* by Michael T. Murray ND, page 238**

Ephedra (Ma huang) and St. John's wort: A potent combination that can help suppress appetite and boost metabolism. CAUTION: Ephedra can cause dangerous side effects and should not be taken by anyone who has a history of heart disease or who is taking a prescription antidepressant. I recommend consulting a nutritionally oriented practitioner before using ephedra in any diet regimen. ***Vitamin Bible for the 21st Century* by Earl Mindell, page 342**

Clinical studies show that ephedrine increases the metabolic rate by stimulating the release of noradrenaline from the sympathetic nervous system. Whereas thin people experience up to a 40 percent increase in thermogenesis (heat production) after eating a meal, overweight individuals may only have an increase of 10 percent or less. This means more food is stored as fat rather than converted to energy (heat). People taking ephedrine have experienced a 10 percent increase in thermogenesis compared with control groups. Researchers now believe that ephedrine increases thermogenesis primarily in skeletal muscle rather than in brown adipose (fat) tissue. Ephedrine may also help suppress the appetite because blood

is diverted away from the digestive tract to the limbs. *The Encyclopedia Of Popular Herbs* by Robert S. McCaleb, page 421

As of this writing, "Fen Phen," the combination diet pill, has been recalled by its manufacturer because of reports of serious side effects among its users, such as potentially fatal heart valve problems. One alternative being offered is so-called herbal Fen Phen, a combination of a thermogenic enhancer (such as the herb ephedra) and the antidepressant Saint John's wort. It makes sense that these herbs would be helpful for losing weight. We know that ephedra can speed up metabolism, which helps the body burn fat faster. In addition, Saint John's wort is reputed to be a natural appetite suppressant. As yet, there are no studies to confirm that these herbs will work well together. *Earl Mindell's Supplement Bible* by Earl Mindell RPh., PhD, page 192

Unfortunately, ephedra is now sold as a stimulant and a weight loss product for its metabolism-stimulating and appetite-suppressing properties. Many people who are overweight also have hypertension—just imagine how dangerous ephedra can be in these particular cases. That's not to say the herb doesn't work for weight loss. In fact it does, and the result is even more powerful when combined with green tea, due to the additional action of caffeine. The combination of these two types of stimulants can be especially powerful. But again, this should be done under the guidance of a professional with experience about safety and dosage.

Asthma and weight loss are both complex, serious problems. You can't treat them safely just by swallowing over-the-counter herbal pills. *The One Earth Herbal Sourcebook* by Alan Keith Tillotson, page 131

Saint John's wort is nature's cure for depression, but is it also a cure for obesity? A new product called "herbal Phen Fen" is being sold at natural food stores and pharmacies. "Herbal Phen Fen" contains Saint John's wort and ephedra, an herb that is used in antihistamines but that can also increase metabolism. Very preliminary studies suggest that Saint John's wort can help control appetite and food cravings. *Earl Mindell's Supplement Bible* by Earl Mindell RPh PhD, page 141

Suppress your appetite with ephedra, guarana, and kola nut. Caution: Do not use ephedra if you suffer from anxiety, glaucoma, heart disease, high blood pressure, or insomnia, or if you are taking an MAO (monoamine oxidase) inhibitor. *The Doctor's Complete Guide to Vitamins and Minerals* by Mary D. Eades MD, page 446

The war against ephedra is nothing more than a smoke screen to distract people from the far more dangerous effects of prescription drugs. If prescription drugs and over the counter drugs were measured by the same yardstick, more than half of all drugs would be banned outright. Prescription drugs cause more than 100,000 deaths each year. They injure 2.2 million people each year. And over-the-counter drug are no better: ibuprofen

and other NSAIDS account for more than 40,000 deaths each year from gastrointestinal hemorrhaging. And yet nobody in Congress is calling for these drugs to be pulled off the market, and the FDA mysteriously allows their continued sale, knowing full well that the number of deaths caused by prescription drugs is enormous. Ephedra has admittedly resulted in the deaths of a handful of people. Ibuprofen has killed hundreds of thousands, even according to medicine's own research as published in JAMA and other "scientific" journals. If this is really about science and protecting the public, as is claimed by supporters of the ban, then why not protect the public from dangerous pharmaceuticals at the same time? The answer, of course, is that profits must be protected first. **"Prescription Drugs Kill Thousands of Times as Many People as Ephedra" by Mike Adams, News Target Network (9 Nov. 2003). www.NewsTarget.com/000480.html.**

Thursday the judge ruled that the FDA had failed to prove a low-dose ephedra supplement from Utah-based Nutraceutical International posed a significant health risk. A lawyer for the company, Jonathan Emord, said the ruling overturned the FDA's entire ban.

But yesterday the FDA and some legal experts said the ruling – which some characterized as lacking clarity – may be restricted to Utah and does not have such far-reaching implications.

"The agency interprets the judge's language to mean that the ban remains in effect

for products containing higher dosages of ephedra," FDA spokeswoman Kimberly Rawlings said. "The FDA is considering all options for its next steps." **"Ephedra Ruling Puzzles Industry" by Peggy Crabtree, *The San Diego Union-Tribune* (16 Apr. 2005). www.SignonSanDiego.com/news/business/20050416-9999-1b16ephedra.html.**

Ephedra is a medicinal plant that has been cultivated for over 5,000 years in China, where it was used for asthma and hay fever-like conditions. Also known as ma-huang, ephedra stems contain two primary alkaloids, ephedrine and pseudoephedrine, used in OTC decongestant drugs. Ephedrine has a marked peripheral vasoconstricting action (causing constriction of the blood vessels). Pseudoephedrine is a bronchodilator (able to expand the bronchi in the lungs, necessary for proper breathing), approved for use in asthma and certain allergy medicines. Ma-huang and its extracts are found in a number of herbal formulas that are designed to increase energy and reduce appetite. ***Alternative Medicine* by Burton Goldberg, page 262**

Ephedra preparations may be useful as a weight loss aid. Although ephedrine does suppress appetite, its main mechanism for promoting weight loss appears to be by increasing the metabolic rate of adipose tissue. Its weight-reducing effects are greatest in those individuals with a low basal metabolic rate and/or decreased diet-induced thermogenesis. ***The Healing Power of Herbs* by Michael T. Murray ND, page 112**

Although ephedrine has demonstrated an appetite-suppressing effect, its main mechanism for promoting weight loss appears to be increasing the metabolic rate of adipose tissue. ***Encyclopedia Of Natural Medicine* by Michael T. Murray MD, Joseph L Pizzorno ND, page 689**

Garcinia cambogia/Hydroxycitric Acid (HCA, Citrin)

Garcinia (*Garcinia cambogia*). This is the primary herb sold for enhancing weight loss and boosting your amount of lean muscle. Also known as hila or brindall berry, garcinia is touted as an appetite suppressant that also prevents the body from making fat. Conclusive research is still lacking, however. A single human trial combined garcinia and chromium, resulting in a few more pounds of weight loss in obese volunteers than a low-fat diet alone, but the study's design has led some experts to question whether it's conclusive. ***The Herbal Drugstore* by Linda B. White MD, page 447**

HCA suppresses appetite. Because it makes you feel full, HCA makes it easier to eat less. For many patients it eliminates even the sharpest cravings, similar to the positive effects of fen-phen and Redux. ***The Diabetes Cure* by Vern S. Cherewatenko MD and Paul Perry, page 37**

Citrin is a trademarked name for a standardized herbal extract from the fruit of the *Garcinia cambogia* plant, also known as Indian berry. It inhibits the synthesis of fatty

acids in the liver, promotes the burning of body fat as fuel, and suppresses the appetite. Its primary usefulness is in treating obesity, although it may also aid in preventing or slowing atherosclerosis and heart disease. It does not affect the nervous system or cause any known side effects. Citrin is an ingredient in a number of different products sold by various manufacturers. ***Prescription for Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 66**

Hydroxycitric acid (HCA) is derived from the dried rind of the tamarind fruit (*Garcinia cambogia*). It helps to clear fats from the liver, helps suppress appetite, and slows the rate at which the body converts carbohydrates into fat. Studies show that HCA reduces food consumption by approximately 10 percent. HCA has been found to be more effective when taken in combination with chromium. ***Alternative Medicine* by Burton Goldberg, page 830**

Studies on both animals and people have found that HCA has the unusual effect of reducing the body's conversion of carbohydrates to fats. This tends to curb appetite and reduce food intake, thus leading to loss of weight. The mechanism has been traced to glucose metabolism. High blood-sugar levels cause the body to convert glucose to glycogen for storage in the liver and muscles. When these bodily stores have no room for additional glycogen, glucose is broken down and converted in a number of steps into fatty acids and cholesterol for storage elsewhere in the body. Researchers

have found that HCA temporarily inhibits the enzyme (ATP-citrate lyase) necessary for this glucose-to-fat conversion. Two studies on animals determined that HCA reduces the synthesis of fats by 40 to 70 percent for between 8 and 12 hours following a meal. ***Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 370**

Citrin / *Garcinia cambogia*, used as a food preservative for centuries, with ample amount of active principle Hydroxycitric Acid (HCA, preserved with Calcium and Chromium) that binds to receptors and inhibits excess liver enzyme Citrate Lyase outside the mitochondria from converting to two-Carbon Coenzyme-A synthesizing lipids and fatty acids, keeps up the metabolic rate and energy that reduces free fatty acids, reducing fat storage and buildup; excess glucose is converted to glycogen instead of fat that sends a "full" signal to the Brain, suppresses appetite and lowers food intake. 1500 milligrams Citrin (has 750 milligrams HCA), taking 500 milligrams three times a day 30 to 60 minutes before meals. Tested safe in humans up to six grams of HCA (12 grams Citrin) per day. Citrin is available from SabinsaCorp., Piscataway,N.J.). ***Anti-Aging Manual* by Joseph B. Marion, page 100**

Human studies indicate that HCA reduces food consumption by about 10 percent. One human study of 22 obese subjects put on a low-fat diet found that after two months those who took 250 mg of HCA plus 100 mg of a chromium supplement three times

daily lost an average of 11 pounds, compared to only four for those taking a placebo. The HCA subjects reported decreased appetite and fewer cravings for sweets in particular. ***Off The Shelf: Natural Health How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 370**

HCA, on the other hand, has no side effects. Ten years worth of research—both animal and human—shows that HCA reduces appetite by means of increased glycogen production. HCA also slows the process of converting carbohydrates into triglycerides, a form of blood fat that is linked to a higher incidence of heart disease and strokes. Here is more research showing the effect of HCA on the causes of type 2 diabetes: In an eight-week, double-blind study, fifty obese volunteers were placed on a low-fat diet. Twenty-nine of the patients were given HCA before each meal, while the rest were given a placebo. After eight weeks the HCA group lost an average of eleven pounds per person, while the placebo group lost an average of only four pounds per person. The reason given for the added weight loss was greater appetite suppression caused by increased insulin sensitivity. ***The Diabetes Cure* by Vern S. Cherewatenko MD and Paul Perry, page 10**

Hydrocitric acid (HCA), also called garcinia, is a natural appetite suppressant and thermogenic agent that slows down the production of fat from the metabolism of carbohydrates and proteins. HCA enhances the ability of the liver and muscles to store glycogen, thereby reducing fat production

and diminishing appetite. Animal studies have shown that HCA can suppress fat production by 40 to 80 percent for 8 to 12 hours after eating. Human studies have also confirmed that people eat less and store less body fat after taking HCA. *Earl Mindell's Supplement Bible* by Earl Mindell RPh PhD, page 193

Hydroxycitrate has been shown to be a powerful lipogenic inhibitor in animals. Whether or not it demonstrates this effect in humans has not yet been proven. The weight loss-promoting effects in animals are perhaps best exemplified in a study that shows hydroxycitrate producing a "significant reduction in food intake, and body weight gain" in rats. Hydroxycitrate may not only be a powerful inhibitor of fat production; it may also suppress appetite. It is critical when using a hydroxycitrate formula that a low-fat diet be maintained as it only inhibits the conversion of carbohydrates into fat. *Textbook of Natural Medicine Volumes 1-2* by Joseph E. Pizzorno and Michael T. Murray, page 10

While the most recent study indicates HCA had little effect on fat storage, bodybuilders have reported differently. Furthermore, one physician friend of mine told me HCA has fairly decent appetite suppressing effects when used in high enough doses. He recommends up to 1500 mg before each meal. In his opinion, smaller amounts are ineffective. *Everything You Need To Know About Fat Loss* by Club Creavalle Inc., page 138

Garcinia cambogia is an herbal remedy that helps suppress appetite and rid the body of excess fat. Take 500 milligrams twice daily. *Smart Medicine for Healthier Living* by Janet Zand LAc OMD, Allan N. Spreen MD CNC and James B. LaValle RPh ND, page 449

Citrin is a trademarked name for a standardized herbal extract from the fruit of the *Garcinia cambogia* plant, also known as Indian berry. It inhibits the synthesis of fatty acids in the liver, promotes the burning of body fat as fuel, and suppresses the appetite. Its primary usefulness is in treating obesity, although it may also aid in preventing or slowing atherosclerosis and heart disease. It does not affect the nervous system, or cause any known side effects. Citrin is an ingredient in a number of different products sold by various manufacturers. *The A-to-Z Guide to Supplements* by James F. Balch MD, page 131

Recently introduced to the West, garcinia has been used for centuries by Ayurvedic healers as a digestive aid and a natural appetite suppressant. What has captured the attention of the West is that garcinia, or more specifically HCA, may be a useful tool in the ongoing battle of the bulge. Recently, researchers have discovered that HCA is a "lipogenesis inhibitor," which means that it slows down the production of fat from the metabolism of carbohydrates and proteins. *Earl Mindell's Supplement Bible* by Earl Mindell RPh PhD, page 78

Hydroxycitric acid (HCA) is a fruit extract with a chemical composition similar to citric acid (the primary acid in citrus fruits). Preliminary research, based on laboratory experiments and animal research, suggests that HCA may be a useful weight loss aid. HCA has been demonstrated in the laboratory (but not yet in trials with people) to reduce the conversion of carbohydrates into stored fat by inhibiting certain enzyme processes. Animal research indicates that HCA suppresses appetite and induces weight loss. One case report found that eating one gram of the fruit containing HCA before each meal resulted in the loss of 1 pound per day. *The Natural Pharmacy* by Schuyler W. Lininger, page 303

Hydroxycitric Acid (HCA): This extract is derived from the rind of *Garcinia cambogia*, a fruit grown in Southeast Asia. Laboratory and animal research has shown it helps with weight loss by reducing the conversion of carbohydrates into stored fat. It has been shown to suppress appetite in animals, and seems to have no side effects. Whether it will prove effective in human studies remains to be seen. Dosage: 500 milligrams three times daily before meals. *Natural Physician's Healing Therapies* by Mark Stengler ND, page 159

Garcinia cambogia helps reduce the appetite, inhibits the production and storage of fat, and works to lower cholesterol. Select an extract of this herb that supplies 50 percent hydroxycitric acid (HCA) and take 500 to 750 milligrams three to four times daily. *Smart*

Medicine for Healthier Living by Janet Zand LAc OMD, Allan N Spreen MD CNC and James B LaValle RPh ND, page 450

Other active constituents of guarana are theobromine and theophylline, which are called xanthines (a class of thermogenic substances found in coffee, tea, and certain beans). They have some effect on increasing metabolic rate, suppressing appetite, and enhancing both physical and mental performance. They also act as muscle relaxants and possess diuretic properties. Interestingly, caffeine accelerates the effectiveness of CLA, thus making CLA a more potent fat burner. Guarana has been shown to stimulate the migration of lipids so fat can be burned as energy. It is also an appetite suppressant. *Disease Prevention and Treatment by Life Extension Foundation*, page 1145

Rats fed a high-fat diet supplemented with HCA were compared with rats fed a high-fat diet not supplemented with HCA. After fifteen days the HCA group ate less, lost weight, and had lower levels of serum triglycerides than the other group. Much of the effect was attributed to the fact that increased insulin sensitivity reduces appetite. In two human trials published in *The Bariatrician*, patients were asked to assess their level of energy after one group was given HCA and another group was given a placebo. The group that was given HCA consistently reported more energy than the group given the placebo. All were then blood-tested. The HCA group had far lower levels of blood sugar than the placebo group, indicating that the blood sugar had been

absorbed into their systems. ***The Diabetes Cure* by Vern S. Cherevatenko MD and Paul Perry, page 10**

Hydroxycitric acid (HCA), extracted from the rind of the *Garcinia cambogia* fruit grown in Southeast Asia, has a chemical composition similar to that of citric acid (the primary acid in oranges and other citrus fruits). Preliminary studies in animals suggest that HCA may be a useful weight loss aid. HCA has been demonstrated in the laboratory (but not yet in clinical trials with people) to reduce the conversion of carbohydrates into stored fat by inhibiting certain enzyme processes. Animal research indicates that HCA suppresses appetite and induces weight loss. In one case report, an individual who ate one gram of the fruit containing HCA before each meal lost 1 pound per day. However, much more research in humans is needed to determine the effectiveness of HCA as a weight loss aid. ***The Natural Pharmacy* by Schuyler W Lininger, page 167**

Hydrocitric Acid (HCA): This is the active ingredient extracted from the sour Indian fruit *Garcinia cambogia*, which Ayurvedic healers have used as a natural appetite suppressant for centuries. Marketed under the tradenames of Citrin and Citrimax, as well as HCA, it is non-habit forming. Some studies suggest it can reduce caloric intake by as much as 10 percent. For best results, take three 500 to 750 milligrams capsules daily, half an hour before meals—in conjunction with a sensible diet and exercise regimen. ***Vitamin Bible for the 21st Century* by Earl Mindell, page 342**

Guarana

GUARANA (*Paullinia cupana* var. *sorbilis*): South American berry or root from Brazil and Uruguay with 4 - 6 percent caffeine-like alkaloid Guaranine; anti-fatigue stimulant; for mental alertness, quick perception; stamina, natural energy, and endurance; 1 tsp. anti-headache; an appetite suppressant. ***Anti-Aging Manual* by Joseph B. Marion, page 100**

The herb guarana contains guaranine (which is nearly identical to caffeine) and the closely related alkaloids theobromine and theophylline; these compounds may curb appetite and increase weight loss. Caffeine's effects (and hence those of guaranine) are well known and include stimulating the central nervous system, increasing metabolic rate, and producing a mild diuretic effect. Because of concerns about potential adverse effects, many doctors of natural medicine do not advocate using caffeine or caffeine-like substances to reduce weight. ***The Natural Pharmacy* by Schuyler W. Lininger, page 167**

Other active constituents of guarana are theobromine and theophylline, which are called xanthines (a class of thermogenic substances found in coffee, tea, and certain beans). They have some effect on increasing metabolic rate, suppressing appetite, and enhancing both physical and mental performance. They also act as muscle relaxants and possess diuretic properties. Interestingly, caffeine accelerates the

effectiveness of CLA, thus making CLA a more potent fat burner. Guarana has been shown to stimulate the migration of lipids so fat can be burned as energy. It is also an appetite suppressant. ***Disease Prevention And Treatment by Life Extension Foundation, page 1145***

Be skeptical of products in drug- and health-food stores that promise easy weight loss. Many contain stimulant drugs like ephedrine and phenylpropanolamine, or stimulant herbs like ephedra, guarana and kola. Stimulants reduce appetite and speed up metabolism, and they also cause jitteriness, anxiety, insomnia, and drug dependence. When you stop taking them, weight will rapidly rebound. The prescription drugs in widespread use (fenfluramine and phentermine, sometimes called fen-phen when used in combination) are stronger but no different in kind, and no better with regard to long-term outcomes. ***8 Weeks To Optimum Health by Andrew Weil MD, page 240***

Hercampure

Hercampure: This rainforest herb is being promoted as a cure for high cholesterol and obesity. It is reputed to speed up metabolism and to help the body burn fat more efficiently, as well as to control appetite. Look for this herb in weight loss formulas. ***Earl Mindell's Supplement Bible by Earl Mindell RPh PhD, page 239***

Red raspberry leaf tea

Red raspberry leaf tea reduces appetite, increases energy, and acts as a diuretic—and it tastes good. Take a cup twice a day, one week out of each month, for up to three months. Do not take it before bed, though; it may be too energizing. ***Smart Medicine for Healthier Living by Janet Zand LAc OMD, Allan N Spreen MD CNC, James B LaValle RPh ND, page 450***

Yerba mate

In addition to its standing as a popular beverage, yerba mate is used as a tonic, diuretic, and as a stimulant to reduce fatigue, suppress appetite, and aid gastric function in herbal medicine systems throughout South America. It also has been used as a depurative (to promote cleansing and excretion of waste). In Brazil, mate is said to stimulate the nervous and muscular systems and is used for digestive problems, renal colic, nerve pain, depression, fatigue, and obesity. A poultice of the leaves also is applied topically to anthrax skin ulcers (for which mate's tannin content—highly astringent—may be the reasoning behind this use). ***The Healing Power of Rainforest Herbs by Leslie Taylor, page 448***

YERBA MATE Leaves (*Ilex paraguayensis*) Aquifolia and Holly evergreen family; also called Mate, Paraguay and Jesuit Tea. Suppresses the appetite, lessens hunger and indigestion, nourishes the smooth tissues of the small intestine, eliminates gas, an effective

gentle internal cleanser, aids elimination, colon cleansing, and helps constipation; for PMS (edema). *Anti-Aging Manual* by Joseph B. Marion, page 539

Pyruvate

Obese women were given a 1000-calorie liquid diet that included 30 grams of pyruvate daily or placebo in the form of matching liquid diet without pyruvate for 21 days. The pyruvate-supplemented women lost significantly more weight, including weight in the form of fat, than did the controls ... In a recent double-blind study, a much lower dose of pyruvate was tested in overweight men and women. Twenty-six subjects were randomized to receive 6 grams of pyruvate daily or placebo. All subjects participated in 45 to 60 minutes of aerobics three times a week. At the conclusion of the six-week trial, there were significant decreases in body weight, body fat and percent body fat in the pyruvate group, compared with controls. "**Pyruvate**", PDR Health. www.PDRHealth.com/drug_info/nmdrugprofiles/nutsupdrugs/pyr_0218.shtml

Pyruvate, a compound that occurs naturally in the body, might aid weight loss efforts. A clinical trial found that pyruvate supplements (22 to 44 grams per day), compared with placebo, enhanced weight loss and resulted in a greater reduction of body fat in overweight adults consuming a lowfat diet. Animal studies suggest that pyruvate leads to weight loss by increasing the resting metabolic rate. *The Natural Pharmacy* by Schuyler W.

Lininger, page 167

Green tea: So healthy, it's in a category of its own

Studies show that taking green tea twice a day can help reduce the formation of excess fat cells and curb appetite. Dr. Tsang-do Houng, a researcher at the University of Beijing and graduate of Harvard Medical School, says "A cup twenty minutes before a meal makes you feel filled up and kills hunger pangs." *Green Tea* by Nadine Taylor MS RD, page 87

Green tea can also help you lose weight, because it actually suppresses the appetite and inhibits the accumulation of excess body fat! *Green Tea* by Nadine Taylor MS RD, page 126

Vitamins that provide additional weight loss help

Chromium

Chromium's dual effect is tied to its important role in the production and utilization of the hormone insulin. The pancreas secretes insulin in response to increases in blood-glucose levels. Insulin helps to regulate blood-sugar levels by promoting the ability of the liver and muscles to absorb glucose. Insulin is thus an important cog in the bodily mechanism that connects blood-sugar levels with the brain's center for appetite control and metabolism. When insulin secretion is working as it

should, blood-sugar levels are regulated, and the brain properly signals satiety or hunger. Poor insulin activity can lead to reduced energy levels and increased cravings for sugar. *Off the Shelf Natural Health: How to Use Herbs and Nutrients to Stay Well* by Mark Mayell, page 368

Obesity has been associated with low thyroid function in a substantial number of cases. Chromium supplementation, which can help speed up metabolism and stabilize blood sugar levels (reducing the desire to eat) has also proven helpful. Evening primrose oil has been shown to reduce appetite and contribute to weight loss in obese patients, as has ascorbic acid supplementation. Green tea has proven to be a much better weight loss aid than amphetamines. *Woman's Encyclopedia of Natural Healing* by Dr Gary Null, page 142

There is a nutrient that I use with hypoglycemic patients and it has proven to be something of a miracle in controlling blood sugar and reducing sweet cravings. Chromium, a trace mineral, is essential to the proper functioning of insulin. Unfortunately, the average American diet is deficient in chromium. I've found that the trivalent form of chromium taken three times a day before meals is most effective for controlling sweet cravings, reducing appetite, and keeping energy levels up between meals. *Natural Prescriptions* by Dr. Robert M. Giller, page 205

A lack of chromium may result in diabetes in young adults, and a craving for sweet foods (sugar, chocolate). Body effects—Metabolism

of sugars and fats. Blood sugar regulator. Builds up muscle. Lowers cholesterol levels. Encourages the body's insulin to perform effectively. Suppresses appetite—especially craving for sugar, chocolate etc. *Bartram's Encyclopedia of Herbal Medicine* by Thomas Bartram, page 115

CHROMIUM ... suppresses the appetite and sugar cravings by spurring brain synthesis of Serotonin. *Anti-Aging Manual* by Joseph B. Marion, page 25

B Vitamins

A whole foods, whole grain, high-complex carbohydrate, low fat, high-fiber diet is recommended. Vitamin B6 (pyridoxine) aids in fat and protein metabolism and the conversion of the amino acid tryptophan to the brain neurotransmitter serotonin, which helps to control appetite. Chromium is a mineral essential for regulating the production of the hormone insulin, which is responsible for stabilizing blood sugar levels. *Alternative Medicine* by Burton Goldberg, page 300

B12, given intramuscularly, usually in doses of 500-1,000 meg. (0.5-1.0 mg.), is used once, twice, or three times weekly for a period of time to both give energy and, in adults, help with appetite suppression in weight loss programs. These amounts also replenish the vitamin B12 stores. It has a mild diuretic effect as well and may be used premenstrually to diminish water retention symptoms. *Staying Healthy with Nutrition* by Elson M. Haas MD, page 128

Zinc

Leptin also might be influenced by what we eat—in particular, zinc-rich foods. Researchers at Harvard Medical School found that low zinc intake reduced leptin levels. When the same people were given zinc supplements, blood leptin levels increased, which should reduce appetite and enhance weight regulation. In other studies, animals fed zinc-poor diets switched their preference from carbohydrate-rich foods to fatty, high-calorie foods ... The solution here is clear: Increase your daily intake of zinc-rich foods, such as extra-lean meat, oysters, whole-grain breads, or cooked dried beans and peas, and/or take a moderate-dose multiple vitamin and mineral supplement that contains at least 15 to 20 milligrams of zinc. *Food and Mood* by Elizabeth Somer MA RD, page 77

Exercise: The best way to control your appetite and boost your metabolism

Exercise also reduces appetite. The appetite-control center of the body is the hypothalamus, or "appetstat," the portion of the brain that tells the body when it is hungry and when the stomach is full. The appetstat's hunger signals are triggered by specific levels of certain substances in the blood, including glucose, serotonin, noradrenaline, adrenaline, and dopamine. Physical activity reduces the levels of the hunger-stimulating chemicals that cause the appetstat to start the stomach growling for food, and increases the levels of the chemicals that signal to the appetstat that

the body is humming along at peak efficiency and doesn't require food. In fact, research indicates that exercise can inhibit hunger for as long as six hours after a high level of physical activity. If you are a sedentary person whose favorite activity is eating, commit yourself to at least a twenty-minute period of physical activity each day. Pleasant and fun forms of exercise to try include dancing, hiking, walking, yoga, swimming, bicycling, roller skating, and team sports. If you are self-conscious and prefer to exercise alone, you might want to investigate some of the video workout tapes on the market—there are plenty to choose from.

Smart Medicine for Healthier Living by Janet Zand LAc OMD Allan N Spreen MD CNC James B LaValle RPh ND, page 451

Stay physically active. Exercising regularly or physically exerting yourself in your everyday life has multiple positive effects on body weight. Exercise increases your metabolic rate not only while you work out but also while you're resting. It builds muscle tissue, which at rest burns more calories than does fat. Physical activity also helps control appetite, since it stimulates the release of endorphins, hormones that help to reduce your urge to eat. *Off The Shelf Natural Health: How To Use Herbs And Nutrients To Stay Well* by Mark Mayell, page 18

Still, exercise is one of the easiest ways to feel better, reduce stress, get more energy, control anger, and reduce the appetite. The best motivational tool I've ever found with respect

to exercise is to develop a focused mindset that "exercise is a non-optional activity." Put exercise into the same category as your daily shower, and see it as something that you simply need to do. No ifs, ands, or buts! ***Constant Craving* by Doreen Virtue PhD, page 45**

Endorphins elevate your mood and reduce hunger pangs. That's why I often exercise when I'm hungry. It tends to curb my appetite. ***Anti-Aging Prescriptions* by James Duke PhD, page 263**

Aerobic-type exercise will boost serotonin levels, improve your mood, help relieve premenstrual cramps, and suppress your appetite in general. Exercise also increases the metabolic rate, meaning that you'll burn calories more efficiently throughout the day. This rise in metabolism can last as long as 12 hours after a workout. ***Constant Craving* by Doreen Virtue PhD, page 144**

Work off your appetite. "Regular exercise is one of the best natural appetite suppressants," Dr. Steelman says. Intermittent exercise won't have the same effect, though, so don't expect a Sunday stroll to do the trick. By "regular," Dr. Steelman means five to seven times a week. ***Symptoms: Their Causes and Cures* by the editors of *Prevention Magazine Health Books*, page 406**

As is the case with other types of cravings, studies show that exercise reduces the appetite for dietary fat significantly. This is especially true for yo-yo dieters, whose weight has gone

up and down. People in this category have the strongest fat cravings of virtually any group. ***Constant Craving* by Doreen Virtue PhD, page 225**

"Running increases your metabolism," says Dr. Hamner. "The longer you rev your engine, the more running acts like a mild appetite suppressant. For some people, running can change their food cravings. They find themselves craving carbohydrates like pasta instead of red meat." Of course, the first few days of a running program may make you have a Fred Flintstone appetite. But be patient, says Dr. Hamner. By week three, running's mild appetite suppressant effect will kick in. ***Healing with Motion* by the editors of *Prevention Magazine Health Books*, page 340**

Physical activity calms the nerves of people who feel anxious and agitated, and invigorates those who feel lethargic and tired. It can also improve appetite for people who don't feel like eating, and reduce food cravings in those prone to overeating. ***Stopping the Clock* by Ronald Klatz and Robert Goldman, page 188**

Fighting food cravings

Vitamin and mineral deficiencies

Organic and wild crafted blue green algae is abundant in minerals and vitamins and these nutrients are easily assimilable by your body. For example, often a craving for sweets is caused by a deficiency of the

mineral chromium. Also cravings for salty foods can be a sign for weakened adrenal glands and your need for organic sodium, potassium and magnesium. Wild crafted blue green algae is abundant with these minerals and trace elements. **"What Causes Food Cravings?" Green Earth Naturals.** www.CrystalAlgae.com/articles_cravings.htm.

Please see Colleen Huber's online, food cravings chart. **Huber, Colleen. "Food Cravings ..."** *Naturopathy Works*. 2004. www.NaturopathyWorks.com/pages/cravings.html.

How to prevent mineral-based food cravings in general

David Wolfe, a fantastic pioneer in the raw food arena and co-founder of a company called Nature's First Law, which sells raw foods, talks about the mineralization of our crops and the fact that grass absorbs all the trace minerals and all the macro minerals. Wheatgrass, which is really just grass from wheat, can absorb all of these, too. So if you are eating grass or juicing grass, you're going to get the full combination of minerals you need. Now of course, you have to have the minerals available in the wheatgrass. If you just juice wheat grass that someone else grew, you won't know if it has all the minerals or not. They may not have put the entire assortment of ocean minerals in their soil. If they didn't put ocean water or sea kelp in there, it may not have all the minerals. Just because it's wheatgrass doesn't mean it's

heavily mineralized. But if you grow wheat grass yourself with minerals available, then you can be sure it will absorb all of those minerals and make them bioavailable for the benefit of your body. **Unpublished work by Mike Adams**

Trace Minerals Research combines trace minerals with sea vegetables and some other medicinal plants and herbs. The *Complete Food Multi* is a whole food concentrate, and it's a supplement I buy and have been taking for a while. Physically, it's a very large pill, so if you have difficulty swallowing pills, this may not be the best thing for you, although you could blend it up with something. In terms of packing nutrition into a convenient form, however, you can't beat this, especially when it comes to trace minerals. The Trace Minerals Research Company knows what it's doing. The company has some great products, so even if you don't get the *Complete Food Multi*, check out some of the other product lines. They have liquid trace minerals, so you can pour them into a smoothie or into a recipe, and they have other supplements that are smaller than this one. If you can get these supplements into your body, your tissues are going to be mineralized, even if you can't get organic produce or grow your own garden. You can re-mineralize your body from the inside out. **Unpublished work by Mike Adams**

Emotional eating

The next time you find yourself feeling extremely hungry, these steps may help you: 1. Impose a 15-minute cooling-off period. Tell

yourself you cannot eat for 15 minutes. After that time, if you still feel like eating, you'll be free to do so. But during that 15 minutes, you'll be completing the other four steps, and your appetite will likely be reduced to the point where you won't want to overeat. 2. Get away from food. Leave the house if you must, but definitely stay away from the kitchen during the next 15 minutes. Emotional overeating often leads to "automatic" and "absent-minded" eating, where you don't realize how much food you are eating ... 3. If you are having "mouth hunger," brush your teeth and drink a large glass of water (but still stay away from the kitchen for 15 minutes!). By cleansing your mouth, you can get rid of the taste of chocolate, cheeseburgers, or cookies or whatever else you're craving, and help reduce your emotional appetite. The water will also help if you are confusing thirst with hunger (which occurs with surprising frequency). 4. Ask yourself, "Am I feeling Fear, or its manifestations of Anger, Tension, or Shame?" ***Constant Craving by Doreen Virtue PhD, page 33***

That cure is to stay in touch with your appetite for life. When you are fully connected to your soul, you are too busy living, thinking, and absorbing what is going on around and inside you to be obsessed with your appetite. ***Food Swings by Barnet Meltzer MD, page 114***

Work on the issues triggering feelings of emptiness. Often, empty pangs stem from unexamined childhood issues. Is there something from your childhood that you want to confront? Some painful anger or

guilt you are holding onto that needs brief examination? After you confront the issue, either through honest introspection or by talking with a trusted psychotherapist, be sure to release it from your body and mind.

Constant Craving by Doreen Virtue PhD, page 225

Depression

- Persistent sad, anxious, or "empty" mood.
- Feelings of hopelessness, pessimism.
- Feelings of guilt, worthlessness, helplessness.
- Loss of interest or pleasure in hobbies and activities that were once enjoyed, including sex.
- Decreased energy, fatigue, being "slowed down."
- Difficulty concentrating, remembering, making decisions.
- Insomnia, early-morning awakening, or oversleeping.
- Appetite and/or weight loss or overeating and weight gain.
- Thoughts of death or suicide; suicide attempts.

- Restlessness, irritability.
- Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders, and chronic pain.

"Depression" by the National Institute of Mental Health. 2006.
www.Nimh.nih.gov/publicat/depression.cfm#ptdep3

Dr. Rosenthal and fellow researchers at the National Institute of Mental Health in Bethesda, Maryland, first discovered this link, which led to the successful use of light therapy (also called phototherapy). "Up to 80 percent of SAD and Winter Blues sufferers report at least some relief when exposed for thirty minutes to one and a half hours daily to sunlight or a specialized light box that emits light five to twenty times brighter than typical indoor light," says Dr. Rosenthal. Some people show no improvement after a week of treatment, but do respond when the duration or frequency of light therapy is increased. They report reduced appetite, slowed weight gain, reduced food cravings, elevation in mood, and improved sleep habits (they need up to three hours less sleep and sleep deeper during the night). Symptoms return within days when these people discontinue therapy; consequently, although the length of exposure usually can be reduced after the first few weeks, SAD sufferers usually must continue light therapy throughout the winter months. Apparently, light therapy lowers melatonin levels and rebalances sleep, mood, and

appetite. (See the "Resources" section in the back of this book for a list of companies that sell the specialized light fixtures for treating SAD.) ***Food and Mood* by Elizabeth Somer MA RD, page 144**

Relaxation is like the flip side of exercise: It's just as important to condition your mind as your body before a meal. To downshift from the exercise-induced endorphin high, take fifteen minutes to meditate or pray. You need more than just a moment to really unwind. America was founded on the Puritan work ethic; to this day most of us are afflicted with relaxation-deficit disorder and choose to ignore it. But, like exercise, relaxation before eating increases the assimilation of nutrients and aids the digestive system. Also like exercise, relaxation keeps you calm enough to control your appetite. If mind and body are in a state of balance, digestive enzymes, nerves, and hormones can cofunction efficiently. When nervous, many people speak of "butterflies in the stomach" or complain of a tummy ache. When relaxed, the opposite is true. Meditation or prayer promotes liver, pancreatic, and intestinal wellness. ***Food Swings* by Barnet Meltzer MD, page 115**

Practitioners of alternative medicine say that one of the best ways to treat the depression associated with binge eating is to take a variety of nutritional supplements. Some vitamins, minerals, herbs, and other natural compounds can increase the levels of certain brain chemicals, or neurotransmitters, that lift your mood, suppress your appetite, and

eliminate cravings. *Nature's Medicines* by Gale Maleskey, page 342

Can color affect mood?

Like blue and green, violet creates a peaceful environment. Violet also suppresses the appetite and is good for scalp and kidney problems and for migraine headaches. *Prescription For Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 704

Violet: This color is relaxing and soothing, stimulates the spleen, and builds white blood cells. Violet sedates heart and muscle activity, and it calms hyperactive people. It is useful for overactive kidneys and bladder, bed-wetting, nerve disorders and overactive mental disorders, epilepsy and insomnia. It also suppresses appetite. *The Natural Way to Heal* by Walter Last, page 89

Black is a "power" color. Try wearing black clothes for a feeling of strength and self-confidence. Black also suppresses the appetite. If you want to lose weight, cover your dining table with a black tablecloth. *Prescription For Nutritional Healing* by Phyllis A. Balch CNC and James F. Balch MD, page 704

Weight loss eating plans and strategies

Raw food diet

For many people who follow a raw food diet, going vegan is integral, meaning no animal products are consumed. But some raw foodists consume unpasteurized, unhomogenized dairy products, and an even smaller minority eat raw animal flesh. And few are complete purists; though most raw food enthusiasts avoid meals that have been heated above temperatures of 110 to 120 degrees Fahrenheit, many practitioners supplement their diet with small amounts of cooked food from time to time. **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?"** by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.

Raw-food proponents believe in eating only uncooked, unprocessed and organic plant-based foods. They claim that heating food above 116 degrees Fahrenheit destroys enzymes the body needs for optimum health and renders food "toxic." A raw-food diet is also a vegan one, so no animal products are allowed. A typical meal includes nuts, sprouts, greens and fruit. **"Ask the Nutritionist: Q. Is it true that a raw food diet is better for your health and can help you lose weight?"** by Katherine Tallmadge MA, RD, Ed. by Sharon Cohen and Kathleen Doheny, *Shape* 23:3 (Nov. 2003): 134.

Raw food: Pros and cons

Gonzalez says it's hard to eat more than 1,200 calories a day in uncooked foods. **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?"** by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.

In short, while raw foodists will probably be thin because they eat large amounts of high-fiber, low-calorie foods that are difficult to chew and digest, they may also be malnourished. **"Ask the Nutritionist: Q. Is it true that a raw food diet is better for your health and can help you lose weight?"** by Katherine Tallmadge MA, RD, Ed. by Sharon Cohen and Kathleen Doheny, *Shape* 23:3 (Nov. 2003): 134. The anecdotal, and widely touted, benefits of eating raw include increased energy; clear skin, weight loss, better digestion and even reversal of chronic disease. Certified nutritionist

Monica Dewart explains, "When heat is applied, food enzymes are quickly destroyed, followed by many vitamins and other nutrients. In the case of extreme heat, such as when something is deep fried, the actual chemical structure of the food changes." Over time, digesting cooked foods wears out the body, and chronic disease appears, argues Dewart. **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?"** by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.

If followed long-term a 100 percent raw-food diet is potentially dangerous, say nutrition experts. For one thing, it's too low

in protein. A healthy vegan diet depends on legumes, such as beans and peas, for protein. But because most beans are indigestible unless cooked at high temperatures, a raw-food diet contains few of them. It also has very few grains, another protein source, as they're basically inedible raw, says Gail Frank, Dr. PH., R.D., a professor of nutrition at California State University, Long Beach, and an ADA spokesperson.

"Ask the Nutritionist: Q. Is it true that a raw food diet is better for your health and can help you lose weight?" by Katherine Tallmadge MA, RD, Ed. by Sharon Cohen and Kathleen Doheny, *Shape* 23:3 (Nov. 2003): 134. If you decide to go raw, there are benefits to the Earth as well as your health. Naturally, the lower you eat on the food chain, the less impact you will have on the Earth's resources. Dewart adds, "One hundred percent of the waste materials (seeds, peels, etc.) of a raw, vegan diet are biodegradable and compostable. Not only that, but seed-savers can grow perpetually sustainable gardens, year after year. This is the ultimate environmentally friendly diet!" **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?"** by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.

In fact, many foods must be cooked for their nutrients to be usable by the body. Lycopene in tomatoes, for instance, is a cancer-fighting phytochemical that is enhanced through cooking. In short, while raw foodists will probably be thin because they eat large

amounts of high-fiber, low-calorie foods that are difficult to chew and digest, they may also be malnourished. **"Ask the Nutritionist: Q. Is it true that a raw food diet is better for your health and can help you lose weight?" by Katherine Tallmadge MA, RD, Ed. by Sharon Cohen and Kathleen Doheny, *Shape* 23:3 (Nov. 2003): 134.**

Recent reports about a chemical called acrylamide, found in carbohydrate-rich foods, may give some scientific credence to an uncooked diet. Acrylamide is naturally formed in some starchy foods when they are roasted, fried and baked at temperatures from 120 to 248 degrees, including French fries, potato chips, cereals and crackers. The Food and Drug Administration (FDA) characterizes the chemical as a potential human carcinogen and genotoxin (meaning it can damage DNA), as well as a known neurotoxin. Representatives from the FDA and the World Health Organization have called acrylamide in food a "major concern." People who eat raw food would get none of the chemical. **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?" by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.**

For appetite control, raw celery can be eaten between and during meals. To slow down and encourage more thorough chewing of food, eat celery with a meal. Celery is one of the few vegetables (lettuce is the other) that combines well with fruit, as it has an ability to dry damp conditions, including those associated with eating fruit and concentrated sweeteners. ***Healing with Whole Foods* by**

Paul Pitchford, page 500

Some raw foodists, like some vegans, suggest taking a B12 supplement. The logic is that B12 is the one vitamin that can't be found or made by the body without consuming animal products, though some people argue that it's not necessary. "A raw food diet is a natural diet, and most of the strongest animals on Earth are raw food vegans," argues Soria. **"Que Se-Raw, Se-Raw: Is Uncooked Food the Next Big Thing?" by Starre Vartan, *E Magazine* (July / Aug. 2004): 42 - 43.**

A low GI (glycemic index) diet

If you're trying to lose weight, low G.I. foods will enable you to increase your food intake without increasing your waistline, control your appetite and choose the right carbohydrates for your lifestyle and your well being. ***Glucose Revolution* by Thomas Wolever MD PhD, page 117**

Eat more complex carbohydrates, which you'll find in starchy vegetables, whole grain bread, unrefined cereals, brown rice, beans, and whole-wheat pasta. These foods should comprise over half your total calories. Carbohydrates are not fattening. They are rich in fiber, which has been shown to help prevent a number of diseases. Carbohydrates are also helpful in stabilizing blood sugar, thereby helping to control your appetite. ***Natural Prescriptions* by Dr. Robert M Giller, page 10**

Sugar from complex carbohydrates enters the bloodstream more slowly. As a result, blood sugar levels and appetite are better controlled. Complex carbohydrate foods like whole grain breads, cereals, and starchy vegetables are higher in fiber and nutrients but lower in calories than foods high in simple sugars like cakes and candies. ***Natural Alternatives to Drugs* by Michael T. Murray ND, page 351**

You're less likely to overeat low G.I. carbohydrates, because they're bulky and filling. Consider them natural appetite suppressants! ***Glucose Revolution* by Thomas Wolever MD PhD, page 85**

Breads, cereals, and starchy vegetables are classified as complex carbohydrates. Chemically complex carbohydrates are made up of long chains of simple carbohydrates or sugars. This means the body has to digest or break down the large sugar chains into simple sugars. Therefore, the sugar from complex carbohydrates enters the bloodstream slower. This means that blood sugar levels and appetite are better controlled. ***Textbook of Natural Medicine Volumes 1-2* by Joseph E. Pizzorno and Michael T. Murray, page 1605**

To put the results of this study to work, always select satisfying foods like vegetables and fruits over their higher-fat, lower-fiber counterparts, recommends Dr. Rolls. For example, choose a baked potato over a serving of french fries. Between meals, snack on a cup or two of air-popped popcorn, which is more likely to satisfy you than the same amount of potato chips. Better yet, grab an apple or

an orange. The idea is to satisfy your hunger immediately and help control your appetite for the next few hours, without loading you up with unwanted calories. ***New Foods for Healing* by Selene Yeager, page 403**

One of the toughest aspects of trying to lose weight can be feeling hungry all the time. But a gnawing, empty feeling isn't necessary when you're shedding excess pounds. In fact, carbohydrates are natural appetite suppressants, because gram for gram, those carbohydrate foods with a low glycemic index are the most filling and prevent hunger pangs for longer periods of time. In the past, experts believed that protein, fat and carbohydrate foods, taken in equal quantities, satisfied our appetites equally. We now know from recent research that the satiating (making us feel full) capacity of these three nutrients is not equal. ***Glucose Revolution* by Thomas Wolever MD PhD, page 17**

If your idea of a weight loss plan is to "eat light," you may want to consider doing just the opposite. Research suggests that controlling appetite and weight gain may be as simple as choosing "high-satisfaction" foods. Researchers at the University of Sydney in Australia had volunteers eat 240-calorie portions of a variety of foods, including fruits, baked goods, snack foods, high-carbohydrate foods, high-protein foods, and cereal. After eating, the participants rated their feelings of hunger every 15 minutes. The goal was to see which foods kept them feeling satisfied the longest. ***New Foods for Healing* by Selene Yeager, page 402**

Taking control of your blood sugar and your weight with Chia and Salba

Well, in Salba you've got everything. The most important thing, I think, is that it has the highest omega-3 and fiber content of any grain in the world. The combination of the omega-3s – which are higher in Salba than in flax – and fiber makes it a very special grain. You've got a total fat of 31.4 grams, and the omega-3s out of that are 20.3. Over 20.3 grams of omega-3s and the total fat of 31 is just amazing. **Larry Brown of the Salba Research and Development Corp., during a yet unpublished interview with Mike Adams, News Target Network**

Yes, and you've got high fiber. If you look at 100 grams of Salba, you've got the equivalent of 1.5 kilograms of broccoli. You've got the equivalency of, I think, 56 grams of asparagus. It's the equivalent to 291 grams of spinach or 940 grams of oranges when you look at it as a source of antioxidant capacity. When you look at protein, eating 100 grams of Salba is like eating 243 grams of kidney beans. It's like eating 113 grams of all bran cereal. It's like drinking 636 grams of whole milk, which is just over 22 ounces, for calcium. It's got a source of potassium equivalent to 166 grams of bananas, which is about 1 1/2 large bananas, and the omega-3 content is comparable to 790 grams, or around 28.2 ounces of Atlantic salmon. And Mike, if you ate all those foods, the total calories would be 3,394, but it is 383 for 100 grams of Salba. **Larry Brown of the Salba Research and Development Corp., during a yet unpublished interview with**

Mike Adams, News Target Network

I think it's really important for people to understand what it does. For example, if you consumed other carbohydrates with that meal, the gel effectively locks them up and reduces the glycemic effect of those carbohydrates, which slows the absorption into the bloodstream. You know, think about the healthy effects on the way out too, throughout the entire digestive tract. **Mike Adams, during a yet unpublished interview with Larry Brown of the Salba Research and Development Corp., News Target Network**

Just keep it in the fridge, and it will stay fresh in the fridge. You don't have to refrigerate the whole grain Salba; that will stay fresh for years and years if you keep it in a cool, dark spot. We even have people calling us, if you can believe this, that take our Salba grain and plant it in their gardens, and people are telling us about the beautiful Salba plants that they're getting. **Larry Brown of the Salba Research and Development Corp., during a yet unpublished interview with Mike Adams, News Target Network**

Can hormone supplements safely help you lose weight?

In fact, each year after the age of forty, a pound of fat replaces a pound of muscle. This means that by the time you are fifty, ten pounds of your muscle have been replaced with ten pounds of fat. *Power Aging* by Gary Null, page 88

DHEA

Dehydroepiandrosterone, or DHEA, as it is more often called, is a steroid hormone produced in the adrenal gland. DHEA levels are known to fall precipitously with age, falling 90 percent from ages 20-90. DHEA is like the hub of a wheel and is the central hormone that is a precursor to the numerous steroid sex hormones (including estrogen and testosterone). Although there is an apparent lack of any direct hormone action for DHEA, it has been suggested that it may serve the role of a buffering hormone, which would alter the state-dependency of other steroid hormones. Although the specific mechanisms of action for DHEA are only partially understood, supplemental DHEA has been shown to have antiaging, antiobesity, and anticancer influences, as well as significant immune-enhancing functions. ***Disease Prevention And Treatment by Life Extension Foundation, page 925***

A landmark study of 242 men, 50-79 years old, based on 12 years of research, stated that a small supplementation of DHEA (100 mcg/ml) corresponded to a 48 percent reduction in death from heart disease and a 36 percent reduction in death from any cause (other than accidents). A Temple University medical researcher reported that DHEA can help a person lose weight by blocking an enzyme known to produce fat tissue. In one study, DHEA supplementation enabled men to lose 31 percent of mean body fat with no change in body weight in 28 days. Another study, involving 16 middle-aged to elderly

men, showed that taking DHEA for one year led to a 75 percent increase in their sense of well-being—they coped better with stress, felt more physically mobile, and slept better. ***Alternative Medicine by Burton Goldberg, page 377***

DHEA's ability to stabilize blood glucose levels, as well as its ability to stimulate the thermogenic "burning" of fat, and to control appetite. ***Brain Longevity by Dharma Singh Khalsa M.D. with Cameron Stauth, page 403***

A report in 1988 that high-dose DHEA could favorably affect lipids and induce weight loss in young males was not confirmed in two subsequent trials. In another trial, using the same 1,600-milligram daily dosage of DHEA used in the 1988 study but this time in women, there was, again, no weight loss. The women subjects suffered androgenic effects and developed insulin resistance and adverse changes in lipoprotein. ***PDR for Nutritional Supplements by Sheldon Saul Hendle and David Rorvik, page 131***

Testosterone builds muscle. Remember, muscle builds metabolic rate. While not approved for weight control because it does not work like traditional drugs (decreasing appetite or stimulating the nervous system) testosterone could be used to alter the muscle to fat ratio in the body. ***Everything You Need to Know About Fat Loss by Club Creavalle Inc, page 149***

Synthetic human growth hormone (HGH)

Researchers wondered how supplemental HGH might affect healthy adults. Some work on this question had already been done by exercise physiologist Douglas Crist and his colleagues at the University of New Mexico School of Medicine in Albuquerque in 1987. Crist and his associates worked with eight healthy, athletic young people, five men and three women, all between the ages of 22 and 33. After six weeks of getting HGH injections three times a week, these young adults—already in good shape—had nevertheless gained an average of close to three pounds of muscle while losing an average 1.5 percent of their body fat. Their overall ratio of muscle to fat—a key sign of being well conditioned—improved by an average of close to 25 percent. ***Stopping the Clock* by Ronald Klatz and Robert Goldman, page 50**

In an article that appeared in the 1990 New England Journal of Medicine, Dr. Daniel Rudman and his colleagues at The University of Wisconsin released the results of their treatment of 12 men aged 61 to 80 with intramuscular growth hormone. After six months, these 12 men had lost 14 percent of their body fat and gained an average of 8.8 percent muscle mass. Their bone density increased and their skin became thicker and firmer. Wrinkles disappeared and sexual performance was improved in several. Dr. Rudman concluded that, "The overall deterioration of the body that comes with growing old is not inevitable. These injections appear able to reverse 10 years of aging with

one year of treatment." ***A Physicians Guide To Natural Health Products That Work* By James Howenstine MD, page 233**

Less common hormone supplements

While Nancy's conditions did not require medications, they definitely called for hormones. She was given 18 milligrams of natural growth hormone per month to address her memory, her metabolism, her muscles, and her bones. I also gave her 50 milligrams per day of DHEA to restore her vigor, and 200 IU per day of calcitonin (Miacalcin) to stabilize her metabolism. Natural estrogen helped control her appetite and lose weight. Supplementing her estrogen was a good idea for her menopausal symptoms (dry vagina, low sex drive, and low mood) and for helping her control her appetite and lose weight, but using Premarin wasn't. I replaced that prescription with 0.5 milligrams of estradiol—bioidentical estrogen—and combined it with 100 milligrams of progesterone and a small amount (2.5 milligrams) of testosterone, a combination known as PET. ***The Edge Effect* By Eric R Braverman MD, page 106**

Fluid retention (Edema): An inside guide

There are many herbs that can also be helpful during weight loss. Jumper berry is a good diuretic herb and helps in detoxification. Parsley leaf is also a diuretic, and peppermint leaf tea helps reduce the appetite for many people, as it is said to relax the stomach nerves. Chickweed herb, a spring green, has

historically been known for reducing appetite and helping in weight loss. Bladderwrack is a type of sea vegetable; when taken with kelp, it will support thyroid function, and the high mineral levels of this herb aid general energy utilization. Garlic has also been used in weight loss programs to help lower blood lipids and for detoxification.

***Staying Healthy with Nutrition* by Elson M. Haas MD, page 853**

About the Health Ranger, Mike Adams



Mike Adams is a holistic nutritionist with over 5,000 hours of study on nutrition, wellness, food toxicology and the true causes of disease and health. He is the author of *The 7 Laws of Nutrition*, *Grocery Warning*, *How to Halt Diabetes in 25 Days* and many other books available at www.TruthPublishing.com.

Adams is also the creator of the popular *Honest Food Guide*, a free downloadable nutritional guide found at www.HonestFoodGuide.org. In addition, more than 1,500 free articles on health, nutrition and wellness have been authored by Adams and are available at www.NewsTarget.com.

Adams uses no prescription drugs whatsoever and relies exclusively on natural health, whole foods, superfoods, nutritional supplements and exercise to achieve optimum health. To prove the value of nutrition and physical exercise in enhancing health, Adams publishes detailed statistics on his own blood chemistry (with full lab results) at www.NewsTarget.com/AdamsHealthStats.html.

Natural Appetite Suppressants for Safe, Effective Weight Loss

Ready to lose weight but afraid of the side effects of weight loss prescription drugs?

There are safer, more natural alternatives that really work, and Truth Publishing's new book *Natural Appetite Suppressants for Safe, Effective Weight Loss* reveals the very best of them: herbs, vitamins and minerals for beating hunger, boosting energy and reversing fat storage—safely and naturally.

