
HOW TO GET
LEAN, STRONG &
BULLETPROOF
By Tim Blake
superfitdads.com

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The Author

Tim Blake was born in the U.K. in 1970, and has lived in the mountains of northern Japan since 2009. He is married with two young sons and can't remember what it was like to have hair.

A qualified mechanical engineer, Tim worked in the automotive industry for over a decade before jumping ship and becoming a personal trainer and nutrition coach back in 2007.

He has studied Hung Kuen kung fu, and is a very mediocre snowboarder, mountain biker and surfer. He's a pretty good dad, though.

In January 2014, Tim went on a no-holds-barred eating binge with the aim of gaining as much weight as possible in a one-year period. It was a resounding success – in 12 months he gained an eye-watering 56 lbs.

On January 16 2015, it was time for the weight to start coming off. Just 27 weeks later, Tim was in the best shape of his life, having lost over 61 lbs.

All while doing pretty much zero cardio and still consuming the foods he enjoys.

This book contains all the strategies Tim used to make that transformation possible. And much more.

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Introduction

First off, a big thank you for purchasing this book.

I came to this whole parenting thing later in life – at the ripe-old age of 37 to be exact. And my guess is that your motivation to be in shape is pretty much the same as mine.

- To get strong and healthy so that we can have the best chance of seeing our kids grow up and giving the grandchildren a run for their money someday

- To be stronger and in better shape at 40 than we were at 20, and better still at 50 and beyond

- To minimize the time required to do that so we can spend more time doing important stuff like having fun with our families

- To have a mental and physical edge that will allow us to better deal with whatever life, the boss or anyone else throws at us

- To build positive habits, exceed our goals and have fun doing it

- To be the coolest dad in the park

- To look good naked and be strong like bull

Most importantly, we want to do all this while still being able to enjoy a bacon double cheeseburger and a beer or two. Sound good? Then let's get started!

-Tim

The Slow Squeeze

While we may not realize it, we've got a fight on our hands. And I mean right now, *at this very moment*.

And this is one fight where we really don't want to be throwing in the towel. The problem is we're up against an invisible opponent who's as determined as she is patient.

So the sooner we get prepared, the better. Here's what we're talking about.

Sometime in our 30s, mother nature starts putting a slow stranglehold on our cojones. Sure, it may start out as a gentle cupping at first, but her grip is firm and relentless.

The upshot is testosterone levels begin to slide by around 1% per year or so [1]. Now that may not sound like such a big deal, but keep in mind that testosterone punches well above its weight.

As far as we're concerned, it's the dragon slayer of hormones and it's responsible for making guys guys. Testosterone is the reason why we have stronger muscles, facial hair and prefer things like skydiving and motocross to embroidery and basket weaving.

And low levels can lead to all kinds of evil stuff such as the loss of muscle mass and strength, decreased libido, decreased bone mass, fatigue, insomnia and depression. Which all sounds pretty grim.

But it doesn't end there.

Research indicates that once we head towards our mid-40s, strength levels decline by around 10-15% per decade [2]. So at 65 years-old – which, let's face it,

no longer seems as far off as it once did – we could be down by both testosterone and strength by a whopping 30% or more.

And if we hit the current average U.S. lifespan of 80 years-old, our strength levels may have dropped by *more than 50%.* Which explains why old folks have so much trouble performing even the most basic physical tasks.

Now here's an easy way to get an idea of what that would be like. Imagine everything in the world suddenly doubling in weight *right now* while your current strength remains the same.

Suddenly life became a whole lot harder, right? Getting out of bed or off the toilet takes almost superhuman effort when you weigh 400 lbs instead of the 200 you did until a moment ago.

Shopping for groceries becomes a major headache when what was a 20-lb sack now feels more like 40. And let's not forget how much harder it now is just to walk around the supermarket in the first place.

Physical strength is such a fundamental part of everyday function and quality of life, and losing it just plain sucks. But there's more to this than strength alone. The obesity epidemic is spiraling out of control and around one third of U.S. men are now classified as obese [3]. On top of that, the rates of heart disease, diabetes, hypertension and cancer are just skyrocketing [4].

And we're kind of stuck in the middle. Every day we're hammered with information, but we're not really sure how we should be using it, or if it's even useful to begin with.

Especially when so much of that information seems to be conflicting. On Monday we read that drinking a glass of wine can be part of a healthful diet, but a few days later there's a news report linking alcohol consumption to obesity and cancer. No wonder we're confused.

And here's the worst part. Some folks even claim that they simply don't know how to lose weight any more! And who can blame them? It's all just been made out to be so damn complex.

We keep hearing about things like GM foods, gluten, BPA, additives and high-fructose corn syrup. And it isn't showing any sign of letting up. The list of things we should fear or avoid is growing every day.

It's like the Salem witch trials only with food. But the reality is while all that stuff may be interesting to researchers and journalists, most of it isn't particularly relevant to folks like us. Their desperation to report something sexy and new means fundamental principles end up getting pushed aside in favor of minor details. And you've probably noticed that the more minor the detail, the bigger a headline it tends to get.

It's sensationalism on steroids. So if we're going to make some real progress, we should start seeing that stuff for what it really is. We need to stop majoring in the minors and instead concentrate our efforts on where we get the biggest return. Minimum effort for maximum results.

Think of it this way. If you want to improve your car's fuel consumption, you go a little easier on the gas pedal and drive a little slower. Simple enough, right?

Maybe you didn't think about how thousands of other factors like engine oil grade, tire tread depth, air temperature and even listening to the radio can all affect fuel consumption. You probably didn't even care.

After all, you instinctively knew that those weren't worth spending a whole bunch of time focusing on. Driving slower and less aggressively would do more to improve gas mileage than *all those other things combined*.

Now that doesn't mean all those other factors don't matter. Right now, engineers and scientists are toiling away and spending millions on research to eek out tiny performance improvements in every area imaginable.

But to us they're just minor details that easily get lost in the background noise of the real world. Theoretical improvements don't automatically translate to measurable real-world results.

Unfortunately, the health and fitness industry is largely about the minor details

and making simple things complex. That's the reason why most folks don't get anything like the results they want and deserve.

That's where this book comes in. Identifying what's fundamental and filtering out the stuff that isn't is what it's all about.

It's about providing surefire strategies that obey universal principles which work for every single person, every single time. In fact, every time someone gets in shape it's because they've applied these principles *whether they realized it or not*.

And here's the best part.

Once you understand the basic principles and begin putting them into action, incredible things start to happen. Results that were previously hit and miss are now predictable and reliable.

Before long it almost becomes a game – you can get all the results you want, anytime you want if you know the right buttons to push. This book shows you exactly where those buttons are.

The bottom line is that pretty much every one of us can be stronger, leaner, look better, feel better and be just plain more awesome at 50 than we were at 20. *And it really isn't that hard*.

So let's get to it.

Small Steps

It doesn't matter how overweight you may be, how weak you feel or how over the hill you think you are. We can all make incredible progress and get measurable results fast if we go about things the right way.

Now don't feel intimidated if this is all new to you, because you're actually in a very fortunate position. Your newbie status guarantees even more rapid progress.

You can make the kind of strength gains in two weeks that an Olympic athlete would be lucky to make in two years. And you can lose weight almost effortlessly while Hollywood actors nudging single-digit body fat percentages have to go through hell just to shed another pound.

People love making progress, and that's why the first few steps that get us moving are the most important. Once you start making progress, your belief and motivation really get going – *hey, this really works!* – and that spurs you on even more.

Success breeds success, and building that initial momentum is all-important. So here's how we're going to tackle this.

This book is split into two sections: eating and moving. And we've arranged things so that you can start taking action today.

Don't worry, we'll take small steps.

This isn't about turning your life upside down or taking the pleasure out of eating. In fact, we have some fantastic news for you.

We want you to consume stuff you actually enjoy.

Absolutely nothing is off-limits, so there's no need to say *adios* to the pizza, beer and ice-cream. But before you call *Domino's* to celebrate, this doesn't mean we'll be launching into a full-on junk-food diet.

It does mean we'll be putting food avoidance where it belongs: in the trash can.

We'll also discover what types of movement hold the key to not only losing weight, but making sure it stays off. And you'll learn why those "fat blasting" workouts aren't anywhere near as effective as they're made out to be.

We'll also reveal why exercise isn't an effective way for most folks to get strong. Which sounds kind of absurd, but it's 100% true.

And if you do want to get stronger, we'll show you how to achieve that in the fastest way possible. All with results that are measurable rather than just subjective.

But before we get to all that, we first need to figure out where we are and how we got here. Having a good grasp of that will enable us to identify where our efforts will have the most effect.

So let's start with the $64,000 question.

Eating

How Did We Get Fat?

First off, we'll look at the big picture to see if there are any major principles that we can get our teeth into. Sure, things like gluten and high-fructose corn syrup seem to grab all the headlines, but those tend to be minor details.

According to the USDA's Economic Research Service, we're currently consuming close to 500 Calories more per day than folks did 40 years ago [5]. That's actually a bigger hit of calories than you'd get from a Bacon McDouble [6] or five tablespoons of peanut butter [7].

Now that doesn't sound like a trivial amount. And you only have to check out some photographs from Woodstock or the Summer of Love to see what people looked like back then.

A lot of hair, but very little fat.

So what would we be looking at if every one of those folks had consumed an extra 500 Calories each day? *The summer of love handles.*

Now at this point some people would try to pull some mathematical smoke and mirrors trick to try and "prove" that additional calories aren't to blame. They'd claim that 500 Calories per day over one year totals 182,500 Calories (500 x 365 = 182,500), which is true.

Then they'd claim that over 10 years that comes to more than *1.8 million additional Calories*. Which is also true.

Then they'd fumble and drop the ball. Here's how it would go.

Their final claim is that 1.8 million Calories would result in a fat gain of something like 450 lbs over 10 years. And, as the average person is nowhere near that heavy, they argue that it *can't be about calories*.

So off they go majoring in the minors, trying to find a scapegoat for why so many folks are overweight. But here's how it really works.

Let's say a 150-pound man is maintaining his bodyweight on 2000 Calories per day. Now if we bump his intake up to 2500 Calories per day, will he gain weight?

Almost certainly. But it won't make him balloon up to 600 lbs over 10 years, or even a lifetime.

It will merely take him to a bodyweight where 2500 Calories becomes his new daily maintenance intake. That bodyweight could be 160 lbs, 200 lbs or anywhere in between.

But it definitely won't be 600 lbs. Put it this way, even a *300-lb* man would be unable to maintain his bodyweight on only 2500 Calories per day.

This isn't just speculation. According to researchers, reversing current bodyweights to what they were back in the days of *The Rockford Files* and *Hawaii Five-O* would require a cut in calories to the tune of – you guessed it – 500 per day [8].

But it's not just that we're consuming more. Since 1960, occupation-related activity has nosedived by over 140 Calories per day [9].

And that's just occupation related. It doesn't include the fact that we now spend most of our free time sitting on our butts, too.

But there's more.

Other research indicates that obese people tend to simultaneously *over*estimate physical activity and *under*estimate calorie consumption by up to 50% [10]. Those folks were also more likely to believe their obesity was the result

of unfavorable genetics or some kind of metabolic disorder.

So ultimately, here's what it boils down to. Although we're consuming more and moving less than the previous generation, we've somehow managed to convince ourselves that we're consuming less and moving more [11].

Now that's bad news because it means we're primed to believe all kinds of goofy reasons why we're overweight.

We're convinced that we've taken care of the majors – *we hardly eat a thing* – so we begin majoring in the minors. We start getting OCD about organic food, additives or 101 other details.

And when *that* doesn't give results worth a damn, we fall into the trap of believing that we're somehow unique and unable to lose weight. Instead of just facing the reality that we're consuming too much and expending too little.

And the diet industry wouldn't have it any other way. They don't want you to know that the answer lies in the simple, not the complex.

Remember all those diet books claiming that you can lose weight while eating as much as you want? Now that does sound like a pretty sweet deal, especially if you have a thing for food.

But a few chapters in, they suddenly drop the bombshell.

Like you can only consume stuff from an approved list that omits all the calorically-dense goodies that are easy to overeat. Or maybe they restrict your eating window to six hours per day, which strong-arms you into throttling back on your intake.

But they never pitch it that way.

They'll claim the diet works because we're reconnecting with our primal eating pattern, optimizing our hormones, hacking our biology or some other mumbo jumbo. The fact that it's basically just plain-old calorie restriction repackaged with a shiny new wrapper doesn't get mentioned.

Now this doesn't mean losing weight is simply a case of eating less and moving more. There's a lot more to it than that, and we're going to go about things the smart way.

But for weight loss to occur, an energy deficit is essential. That basically means expending more energy than we consume.

And the great news for us is that there's no single best way to achieve an energy deficit. This means we've got plenty of flexibility to come up with a strategy that will work for each of us as a unique individual.

After all, nobody wants to shoehorn some regimented one-size-fits-all approach into their life. You wouldn't feel comfortable wearing your boss's pants or your neighbor's shoes, so why force yourself to eat the same way they do?

We're going to combine fundamental principles with some pretty clever science to help stack the deck in our favor. We want to get the biggest possible bang for our buck every step of the way.

So let's start by taking a look at where our calories are coming from, where they end up going, and what we can do about it.

Count On It

Have you ever received your monthly credit card statement, looked at the total and felt your jaw drop? Sure, you remember buying the big things – the 50-inch TV or the washer drier – but the total is still way more than you expected.

You're certain that they made a mistake this time. So you check your receipts and, boy, do all those little spends soon add up.

You know, the "it's only $4.99" purchases that you forgot about the instant you slipped your credit card back inside your wallet. But they still made it onto your statement, and it turns out the total was correct all along.

It happens to all of us, and the problem is almost always with our recall.

We're just not very good at remembering that stuff.

Calorie intake works pretty much the same way. No matter how few calories we think we're consuming, it's almost always more.

The damn things just seem to have a habit of sneaking in under the radar. That's why we're going to kick off with the single most important thing we can do for our waistline and our health.

And if you're anything like most folks, you'll be amazed by what you discover. So here's what we're going to do.

Count the total calories and protein consumed each day for one week

Now I realize that may sound kind of lame, but stick with me here. Remember that we're focused on things that actually work, not things that just sound good.

Counting calories happens to be the single most empowering thing you can do to get a handle on your eating habits. It's as fundamental as knowing how much gas you've used if you want to calculate your car's fuel consumption.

Now it's true that not all calories are created equal. Our bodies don't treat one Calorie of fat the same way they do one Calorie of protein or one Calorie of carbohydrate.

But that's OK. Counting calories is more of an awareness tool than a foolproof way to adjust bodyweight with NASA-like precision.

A method doesn't need to be perfect in order to be extremely valuable.

The same way the speedometer in your car isn't 100% accurate. Although it only gives an approximate indication of the vehicle's speed, it's incredibly important nonetheless.

So whether you're looking to lose body fat, get stronger or put on some muscle, counting calories is right at the top of the to-do list. And since all calories count, we need to make sure that we count all the calories we consume.

Nothing gets a pass.

The late night black-ops raids on the refrigerator and those stealthy visits to Starbucks? Yep, they count too.

The same way a meagre $1.99 purchase still manages to end up on your credit card statement, calories always make it through. They never just disappear.

But the good news is tracking them has never been easier. Twenty years ago, we would've had to go to a store and buy a nutrition book with calorie tables that were completely generic, and therefore not very accurate.

Today all the information we need is instantly available and, even better, it's free. An online calorie tracker like *MyFitnessPal* is an awesome resource that's both accurate and easy to use. There's even a free app available for your smartphone. So let's get the ball rolling by signing up for an account right now.

It doesn't have to be *MyFitnessPal*, feel free to chose one of the many alternatives out there, if you prefer. The most important thing at this stage is that you actually sign up for an account.

Don't worry, I'll wait. All done? Now that may not seem like such a big deal, but you've just taken a definite step to becoming a *Super Fit Dad*.

Remember that massive success comes from doing small things consistently rather than the occasional big thing in isolation. Those small things really do accumulate to give life-changing results. So, if you haven't already done it, go the extra mile and download the free *MyFitnessPal* app to your smartphone.

That means you're now pretty much all set. Just make sure you have a decent set of kitchen scales at home so you can weigh your food accurately.

Also, do whatever you can to get your other half on your side. Explain what you're doing and why. Having supportive people around you makes a huge difference and it's only going to do good things for your progress. So now you're ready to rock n' roll.

Here's how we're going to do this:

Record all calories and protein consumed each day for one week <u>without making any changes to your eating habits</u>

Now the underlined bit is super important. At this stage we don't want you to change a single thing about what you eat and drink.

That means you'll need to ignore some of the advice that *MyFitnessPal* may give about things like target daily calories and projected weight loss. Don't worry - we'll be dealing with that stuff a bit further down the track.

But for now we're going to keep on consuming exactly the same things as normal. That means all the food, all the snacks and all the drinks, in all the usual quantities.

Even the stuff that you know you really shouldn't be consuming, but do anyway. *Don't change a thing*.

All we're going to do this first week is figure out where we are. We're simply establishing a baseline of what's normal for us.

Now here's where things may get a little weird because sticking to your normal diet may actually take a bit of self-control. What happens is that the simple act of counting calories makes you more aware of what you're consuming.

You then start feeling more accountable, and that can cause some folks to spontaneously throttle back on their caloric intake. So resist any urge you may have to do that.

We want to get a snapshot of your current diet, warts and all. That goes the same whether you live on organic broccoli and grass-fed beef or *Mountain Dew* and *Pop-Tarts*.

This week of calorie counting will achieve so much more than providing numbers for overall calorie and protein intake. It will also reveal exactly where

those calories are coming from.

Now that's a really big deal because, as we know, not all calories are created equal, and some are more easily punched out of our intake than others. So what we're going to do is first identify those freeloading calories that aren't pulling their weight, then we can start picking them off later on.

Think of this week of calorie counting as the reconnaissance stage. We'll then be able to figure out the right plan of attack once we've got the information we need.

Here's how that could work. Let's introduce Jim as an example.

Now Jim is a regular Cookie Monster. The mainstays of his diet read like a list of what not to eat: pasta, pizza, desserts and beer.

He's maintaining his bodyweight, but figures he needs to drop around 60 lbs. He knows that he'll look and feel a lot better at 180 lbs than he does at 240.

Now the hardline approach would be to go straight for the jugular and cut out all the pasta, pizza, desserts and beer. Probably replacing them with something tasteless and unappetizing like steamed chicken breast and broccoli.

And wouldn't you know it, that's exactly what Jim does. After all, he thinks dieting means suffering, and suffering means progress.

So he starts choking down steamed chicken breast and broccoli three times a day. He's on a diet, so he's determined to make his life as miserable as possible.

He thinks that shows commitment. Anyhow, this self-abuse continues for a few days or maybe even a full week.

But it's completely unsustainable, and before long he ends up throwing in the towel. It's then back to the familiar pattern of hogging out on pizza and beer.

So Jim chalks up another failure and mentally beats himself up for not being able to lose weight. Sounds familiar, right?

Now the fundamental problem is that he's flip-flopped from one dietary extreme to the other while ignoring the whole range of possibilities that lie in between. With this in mind, Jim hits the reset button and starts over again.

This time he begins by tracking calories and protein for a week. And he's amazed by what he discovers.

It turns out that his beer, soft drink and latte habit totals over 700 Calories per day! Which may sound extreme, but it's actually right in line with National Health and Nutrition Examination Survey (NHANES) data.

According to this, the average U.S. adult gets a whopping 20% or more of their daily calories from beverages [12]. Now that's a really big deal because liquid calories are just brutal.

They slide down quick and easy, but don't make us feel any fuller than if we'd had a glass of water. Eating 500 Calories of sirloin steak and salad will always make you feel much more satisfied than drinking 500 Calories from a 44 oz. soda.

So Jim makes the relatively painless switch to low-calorie or calorie-free alternatives. This alone knocks out more than 500 Calories per day from his intake.

And thanks to that one simple change, Jim is now consuming fewer calories than he expends. In other words he's now in a *caloric deficit*, and that's the driver for weight loss.

This starts working its magic and his bodyweight begins creeping down by around 1 lb per week. Even better, the weight loss is almost effortless this time around.

He doesn't feel the pain of dieting *because he isn't on a diet*. He just made a few smart decisions based on the information that came from the week of counting calories.

Being aware of what he was consuming was the first step to some very easy

weight loss. Of course, Jim isn't going to lose all 60 lbs just by switching to *Miller Lite* and *Coke Zero*.

But he now feels confident and empowered where previously he felt crushed by an unsustainable diet. This time he knows he's in the driver's seat, and that's a real game changer.

Plus he's only just getting started. Tracking calories allowed him to identify a bunch of other areas where he can pare back his intake without turning his life upside down. Now at this point he's already won, he's got this weight loss thing dialed.

Now it doesn't matter if you eat better, worse or the same as Jim. Counting calories shouldn't be seen as merely optional. It is the single most powerful thing you can do to understand your own eating behavior. And each person will have their own lightbulb moment.

For some it may be portion sizes that have gradually crept up, or a peanut butter habit that's spiraling out of control. For others it could be drowning meals in olive oil.

Remember, just because a food is "healthy" doesn't mean the calories magically disappear. Ultimately, what we all have in common is that we're consuming a bunch of calories that we can easily eliminate without even noticing. Counting calories is the best method we have to identify those easy targets.

And we only need to do it for one week.

Counting calories also has some pretty awesome tag-along benefits. Before you know it, you'll be able to eyeball food and have a decent idea of how many calories and how much protein it contains.

That's when the fun starts because once you know how the system works, you can then make it work for you. So you can do things like:

Eat a 2000-Calorie breakfast while still losing body fat

Dive in to an all-you-can-eat pizza place for lunch and still keep your weight loss on track

Have a big night out and still end up ahead

Counting calories is the key that unlocks the door to all that and more. But if you still need a little convincing, take a guess at how many calories are in each of the following:

- A 10 oz. sirloin steak (broiled)
- Twelve Oreo chocolate cookies
- A *McDonald's* quarter pounder with cheese
- Three 12 oz. cans of *Mountain Dew*
- Two 12 oz. beers (5%) followed by three 1.5 oz. shots OK, that's kind of tough, so here's a clue. *They all contain approximately the same number of calories.* So what do you think – 200? Maybe closer to 1000? The answer is 500 Calories. If you came nowhere close, don't feel bad. Most people absolutely suck at estimating calories, but that can all change within a week.

This example also shows how not all calories are created equal. Consume 500 Calories from a big steak, and you'll feel satisfied and full. Consume 500 Calories from beer and shots, and you'll be on the lookout for a burger joint. How we consume our calories can have a huge influence on how much we end up eating. But we're starting to get ahead of ourselves.

The first step is to track all calories and protein consumed each day for one week

Now tracking calories makes perfect sense, but what's the deal with tracking protein intake? Why is that so important?

Well, this is where things get really cool. That's because protein happens to be

our secret weapon in the war against body fat.

There are three main reasons why we want to have protein on our side:

1. *When we talk about losing weight, what we really mean is losing body fat. Having a high protein intake helps to preserve muscle mass while we're losing body fat.*

After all, a weight loss of 20 lbs doesn't seem quite so impressive if 7 lbs of it came from lost muscle mass. Losing muscle not only means reduced strength (which is never a good thing), but it can also reduce the number of calories we end up burning.

2. *Consuming a bigger proportion of our calories from protein helps to jack up our metabolic rate. That's all thanks to protein's high* thermic effect of feeding *(much more on this later).*

At this point let's put it this way: a higher metabolic rate equals more calories burned. And that means more weight lost.

3. *Protein is more satiating than fats or carbohydrate, which means it makes us feel fuller for longer. The upshot is we're likely to end up eating less when we consume a bigger proportion of our calories from protein.*

So we can chalk up three big wins for protein. Now this isn't something that just sounds good in theory, but doesn't deliver in the real world.

After all, most of us have probably heard that low-carb diets are effective for weight loss. Which could make it sound like there's something uniquely fattening or bad about carbohydrate.

But here's a secret. The real reason they're so effective is because of the *high protein* levels typically found in low-carb diets.

In other words, the magic's not in the low carbs, it's in the high protein [13]. So we shouldn't underestimate how powerful a fat-loss ally protein can be.

And while most folks are consuming way more calories than they realize, they're eating nowhere near enough protein. In fact, if you're losing weight while sticking to the government's Recommended Daily Intake (RDI) of protein, you're probably not doing yourself any favors.

Hiking up protein intake to above the DRI when eating in a caloric deficit has been shown to turbocharge fat loss while also putting the brakes on muscle loss [14].

The bottom line is that protein is a big deal and that's why we should be tracking it along with all the calories we consume. Remember that we're just tracking to begin with, so don't change anything at this stage - just eat and drink as normal.

Now at this point it's worth making something crystal clear. We're not claiming that counting calories and tracking protein is the only way to lose weight.

What we're saying is that it's the smart way to lose weight. We want you to enjoy all your favorite foods while coaxing off body fat.

Keep in mind that the best diet is the one you can stick to, not the one that looks best on paper or is the current flavor of the week. Ultimately, you're more likely to stick to a diet if it doesn't feel like you're actually on one.

And here's something the diet books almost always fail to mention. Losing weight is less than half the battle.

There's evidence that only around one person in five is able to maintain a 10% drop in bodyweight after one year [15]. Now that shouldn't really come as a surprise.

After all, think of the millions of diet books sold, and the billions of dollars of weight-loss supplements purchased. Yet the average person isn't looking any slimmer.

Now a 10% drop in bodyweight may not sound like that big a deal. But it could make all the difference between being healthy or developing a life-threatening condition like metabolic syndrome.

Below are some real interim figures from a Super Fit Dads client.

Drop in bodyweight: 10% (245 to 220 lbs = 25 lbs)

Blood pressure: Improved from 134/75 to 107/67

LDL ("bad cholesterol"): Improved from 151 to 115

HDL ("good cholesterol"): No change

Fasting blood glucose: Improved from 114 (pre-diabetic) to 94 (normal)

In his own words, the single most important thing he did was to track calorie consumption. It beat hands down everything else he'd tried over decades.

Ultimately, the quick-fix approaches that most folks take simply aren't sustainable beyond the short term. People either quit and resign themselves to being overweight, or hop from diet to diet in the hope that they'll eventually luck out and hit on something that works.

We're going to be different. We're going to set aside short-term gratification and aim for long-term success.

We want the weight to come off and, just as importantly, stay off. Counting calories and protein is the catalyst that sets us up for that long-term success.

Getting results may be gratifying but understanding how we achieved them is empowering. So track your calories and protein for the next seven days while sticking to all your regular habits.

That's where the journey begins.

Your Metabolic Advantage

Most people would agree that having a high metabolic rate/fast metabolism is an advantage for losing weight. But a number of folks seem to think that

metabolism is something genetically predetermined and largely outside our control, like eye color and shoe size.

So they figure that lean people must be blessed with a fast metabolism. The flip side being that anyone cursed with a slow metabolism just has to suck it up and stay fat.

In other words, you play the hand you're dealt. But is there any truth in that - are we really just victims of the genetic lottery?

Fortunately, no.

All of us have a massive amount of control over our metabolic rate. And if we've got a slow one, it's because we haven't done what's necessary to get it moving.

But before we get into that, we need to do a quick crash course in metabolism 101. So let's get to it.

Our bodies require energy to function the same way a car needs gasoline. And the only way we can take in energy is through the food and drink we consume.

The energy we take in comes from fats, carbohydrate, protein and alcohol. One gram of each contains the following energy (measured in Calories):

Fats 9: Calories

Carbohydrate: 4 Calories

Protein: 4 Calories

Alcohol: 7 Calories

When we consume fats, carbs or protein these have only one of two fates: either they get burned or they get stored. Nothing else.

We'll ignore alcohol for the moment as it's kind of a special case. Alcohol is burned immediately as there is no place in the body where it can be stored.

Now if we consume more energy than we expend, we'll put on weight. On the other hand, if we consume less energy than we expend, we'll lose weight.

So far, so good. But here's the obvious question - *how does the energy we expend relate to our metabolic rate?*

Answer: The energy we expend is our metabolic rate.

Which means it's not some fixed arbitrary number that we have no control over. In fact, metabolic rate is really just a fancy way of saying your body's fuel consumption.

And, just like your car's fuel consumption, your metabolic rate depends on a number of different things. So let's take a quick look at what those are.

Your car needs fuel just to keep the engine idling even while it's sitting in traffic or waiting at a stop light. Sure, the car may not actually be moving, but there are a whole bunch of systems that require power all the same.

Our bodies work the same way. Even when we're lying in a hammock chilling out to some Bob Marley, there are still a bunch of essential bodily processes ticking over, and they all need energy.

This energy requirement is known as our *resting metabolic rate* or RMR. And when it comes to resting fuel consumption, our bodies are more Humvee than Prius.

For sedentary folks, RMR actually makes up the lion's share of their *total* daily energy expenditure. What's even more amazing is that the majority of our resting metabolic rate comes from powering just four gas-guzzling organs: the brain, lungs, heart and kidneys [16].

Fundamentally, a bigger body has a higher RMR the same way a bigger engine uses more fuel. Just to be clear, when we say "a bigger body" what we're really talking about is *lean body mass*.

That's everything in your body that isn't fat. In other words, stuff like bone, muscle, internal organs and so on.

Now the good news is that it is possible for us to increase our resting metabolic rate. Adding muscle mass will certainly give it a boost.

In fact, each pound of muscle mass that we add will increase our RMR by around 6 Calories per day. Which may not sound like much, but it's worth having all the same.

But there's also a flip side. Each pound of muscle mass that we lose will cause our RMR to *drop* by the same amount.

So crash diets where we may end up losing 5-10 lbs of muscle mass are not a good idea if we want to keep our RMR high. And we do.

Fortunately, we have a neat little trick up our sleeve to help keep RMR high. The great news is that some types of exercise can actually jack up RMR by over 10% for several days following a workout.

This means we could be burning an additional 200 Calories or more per day *for no extra effort*. That's the kind of science we like, and we'll get to it later in the book.

For now, let's just think of RMR (resting metabolic rate) as the body's fuel consumption when we're lying down doing nothing. So, what other things affect our overall metabolic rate?

Let's go back to the car analogy. Obviously, how you drive your car also has a big effect on its gas mileage.

Giving it the beans from every stop light uses a lot more fuel than doing a steady 55 mph down the freeway. The same principle also applies to our bodies.

This is called the *thermic effect of activity* or TEA. How hard and how much we move determines how much energy we require in addition to our resting metabolic rate (RMR).

For sedentary folks, the thermic effect of activity may add only another 20% or so to their resting metabolic rate. Here's a quick example.

Let's say a sedentary person has a resting metabolic rate of 2000 Calories per day. That's how much energy they would expend lying in bed all day doing nothing.

But during a normal day they actually do some limited activity. That could mean driving, desk work and watching TV.

The key thing is that all those activities require more energy than lying in bed. How much more? Maybe 400 Calories in total over a day.

On the other hand, a lumberjack or blacksmith could have the same *resting*

metabolic rate as a sedentary person. In this example that's 2000 Calories per day.

But those physical occupations can easily have a *thermic effect of activity* of 1500 Calories or more per day. Put simply, it takes more physical effort to make horseshoes than it does to sit at a desk.

Now that doesn't mean we need to trade the job in a cubicle for a check shirt and a chainsaw. But it does mean we can increase our metabolic rate any time we want to by simply moving more.

That's because more movement results in an increase in the thermic effect of activity (TEA). OK, time for a quick recap.

So far, we have two key players that make up our metabolic rate: RMR (chill-out calories) and TEA (moving calories). And we know that there are a bunch of things we can do to increase either or both of these.

What's up next? Enter the *thermic effect of feeding*.

When we consume food or drink, around 10% of its energy is "lost" in the effort taken by the body to digest and absorb it. This is known as the thermic effect of feeding or TEF.

If we consume 1000 Calories, the body "sees" only around 900 of them. So we can think of the TEF as being like a transaction fee charged by the body.

This works the same way as when you pay for something with your credit card. Buy a $100 widget with your VISA card, and the store gets $97.50 while VISA pockets $2.50 as the transaction fee.

Now the macronutrients (fats, carbs and protein) don't all have the same transaction fee. Carbs are around 8%, fats around 3%, with protein way out in front at around 20% or more.

This means consuming 800 Calories from fat costs the body only around 24 Calories to process. On the other hand, consuming 800 Calories from protein

costs the body a whopping 160 Calories or more.

The upshot is increasing protein intake while keeping total calories the same will lead to a small, but useful, hike in metabolic rate. This could be by as much as 100 Calories per day.

OK, that may not sound like such a big deal, but it's equivalent to a 185-lb man walking a mile at 4 mph pace [17]. Remember, small increments of progress really add up. Now at this point we need to be clear about something. There's a big difference between increasing TEF by making better food choices (like consuming less fat but more protein), and increasing TEF by simply eating more calories.

Now it's true that eating more food will increase metabolic rate. Consuming 8,000 Calories per day instead of

3,000 will cause a significant increase in TEF – perhaps by 500 Calories or more. But that increase in metabolic rate is dwarfed by the huge net caloric excess you're now in. Here's another way to think of that.

Imagine that your local Honda dealer has a 10% off special on new cars for this weekend only.

Now, would you get your hands on all the cash you can, buy 20 new cars that you don't need, and then congratulate yourself on saving $40,000? Hell, no! It makes no sense to spend $400,000 for the sole purpose of "saving" $40,000. And it makes no sense to increase caloric intake just to achieve a small increase in TEF.

So next time you read some advice about eating a large meal to "get your metabolism revving", smile and shake your head. And think of a driveway full of unwanted Hondas. OK, here's what we now have for overall metabolic rate:

RMR (chilling) TEA (moving) TEF (digesting)

Which looks like we've covered all the bases. But we just need to add in one more factor that's now being recognized as the key to not only losing weight, but

keeping it off too. Enter NEAT, otherwise known by its tongue-twisting moniker of non-exercise activity thermogenesis [18], [19].

NEAT may sound complex, but it's actually really straightforward. It covers spontaneous, unconscious movements like fidgeting, tapping your feet, and drumming your fingers. Now that sounds pretty lame compared to high-intensity activities like running or mountain biking, right? But here's the deal. We need to shift our thinking away from *intensity* and more towards *duration*. The reality is doing small movements over a long duration can really add up. So, how much are we talking about here?

Well, throw in some fidgeting hands and feet to 5 hours of desk work, and you'll rack up an additional energy expenditure equivalent to running 1½ miles [20] ! So NEAT is a serious player in our metabolic rate.

It's also the final piece of the puzzle. Which means we can now summarize our metabolic rate as follows:

Metabolic rate = RMR (chilling) TEA (moving) TEF (digesting) NEAT

The take-home point is that we all have a massive amount of control over our metabolic rate. And it's way easier to increase than we may have thought.

Calories aren't only burned when we're dripping sweat or working out in a gym. We can turn our metabolic rate up a notch or two by something as simple as tapping our feet or taking out the trash.

It all counts.

Now, all this talk about metabolic rate may have you wondering what yours is in terms of Calories per day. How can we figure that out?

Well, we could go to the hassle and expense of getting it measured in a lab using techniques like indirect calorimetry and doubly-labeled water. Which is as OTT as it sounds, and completely unnecessary.

Or we could try estimating it from one of the many standard equations

available. These will give us a reasonable idea, but could be off by quite a bit.

So if you're really desperate to know a ballpark number, here's one that works pretty well out in the real world. Just keep in mind that this is for sedentary guys.

Metabolic rate = bodyweight in lbs x 14

So a sedentary 200-lb man would have a metabolic rate of around 200 x 14 = 2800 Calories per day. Keep in mind this is just a guesstimate and could easily be off by several hundred calories or more.

But there's a much more accurate way. And the great news is *you're already doing it!*

Which means it takes no extra effort, and we get to kill two birds with one stone. Here's how it works.

If the energy we consume through food and drink is greater than our energy expenditure (metabolic rate), we put on weight. On the other hand, if the energy we consume through food and drink is less than our energy expenditure, we lose weight.

But if our weight is stable, it means energy intake is matching energy expenditure. In other words, our average metabolic rate is equal to our average calorie consumption.

OK, stick with me here. Now we know our average daily calorie consumption because that's exactly what we've been tracking.

Here's how that might pan out. Let's assume your weight was stable over the week you counted calories, and you consumed 2,900 Calories per day on average. That means your average metabolic rate is also 2,900 Calories per day!

Remember, our metabolic rate is the sum total of RMR (chilling), TEA (moving), TEF (eating) and NEAT. And we have a lot more control over it than most people believe. OK, that just about wraps it up for metabolic rate. Next up, we'll look at the best ways to go about losing fat.

Lose The Fat

At this point we're going to fast-forward a week and assume that you've finished tracking your calories and protein. If that's still a work in progress, just file this information away in the back of your mind.

Whatever you do, don't let anything you're about to read influence what you're consuming while you're tracking your intake.

As we said earlier, tracking calorie and protein intake is like reconnaissance. And detailed reconnaissance is a key part of any successful mission.

Now, we know that losing weight means we need to consume less energy than we expend. We also know that the energy we consume comes from food and drink, and the energy we expend is our metabolic rate.

We also know that any weight we lose should come from body fat rather than lean body mass. Losing lean body mass effectively means losing muscle, and that's never a good idea.

So we're going to focus on losing body fat at a manageable and sustainable rate. Ultimately, this comes down to losing just a small amount of body fat each day.

All we then have to do is string enough of those days together. Almost before we know it, the belly will be gone and our abs will start to emerge from hibernation.

But in this on-demand and instant-download world, the first question that comes to mind is always *how long will that take?* So let's take a quick look at that right now.

The fact is the more body fat a person is carrying, the more willing the body is to lose it. But as more and more fat comes off, the body starts getting increasingly concerned.

And as fat levels drop even further, the body heads toward full-on panic mode. Now that's not a bad thing – in fact, we should all be very grateful.

Why? Because your body doesn't know that you work in an air-conditioned office, shop at Trader Joe's and carry an iPhone.

As far as your body is concerned, you're a hunter-gatherer from 250,000 years BC. And dwindling fat stores mean only one thing.

You're beginning to starve to death.

So it starts hanging on to its remaining fat stores with an increasingly viselike grip. After all, they're the key to its long-term survival.

Fat is effectively the body's energy bank. When times are good, we store the surplus that we can draw on in future when times are tough.

And when body-fat levels get low enough, the body starts looking elsewhere for fuel. After all, staying alive requires energy.

With body fat off the menu, it zeros in on your protein stores instead. In other words, it starts cannibalizing your muscles for energy.

Obviously, that isn't something we want to happen. So we're better off losing weight at a rate that doesn't spook the body into doing that.

What kind of rate should we be aiming for? Well, that really depends on how much body fat we're carrying.

If you're very overweight, it would be reasonable to lose up to around 2% of your bodyweight per week. This means a very overweight 240-lb man could lose around 240 x 0.02 = 5 lbs per week at first.

But as he loses more and more fat, his body gets increasingly concerned. Is starvation just around the corner?

At that point he should ease the rate of fat loss down to around 1% of

bodyweight per week. That will keep things moving along nicely without causing the body too much anxiety.

This means he's now losing around 2 lbs per week. So, if he wants to lose 40 lbs in total, he's looking at a duration of around 4 to 6 months.

That may seem like an eternity when you're 21 years-old, but it's the blink of an eye when you're the other side of 40.

Now, fat can be lost at much faster rates than that. Some committed folks have put themselves through the wringer and lost 40 lbs in only 63 days [21].

So it is possible, and that can work just fine for exceptionally determined and motivated people. But the reality is most of us aren't wired that way.

Remember how only 17% of Americans are able to maintain a 10% drop in bodyweight after one year [15]? Even though those folks lost weight in the first place, it didn't work out so well in the long run.

The thing is, those people didn't fail at their plan, *it was the plan that failed them*. Now that's hardly surprising when the plan uses the bull-rodeo approach to weight loss.

From the moment the gate opens, you go as hard as possible before the inevitable happens, and you get bucked off. You then head back to your old eating behavior with your tail between your legs.

And sure enough, the weight creeps back on. So if we're going to succeed where most fail, we've got to take a different approach.

Instead of getting hung up on maximum weight loss *right now*, we need to focus more on the real goal. We don't just want to lose weight, we want to keep it off, too.

And we want to feel good while we're doing it. So here's an alternative where we can actually enjoy the process of losing weight.

We're going to turn this thing on its head. How about we aim to lose weight at the *slowest* rate that we would be satisfied with?

That way we can make steady progress without the pain of dieting. And we stick with the plan because we're not doing anything radically different from before.

All we've done is make a few small changes, and great results come along for the ride. Sometimes doing things the longer way round is simply more effective.

We get more familiar with what works best for us as individuals, and we also tend to value the results a lot more. So instead of going at it hell-for-leather, let's start out slowly.

Now it could be that you can handle rapid weight loss just fine. Maybe your body can tolerate it without going into a tailspin.

Or perhaps you're just hard-headed enough to tough it out. But starting out easy puts us in the driver's seat from the very beginning.

And it's reassuring to know that we're making solid progress while still having plenty left in the tank. We can always pick up the pace a little if, and when, we feel like it.

In fact, going at it balls to the wall has a nasty habit of biting people in the ass. Nowhere is this more true than with low-carb or very low-calorie diets. Now, if you take the plunge with this kind of aggressive diet, the initial honeymoon period can yield some jaw-dropping results. How does losing over 15 lbs in only 4 days grab you [22] ?

That sounds tempting even before we start doing the mental arithmetic. "*At that rate I could be back to my old fighting weight in...*" (frantic tapping on the calculator) "*only 18 days. Woot!*" But remember that not all weight loss is created equal. What we're really interested in is losing fat, and fat isn't where this titanic weight loss comes from.

It doesn't even come from a loss of muscle mass either. Amazingly, the vast

majority of the weight loss comes from nothing more exciting than plain old H20.

In other words, water. Now that puts a very different spin on things. Here's how it happens. An aggressive diet forces your body to tap into its reserve of stored carbohydrate, which is called *glycogen*.

So you burn glycogen for fuel, and your bodyweight drops by the amount of glycogen that ended up being burned. Now if that's all there was to it, it wouldn't be so bad. But where you find glycogen, you also find water - the two are inseparable. In fact, 1 gram of glycogen typically associates with 4 grams of water.

In other words, glycogen causes your body to store a lot of water.

But when the body burns glycogen for fuel, that water no longer has a reason to be stored. So the body simply excretes it, and it gets flushed down the toilet. And it's a one-shot deal. It only takes a few days for an aggressive diet to deplete your glycogen stores. And when that happens, weight loss slows to a crawl.

The wave of weight-loss euphoria that you were riding high on only a few days before just peters out. And that's usually enough for most folks to throw in the towel there and then. But that's where this glycogen thing really has a sting in the tail. What happens is that the body is primed to not just refill its now-empty glycogen stores, it wants to store even more glycogen than before. It wants to *supercompensate.*

So the glycogen-depleted person quits their diet and goes back to their old eating pattern. Glycogen storage then kicks into overdrive.

This storage can be as much as double what it was before the diet [23]. *Can you guess where this is headed?*

More glycogen stored equals more water stored. The end result is that the person is now even heavier than they were before they dieted.

For someone desperate to lose weight that's just plain devastating. But the irony is that little of the original weight loss or subsequent weight gain was from

fat.

It was almost all down to water. So if you're tempted to give a low-carb or very low-calorie diet (VLCD) a shot, keep this in mind.

A sudden and dramatic drop or increase in weight almost always comes from nothing more exciting than water loss or gain. It's practically impossible to lose or gain several pounds of fat in only a day or two.

Keep in mind that it's also possible for a VLCD to lead to micronutrient deficiencies, even if it contains levels at the dietary reference intake [24]. Here's a good way to think about micronutrients, and why they're such a big deal.

If the macronutrients (protein, fats and carbohydrate) are the car's body, engine and transmission; it's the micronutrients (all those vitamins, minerals and phytonutrients) that are the nuts, bolts and welds holding them together.

So it's no surprise that chronic micronutrient deficiencies are linked to a whole bunch of nasty stuff such as low testosterone, sexual dysfunction, and more [25], [26]. Ultimately, we're better off losing weight the smart and healthy way.

There are no prizes for getting sick, cranky and depressed. So it makes perfect sense to start out with a small caloric deficit that's just big enough to begin coaxing off body fat.

Weight loss is a marathon not a sprint, and nobody ever wins a marathon in the first 100 yards. This means we should be eating in an energy deficit that works with us, not one that hammers us into the ground.

And you'll be glad to know that the science is on our side. Researchers were left scratching their heads when people instructed to eat at a 10% calorie deficit lost a similar amount of weight to people instructed to eat at a 30% deficit [27].

Sounds crazy, right? But it's true.

Basically, one group was told to eat a little less than normal, and the other group was told to eat a lot less than normal. *But both groups ended up losing a*

similar amount of weight.

Which makes it sound like calories don't count after all. But here's what actually happened.

It turned out that the 10% deficit folks *voluntarily ate less than instructed.* Their target deficit was so easy to live with that it encouraged them to throttle back on their intake that little bit more.

On the other hand, the 30% deficit group had a pretty miserable time. They struggled with hunger and ate more than they should have.

In fact, they ended up consuming a similar number of calories to the 10% group! So here's an interesting question.

For the same amount of weight loss, which group came out of it with the more positive and empowering experience? The 10 percenters!

The take-home point is if it's easy you can always do more, but if it's hard you'll be reluctant to even do what's been asked.

So it makes most sense for us to start out with a manageable deficit. And since we're all individuals, that means different things to different people.

In reality there is no one-size-fits-all deficit that works equally well for everyone. The 20% deficit that works just fine for your friend could end up making you feel like hell.

And if you feel like hell, you're unlikely to stay the course. Ultimately, we're better off taking the long-term view instead of focusing on short-term gain.

A year or two down the track, it won't matter if dropping 40 lbs took you 12 weeks or 24. What's far more important is:

1. *You lost the weight in the first place, and*

2. *You kept it off*

So we're going to ease into things with a nice and easy 10% calorie deficit. And this is where your calorie tracking really begins to pay off.

Thanks to that, you now know how many calories you're actually consuming. Real-world numbers trump a theoretical equation any day of the week.

All we need to do is trim 10% from that number to get our target daily calories. So let's say you're maintaining your bodyweight while eating 3,000 Calories per day.

That's the number you got from tracking calories for a week. Now to hit your target deficit you need to reduce this number by 10%.

In this example, that means you should consume 3,000 – 300 = 2,700 Calories per day. Even that modest deficit will get the weight-loss ball rolling. Now the obvious question is *how should we achieve that deficit?* Well, we could simply cut portion sizes by 10% across the board.

But we want to be smarter than that. Like in our earlier example with Jim, we're going to start by chipping away at the easy targets.

Those are the calories that aren't pulling their weight. The ones we won't even miss when they're gone. And right here is where your week of counting calories can really pay off. The big eye-opener for most folks is usually the number of calories they consume from beverages.

Keep in mind that's where the average U.S. adult gets close to one fourth of their daily caloric intake [12]. All those lattes, juices and craft beers really add up. But the good news is that knocking out calories from beverages is actually pretty painless. You'll hardly notice you're doing it, plus you'll save some serious cash to boot.

Forgoing one grande latte per day for a year will save you around $1000, while knocking out close to 40,000

Calories from your intake. As we always say, small changes applied

consistently stack up to give big results. If you like sugar-sweetened drinks, go for calorie-free versions instead. And if you're concerned about artificial sweeteners like aspartame, you can relax.

The overwhelming evidence is that these are safe even at insane levels of consumption [28]. That means up to around 20 cans every single day, for life. So consuming the occasional can or two is nothing to be worried about. In fact, research has shown that drinking artificially sweetened drinks can be part of an effective weight-loss strategy [29].

How about other beverages? Well, if you're into juice or smoothies, you may be better off eating fruit instead of drinking it.

You wouldn't put your roast turkey and mashed potato dinner in the blender, so why do it with fruit? Downing an 800-Calorie smoothie is easy, but munching through the same volume of fruit isn't. Just because we perceive the source as being natural or healthy doesn't make the calories magically disappear.

That goes the same for soy milk, almond milk and everything else. Calories always make it through.

So if you like dairy, you could opt for low-fat or fat-free milk instead. But if you prefer whole milk, you can switch to smaller sizes or reduce how often you consume it - there's always a work around.

Or maybe we could try something a bit out of left field.

Like how about going for green tea extract or oolong tea? In addition to being pretty much calorie free, research has shown that these can give metabolic rate and fat burning a nice little boost [30], [31].

Just to keep things in perspective, we're only talking about a few percent here. But it's a step in the right direction, and it all counts.

But where guys and liquid calories are concerned, one thing stands head and shoulders above the others. Alcohol.

First the good news. Moderate alcohol consumption is associated with a decreased risk of heart attack[32], Alzheimer's disease[33], and metabolic syndrome[34].

The key word here is "moderate". The same alcohol that's associated with all those good things almost vaporized ex-Guns 'N Roses bass player Duff McKagan's pancreas a few years back.

So we should always keep in mind that the dose makes the poison. Even things essential to life, such as oxygen and water, become toxic at some level of consumption.

Now where alcohol is concerned, everyone has their own take on what "moderation" means. For some, it's a small glass of wine once in a blue moon.

For others, it means being able to wake up the following day without a hangover. So we need to have a definition that's a bit more concrete.

Think of "moderation" as being 1-2 drinks per day, where "a drink" means any one of the following:

Beverage	Size	Calories
Beer (5% alcohol)	12 oz (355 ml)	150
Wine (12.5% alcohol)	5 oz (150 ml)	125
Liquor (40% alcohol)	1.5 oz (45 ml)	100

And you can rest assured that calories from alcohol are still just calories. There's nothing inherently evil or fattening about them[35].

In fact, a study found that a group who consumed 10% of their calories from wine had greater levels of weight loss than a group who consumed 10% of their calories from grape juice[36].

Both groups also saw reductions in body fat, waist circumference, blood pressure, blood glucose, insulin, triglycerides and cholesterol. All good things.

So what caused the weight loss in both groups? Our old friend the caloric

deficit.

The bottom line is that alcohol in moderate quantities has some important health benefits and can be part of a healthy lifestyle. But in large enough quantities it can destroy your life.

The dose makes the poison.

Now if limiting yourself to 1-2 drinks per day is a bit of a stretch, here's something you may want to keep in mind. Research has found that consumption just slightly above this can put a dent in testosterone levels [37]. As we already know, testosterone levels start to slide naturally once we hit 30 years-old or so [1]. So it doesn't make sense for us to hurry this along by drinking too much.

The bottom line is that, where weight loss is concerned, beverages can be an easy target. Whether alcoholic or not, they allow us to punch out a lot of calories from our intake. In fact, many people will be able to lose some serious weight by simply changing their drinking habits. And remember that we're only just getting started.

Tracking calories for a week will have identified a whole bunch of targets that would've otherwise stayed off the radar. Like the snacks eaten at your desk or in the car. OK, so we may only be talking about a handful of nuts every couple of hours or so. But over a 10-hour day that can really add up.

Your "healthy" snack could be netting you over 500 Calories per day. Now we're not saying that nuts are "unhealthy". Whether a food is "healthy" or "unhealthy" ultimately comes down to the amount being eaten and the context in which it's being consumed. More on this later.

The reality is most of us are now eating for all kinds of reasons besides hunger [38]. Emotions can wreak havoc with your waistline. You know the way it works. Feeling lousy and want something pleasant to focus on? Time for some peanut M&Ms.

Boss on your case again? Best pop open the Pringles. And all that seems to just happen without us even realizing. Where a two year-old gets comforted by

sucking his thumb, we head straight for the cookie jar.

We're caught in a pattern of behavior that gives us a shot of short-term pleasure at the expense of long-term pain. So we need to focus on breaking that pattern.

Let's imagine that you're about to start snacking. This means it's time to ask yourself a few questions.

Am I really hungry? As in, my boss wanted to discuss trebling my salary, but all I could think about was heading over to Chipotle for a taco. Or am I just bored/tired/depressed/frustrated/[enter emotion of choice] instead? If that's the case, you need to act fast.

What we need is a radical shift in focus, and the quicker we do it, the better. So how exactly should we go about that? Well, we could try to think about something else, but that's often easier said than done. In reality, what's most effective is to simply get your body moving.

Now that doesn't necessarily mean we need to head to the gym or do some kind of formal exercise. Just try walking around the building or, better yet, outside. Even two or three minutes will be enough to get the blood pumping, and your focus will shift pretty much instantly. Hunger will be forgotten and you'll start feeling re-energized.

Keep in mind that you'll also be burning a few extra calories by moving around (our old friend TEA, remember?). So it's a win-win situation. And you remember the saying "out of sight, out of mind"? Well, that applies to snacking in the office, too. Research has actually been carried out on the office candy dish. *I swear I'm not making this up!* They discovered that the more convenient and visible snacks are, the more likely we are to consume them[39].

We're also more likely to underestimate how many we ate. Which means we're better off keeping snacks out of reach and out of sight. That will help us to consume less. Ultimately, we're creatures of habit, and we're shaped by the things that we do habitually. So if our current habits aren't working for us, they need to be switched to ones that will. As the saying goes: *If we do what we've always*

done, we'll get what we've always gotten. For example, let's say that you always stop at a certain drive-thru', even if you're not particularly hungry.

Before long it's almost as if the car's running on autopilot. So how do you go about breaking the pattern? Well, that could be as simple as driving a different route.

Take away the temptation and break the pattern. It works for the office candy dish, trips to Starbucks and pretty much anything else.

The first part of getting rid of a damaging behavior is recognizing that it exists in the first place. That's one of the fundamental benefits of tracking calories.

And, once we've identified it, we can take small but definite actions to break the pattern that triggers it. Put the candy dish out of sight, take a walk when you feel like snacking, drive home a different route.

We can get big results from making small changes when they're applied over a sufficiently long timescale. The same way a degree or two change in heading makes a huge difference to where you end up if you're sailing across the Pacific Ocean.

Now, none of this means we should put any food or food group off limits. There's actually no such thing as good or bad foods, there are only good or bad decisions.

Give a starving man a couple of Big Macs per day, and he'll be in better shape than if you hadn't. But add those same Big Macs to an overweight person's regular diet, and you're looking at something completely different.

Whether a food is healthy or unhealthy all depends on the person doing the consuming, and the context in which it's being consumed. Let's take a quick look at an example.

Is eating an orange beneficial for your health? Keep in mind that oranges contain essential nutrients such as vitamins, minerals and fiber.

The only answer we can give is, *it depends*. If those things are otherwise lacking from the person's diet then yes, eating an orange is going to provide a health benefit.

On the other hand, how about if the person already has those nutritional bases covered, but they're chronically deficient in protein? In that case, a big steak could be considered a healthier choice.

This actually makes perfect sense when we think about it. After all, how healthy would a person be if he consumed only oranges? Not very.

It also makes no sense for people to make alarmist claims that sugar is unhealthy or "toxic". The reality is that countless people are being kept alive in hospital right now by being fed with glucose (sugar).

The bottom line is we should resist the urge to see things in terms of black and white. Let's always keep in mind the importance of context.

OK, so far we've identified a couple of ways where we can reduce calorie intake simply and painlessly. Those are the beverages and snacks that slide down quick and easy, contain a ton of calories, and we tend to consume without even thinking.

For most folks, the lion's share of their 10% caloric deficit can be made right there. Of course, that doesn't mean we have to quit consuming them completely.

Being able to moderate intake is an important part of making any eating strategy sustainable over the long term. The best diet is always the one that you can stick to.

But how about if you don't consume a bunch of calories through beverages or snacks? Or you don't have any particular weakness for things like desserts or chocolate.

In that case, it makes sense to focus on portion sizes. Here in Japan there's the saying 腹八分目 *(hara hachi bun me*), which basically means eat only until you're 80% full.

Get satisfaction from leaving the table, even though you could still eat a little more. It's also a good idea to start emphasizing the calorically sparse, nutritionally dense food that helps us to feel full.

That means easing up on the bread, pasta, rice and potatoes. Not because they're inherently fattening, they're just easy to eat in massive quantities.

Consuming 1000 Calories from pasta and bread is easily done. Consuming the same number of calories from meat and vegetables isn't.

So make lean meat, fish, fruits and vegetables the majority of what's on your plate. You could think of that as having a rule to consume only single-ingredient foods.

This is an easy rule to understand and apply. If it contains only a single ingredient, it's in – think foods like fruits, vegetables, meat, fish, dairy and nuts.

But if it contains more than one ingredient, it's out. That means processed foods like donuts, cookies and potato chips.

That alone is likely to be all you need to do to hit your 10% deficit. Then it's just a case of waiting for the deficit to work its magic, and the weight will start to come off.

Keep in mind that it's best to start out at a pace we can live with, no matter what. Like maybe the boss has you working crazy hours or the kids have you awake half the night.

We want our eating strategy to work in spite of all that. And when life eases up a bit, you can always push things a little more.

The bottom line is we want to avoid rushing in headlong with an aggressive and unsustainable approach. Start out easy with small steps that are big enough to provide measurable feedback that you're making progress.

You can always do more when circumstances allow.

The Power Of Protein

We know that protein can be a powerful ally when we want to lose body fat. The fact is weight loss is just so much easier when we consume it in sufficient amounts.

Here's a quick recap of why protein is so important:

- It helps us retain muscle mass in a caloric deficit [40]
- It provides a small but useful boost to metabolic rate thanks to its high thermic effect of feeding
- It's the most satiating (makes us feel full) of all the macronutrients [41]

As we mentioned earlier, the real reason low-carb diets are so effective is because they're high in protein. Here's what that means for us.

Consuming a larger proportion of our calories from protein means increased fat loss. And the reality is that the average person doesn't eat sufficient protein to take advantage of its fat-loss benefits.

So we should increase the proportion of calories from protein, while still respecting our 10% caloric deficit.

The driver for weight loss is always a caloric deficit, but it's where we consume those calories from that determines our body composition and general health. Here's an extreme example of what that means. Imagine someone living on six cans of Coca-Cola and a couple of burritos every day for the next three months. They consume nothing else during that time.

Naturally, they'll lose a massive amount of bodyweight. That's because even though what they're consuming is full of fat and sugar, they're still eating in an energy deficit.

But there's a price to pay. Coca-Cola and burritos contain very little protein

and essential nutrients, so the person is likely to end up severely malnourished. They'll also lose a bunch of muscle mass, feel like hell, and look even worse.

Now, if they had consumed the same number of calories from fruits, vegetables, meat and fish, it would've been a very different story. They would have lost more fat, less muscle, and they'd be a whole lot healthier.

Especially if they had also been doing a resistance training program. Much more on that later. For now, we're going to set a daily protein target to go alongside our target for overall calories. And if you're familiar with the U.S. government's protein guidelines, this is going to seem pretty excessive.

After all, the Centers for Disease Control (CDC) recommends a blanket figure of 56 grams of protein per day for all men age 19 to 70 [42]. That's in spite of the fact that this level of intake has been shown to allow muscle loss *even when eating at maintenance calories* [43].

Keep in mind that to lose weight we'll need to be eating at a caloric deficit. The upshot is we risk losing some serious muscle mass if we follow the CDC's recommended protein intake.

So if 56 grams of protein per day isn't sufficient, how much is? Well, the current research indicates a daily intake of around 0.8 grams of protein per pound of bodyweight is the cut-off point for protein's muscle-protecting benefits [44].

But if we aim for that level of protein intake, we could easily end up lowballing and consuming less. Just as importantly, this cut-off point applies only to protein's muscle protecting ability.

Consuming protein over and above this level doesn't reduce its ability to boost our metabolic rate (via the *thermic effect of feeding*). And a bigger protein intake will help make us feel even fuller, for longer.

Those benefits are always worth making the most of. That means we have enough wiggle room to come up with a figure that's nice and easy to remember.

So here's our target daily protein intake:

1 gram of protein per pound of bodyweight per day

In other words, a 200-lb man should be aiming to consume 200 grams of protein each day. That's probably way more than you've been consuming up until now, and it's close to four times the CDC's recommended intake.

Now at this point we need to make it clear that there is no evidence that a high level of protein consumption is harmful to folks who aren't suffering from kidney disease. This number has actually been the rule-ofthumb in weight-training circles for over 50 years.

But the obvious question is *how does that level of intake stack up in terms of real food?*

	Serving size	Protein/g
Beef (ground)	3 oz	22
Chicken	1 breast	27
Cheese, cheddar	3 oz	21
Cheese, cottage 2%	1 cup	31
Egg	Medium	6
Milk, 2%	1 cup	8
Pork (loin)	3 oz	24
Salmon, sockeye	3 oz	23
Tuna (canned)	3 oz	21
Turkey (roast)	3 oz	25

Amazingly, the above list totals only 208 grams of protein. Which means our example 200-lb man would be looking to consume something similar to this every single day.

So food bills could get very expensive, and planning what you're going to eat may end up becoming a real pain in the ass. Obviously, both of these are things we can do without.

But protein is so important to our fat-loss goals that a higher intake shouldn't be regarded as optional. Now, if you're able to consume that amount of protein

from real food without overshooting your daily calorie target, that's awesome.

But the reality is most of us will need to look at supplementing with an inexpensive whey protein powder. That will allow us to hit our target protein intake in an efficient and inexpensive way.

Fifty grams of protein from a whey supplement comes to around $1.70, while 50 grams of protein from canned tuna could cost twice that. Plus, canned tuna tends to get very boring, very quickly.

Now it's true that a pound of dried pasta may contain as much protein for even less cash, but keep in mind that it also contains a load more calories. This could make keeping within your daily calorie target a major headache.

So do yourself a favor and get hold of a low-carb whey protein powder. I've tried countless protein supplements over the years, and these are my personal favorites:

- *EAS's 100% Whey Protein Powder*

- *Quest's Chocolate Peanut Putter protein bars*

But regardless of what brand you go for, the main thing is to consume sufficient protein while respecting your target caloric intake. Increasing our protein intake to 1 gram per pound of bodyweight per day means

we'll need to decrease calories from elsewhere in our diet to compensate. Here's a quick example. Let's assume a 200-lb man is maintaining his bodyweight while consuming 3000 Calories and 80 grams of protein per day. Now, to start losing weight at a nice sustainable rate he's going to:

1. Slightly reduce his daily caloric intake by 10%.

This means his target caloric intake will be 2700.

2. Increase his daily protein consumption from 80 grams to 200 grams.

As we can see, that's quite a large hike in protein intake. And, no matter how he consumes the extra protein, it will still contain calories.

In fact, this 120 grams of extra protein will contain something like 500 Calories. And here's something that's easily overlooked.

Those 500 Calories from increased protein need to fall within his total daily intake of 2700 Calories.

This is important enough to be repeated. It's essential to get in sufficient protein while still respecting your target daily calorie intake. Now, some folks may feel tempted to hit the caloric deficit, but ignore the protein side of things. Perhaps it's perceived as unnecessary, or maybe the thought of consuming whey protein seems a tad extreme.

To be honest, I wouldn't even think of whey protein as a supplement. It's really just food.

And if that's what's standing between you and hitting your target protein intake, just buy some and start using it. The importance of protein to fat loss shouldn't be underestimated. Consuming 1 gram of protein per pound of bodyweight per day is like bolting a turbocharger onto your caloric deficit. The effect really is that profound. Now, at this stage we've identified the two key elements to losing weight.

- A caloric deficit
- Consuming sufficient protein

We haven't said anything about how much fat or carbohydrate we should or shouldn't be consuming. Even though some folks would have us believe that micromanaging carbohydrate and fat intake can make a significant difference to our progress.

OK, maybe so if you're an Olympic athlete nudging the limit of their physical potential. Sure, you'll leave no stone unturned when trying to eek out microscopic increments of progress.

But that's not you and me. For us, fat and carbohydrate intake is best left to personal preference.

There is no magical amount or ratio that will speed up weight loss. By far the most important thing is to keep total calories under control while getting in sufficient protein [45].

So, if you prefer higher fat/lower carb, that can work fine. On the other hand, if you prefer lower fat/higher carb, that can work fine, too.

Ultimately, a caloric deficit drives weight loss. Consuming sufficient protein makes the deficit easier to maintain, while also improving body composition.

And eating carbs/fats in line with your personal preference makes the whole thing just plain easier to stick to. This strategy is more than enough to kick start some serious weight loss.

And don't forget, we also have some neat weight-loss tricks up our sleeve, which we'll get to soon. But for now, simple is best.

The Fat-Loss Clock

Once you establish a caloric deficit and consume sufficient protein, great things start to happen almost immediately. Just keep in mind that these things will be occurring right down at a cellular level.

That means it will take a little time for them to translate into results that we can measure and see. The reality is that fat loss can be one of the most mind-numbingly boring experiences there is *if you spend too much time focusing on it.*

Thinking about how much fat you've lost on any given day is a pointless thing to do. It's a bit like wondering how much muscle a set of pushups will add to your body.

It won't be very much. Of course, that doesn't mean what you do today has no value or makes no difference.

Remember that big changes come from tiny increments of progress that accumulate over time. We're living examples of that – after all, it's exactly how we learned to walk and talk.

So the best advice is not to focus on the goal, but to learn to enjoy the process instead. Otherwise, it's like taking a road trip across the country where you're just focused on reaching the destination the entire time.

You'll feel every bump in the road, and minutes will seem like hours. But if you make the effort to enjoy the journey itself, everything becomes so much easier.

All we need to do is set the body's fat-loss machinery in motion, and let it take care of the rest. Your body is a lot smarter than you may think and it doesn't need to be micromanaged.

We'll just keep one hand on the wheel to make sure we stay headed in the right direction. That means we need to have a way of measuring our progress.

Now, a 10% caloric deficit will allow us to lose around 0.3% of bodyweight per week. For a 200-lb man, that translates to something like 2 to 3 lbs per month.

If you're consuming sufficient protein and doing some resistance training (more on this later), that weight loss will be almost all from body fat. And if 3 lbs of fat loss doesn't sound like much to you, go to the refrigerator and see what 3 lbs of butter looks like.

That will give you a pretty graphic idea of what we're talking about. And don't forget, we're only just getting started - a 10% deficit is small and should be almost effortless to maintain.

Now, there are three questions that it's good to keep in the back of your mind.

1. Am I making measurable progress?

2. Am I happy with the current rate of progress?

3. Is this rate of progress sustainable?

We'll cover the best ways to measure progress next, but first let's take a quick look at the last two of these questions. For most of us they're actually flip sides of the same coin.

The rate of progress that we would all be most happy with is massive fat loss, fast. After all, who wouldn't want that?

Of course, the downside is that it requires a really aggressive approach that's not sustainable for most folks. On the other hand, the most sustainable situation will actually be little or no progress.

Now that's exactly what most people are getting, although they're not particularly happy about it. So finding a rate of progress that's both sustainable and satisfying is a balancing act.

And that balance will be different for each and every one of us. What's OK to your friend or colleague may be completely unacceptable to you.

Neither is any more right or wrong than the other – ultimately, the long-term result is what matters most. It's not a competition.

So if progress is already coming along nicely, resist any temptation to get too greedy with your weight loss. If it isn't broken, don't fix it.

Naturally, any adjustments we make to our caloric deficit should be based on our real-world results. This means we need some simple and reliable ways to measure our progress.

Fortunately, we already have the most useful tools at our disposal. So there's absolutely no need to buy any expensive gadgets, no matter how cutting edge they're claimed to be.

Here are the five ways that we're going to use.

1. How your clothes feel

OK, we've all done it at one time or another: you put on a few pounds, but try to convince yourself that it's all muscle. Unfortunately, your pants tell a very different story.

We guys tend to store fat around our midsection. So one of the first signs of fat gain is your pants start feeling tighter around the waist.

The great news is that once you begin to lose fat, your pants soon start to feel looser. If you're also doing some resistance training, your shirts may start feeling a little more snug around the chest and shoulders.

That's a sure sign that you're putting on a little muscle at the same time. People who are either new to resistance training or returning to it after some time off can easily gain muscle while losing fat.

Unfortunately, this distinction is lost on the humble bathroom scale. A 4 lb fat loss coupled with a 4 lb muscle gain can easily be interpreted as zero progress when considering bodyweight alone.

That's why it's best not to rely exclusively on a single measurement method. So pay particular attention to whatever your belt is telling you.

Mark the hole that you're currently using as a reference point. Then every time you have to move down to the next smallest hole, give yourself a big pat on the back.

Reward yourself for a job well done, and do something out of the ordinary to celebrate. That way you'll look forward to the next time you need to tighten your belt another notch.

On the other hand, if you're stuck on the same notch for weeks on end, you may need to look at increasing your caloric deficit. There's no need to go crazy – just start by lowering your daily caloric intake by a further 5%.

Be patient. See what happens after another week or two, and make any further adjustments based on that.

The reality is any time weight loss slows down or stalls, we just need to reopen the caloric deficit to get things moving again. It's that simple.

Trust the science, and trust yourself. The human body has been doing this stuff for over 250,000 years.

2. The measuring tape

One of the hallmarks of being a guy is where excess calories end up getting stored. For most of us, they home in on our bellies and lower backs with cruise-missile precision.

The measuring tape helps to put some hard numbers on what your belt and pants are already telling you. Don't flatter yourself by using sloppy measuring technique, be sure to include the love handles and the belly.

And resist the urge to tug the tape tight to knock off that extra inch or two. It's also best to measure in the same condition each time, such as after using the bathroom upon waking.

Take three measurements, and average them to get the result. Perhaps just as important, be sure to record the result and keep it somewhere safe so you can track your progress in numbers.

3. The mirror

The bathroom mirror is a merciless tool for seeing the naked truth. Spend a little while in front of it every time you take a bath or shower.

There's no need for a posing routine, just see yourself as you are right now. And if what you see is more Cartman than Batman, don't get depressed, get motivated and get busy.

Anyone can turn things around with an energy deficit and a little time. Just think back six months and imagine how good you'd look right now if you'd started back then.

Now commit to being that person six months down the track. What the mind can conceive and believe, the body can achieve.

Of course, the mirror does have one downside because it's difficult to judge progress over time. Which leads us nicely on to...

4. Photographs

Take a front, side and back shot with your camera or smartphone in front of the mirror every 2-4 weeks. It's best to do this while wearing minimal clothing – a pair of shorts would be ideal.

Sure, it may feel a bit weird at first, but you'll soon get used to it. Flipping back and forward through your selfies can give powerful visual feedback that numbers alone simply can't provide.

Having an appreciation of how far you've come will also help keep you motivated and focused on making even more progress. What photographs do is help shift the emphasis from numbers to appearance.

When you can see the difference in appearance that losing 10 or 20 lbs gives, it changes the whole game. Suddenly, losing the next 10 or 20 lbs takes on a new and exciting edge.

You no longer see fat loss as just numbers on a scale. You see it as the key to a physical transformation that's both real and achievable.

Finally, just be sure to always photograph yourself using the same location, lighting, and so on in order to make comparisons as valid as possible.

5. The bathroom scale

Taken in isolation, the humble bathroom scale can be a bit of a double-edged sword. As we know, an aggressive low-carb diet can see some folks losing the best part of 15 lbs in only a few days [22]. With almost all of that weight loss coming from water. But that fact is overlooked by the bathroom scale.

As far as it's concerned, weight is weight. It doesn't matter if it's fat, muscle, water, or anything else. Now that doesn't mean the bathroom scale isn't worth using. It does mean that it comes with a set of limitations the same way any other tool does.

We just need to be aware of those before we start getting fixated on bodyweight alone. As unpleasant as it sounds, keep in mind that sawing off a major body part will result in some impressive weight loss according to the scale.

But ultimately, weight isn't the outcome that we're interested in, it's appearance. Scale weight is most useful for confirming that we're headed in the right direction, long before that translates to visible results. Finally, when you weigh yourself is also important as weight can fluctuate by several pounds during the day. Once again, it's best done after using the bathroom upon waking.

This reduces the confounding effect of other variables such as food and drink consumption, and visits to the bathroom. Now as far as measuring progress is concerned, that's really all there is to it. There's simply no need to make it any more complex than that.

Let's keep in mind that these methods are all really just indicators. After all, what we want to lose is body fat.

But body-fat levels aren't something that we can measure reliably and cheaply. So we're using these indicators as proxies for fat loss instead. And the more of these indicators giving us the thumbs up, the better. Pants feeling looser around the waist and beginning to see the semblance of abs in the bathroom mirror? Bingo. You're losing body fat and making definite progress.

It's a good idea to use several (or all) of these methods at the same time rather than just one. But for your own sanity, don't get too OCD about measuring. Once or twice per week is fine. And it's important to put the feedback the measurements are giving you to good use.

When you make a change, you should compare the results that the change gives with the results that you wanted. You then make further changes as you go along. If fat loss is a journey, that's what will keep you headed in the right direction. The

same way a pilot will constantly make small corrections to his course so he arrives safely at his destination.

Now, you may have noticed that we haven't mentioned body-fat percentage even once. And there's a good reason for that. The fact is, it's pretty much irrelevant. Now let's be clear about this – that doesn't mean the amount of body fat we're carrying is irrelevant.

Not at all. *But trying to pin a number on it is.*

In reality, folks use body-fat percentage as a kind of shorthand for looking a certain way. We think of how we want to look, and then try to pin some arbitrary number on it.

That doesn't really make much sense. After all, we can tell exactly how we look – and if we like it – simply by standing in front of a mirror.

If you don't like what you see, you need to drop more body fat. Regardless of what percentage you happen to be.

And if you do like what you see, do you even care what your body-fat percentage is? Probably not.

But we're guys after all, and that means we love measuring stuff. Body-fat percentages, standing quarter- mile times, and whatever else.

It's just harmless fun, right? The trouble is, measuring body-fat percentage is far from an exact science.

Even measurements performed in a state-of-the-art laboratory can be off by a whopping 5% or more [46]. So a reading of 20% body fat could actually mean anything between 15 and 25%!

And keep in mind that's using techniques like hydrostatic weighing, and DEXA (dual-energy x-ray absorptiometry). Which are as complex and costly as they sound.

So it should come as no surprise that home-measured body-fat percentages are so inaccurate that they're pretty much meaningless. Regardless of what the manufacturers may claim, body composition analyzers are notoriously unreliable.

That holds true even for ones costing several hundred dollars. After all, if body-fat percentage can't be measured accurately in a laboratory, how can it be measured accurately using something we can pick up at Walmart?

In fact, a study back in 2000 measured hunger strikers' body composition using this very technique [47]. According to the device, starvation caused those folks to actually gain muscle mass.

Obviously, that's complete nonsense. But it tells us all we need to know about the accuracy of those things.

Ultimately, if your pants are getting looser around the waist and you're liking what you see in the mirror, you're on the right track. Whatever your body-fat percentage happens to be at that point just is what it is.

Now it's time to reveal some sneaky ways to keep the fat-loss ball rolling. Plus we'll bust a few weight-loss myths in the process.

Stepping Things Up

By now things are moving ahead nicely. You're in a deficit that's quietly working its magic, without you feeling like you're denying yourself or dieting.

You're getting in sufficient protein, and you're making sustainable and measurable progress. You're on a roll.

And all this has come from picking off the easy targets. The spoonfuls of peanut butter, the boredom eating, and the "it's only..." calories that really add up.

Maybe you've realized that your "occasional glass of wine" habit tends to be more than just a glass. And way more frequent than occasional.

Now we're going to change tack and check out a few clever tricks that we can

play on our bodies. We'll split these into two groups:

- Things that actually encourage us to consume fewer calories without even realizing

- Things that boost our metabolic rate for little or no extra effort Let's get started.

Effortless Calorie Reduction

People just love the idea of an archenemy. Whether it's Lex Luthor, the Soviet Union, or high-fructose corn syrup.

Give it a black hat, label it "bad", and we're happy. But when it comes to food, this really makes little sense if you think about it.

How can food like wheat and white rice be "bad" when they're happily being consumed by millions of people around the world. Who, incidentally, are way leaner and healthier than we are.

Tell folks here in Japan that consuming white rice makes you fat. They'll nod, smile, and continue to eat it by the truckload, while having an obesity rate a hair over 3% [48].

That's only one-tenth of the obesity rate in the U.S.

Do grains really make us fat? Tell that to the Ethiopians who consume over 50% of their diet from them [49].

Of course, a minority of folks may not do well on those foods. The same way some people can't tolerate shellfish or dairy.

But that doesn't mean they should be made off-limits for all of us. Ultimately, what we consume should come down to personal preference.

There really is no single best way, and most people would make much better progress if they stopped believing that there was. Nowhere is that more true than

meal timing and meal frequency.

Now, we've all heard about having to eat every 2-3 hours to "keep the metabolism revving". And we've all read that carbs eaten after 6pm will be stored as fat.

The trouble is, both of those are completely untrue. But that doesn't stop them getting repeated all the time. The overwhelming evidence is that meal timing and meal frequency are of negligible importance to fat loss. The same way the temperature of your tires makes zero practical difference to your car's gas mileage.

That's actually great news because it means we don't need to be tied down to a specific approach. If you're hitting your calorie and protein targets while getting in sufficient micronutrients and fiber, that's all the important bases covered.

Let's take a quick look at meal frequency first. Now, all of us have probably heard that grazing (eating little and often) is something that we would do better on.

But the reality is some folks find that the same number of calories spread over a greater number of meals makes it *harder* to lose weight [50] , [51]. Why? Because smaller meals can actually end up making you feel less satisfied.

And that makes it more likely that someone will overeat and sabotage their diet. Of course, this doesn't mean a higher meal frequency is a universally bad thing.

Some people may actually do fine on a greater number of small meals. It really comes down to the individual.

So the choice should be based on personal preference, not some perceived advantage that doesn't actually exist. The bottom line is that you shouldn't feel bad if you hate grazing and prefer eating only 2-3 times per day – you're not losing out [52].

So that's meal frequency.

But how about individual meals – are they all created equal? Or is breakfast really the most important meal of the day?

Fortunately, there's some pretty cool research that has looked into exactly that.

Amazingly enough, studies show that both eating breakfast *and* skipping breakfast can be effective strategies for weight loss [53], [54]. So if you're not hungry when you wake up, there's no need to force down a meal that you don't really want.

And that goes the same for any meal. But it is generally a good idea to make the first meal of the day – literally *breaking your fast* – large and high in protein [55].

That applies whether you're eating it at 7am or noon. A large, high-protein meal helps to keep the lid on calorie consumption later in the day.

Ultimately, no single meal is any more or less important than any other. What happens over the course of an entire day is more important than focusing on a particular meal or time period.

Let's keep in mind that our bodies evolved to cope with a hard physical existence in an unforgiving environment. We simply aren't so delicate that meal

timing and frequency have that much influence on our fat stores.

Now, here's something for those folks who tend to wolf down their food. It appears that more chews per bite can actually reduce food intake [56].

The jury's still out on why that happens, but it's an easy way to reduce calorie intake. Just try slowing things down and chewing more when you eat.

It isn't necessary to start counting chews per bite – that's a little over the top. Just keep chewing until your food turns into a liquid.

Maybe think of it this way: *drink your food.*

Now as we already know, losing weight doesn't mean that we have to give up alcohol. But *when* we drink it can have a serious knock-on effect to subsequent calorie consumption.

Alcohol can have a powerful stimulatory effect on appetite, so we're better off consuming it *while we're eating* instead of before a meal or on its own [57]. It's also worth keeping in mind that "a glass of wine" means 5 oz, not brimming the largest vessel you can get your hands on.

That leads us on to some of the weirdest reasons why we consume more calories than we think. The fact is that the glasses, dishes and containers we use have a huge effect on the amount we end up consuming.

Researcher Brian Wansink has performed some truly bizarre experiments that reveal just how out of whack our perception can be. Such as:

1. Shape of glasses and alcohol poured

Even experienced bartenders tended to overpour alcohol in short, wide glasses compared with tall, slender ones [58]. This ended up being something like 20% more – which is a pretty significant difference.

2. Bottomless bowls

People who unknowingly ate soup from self-filling bowls(!) ate over 70% more than folks who consumed soup from regular bowls [59]. Amazingly, they didn't perceive that they had consumed more, and felt no more satisfied than the other group.

3. Bad popcorn

Moviegoers were given stale 14-day old popcorn in large or medium-size containers [60]. Incredibly, the folks with the larger containers ate over one-third more, even though it tasted revolting.

4. Ice-cream illusions

Nutrition experts at an ice-cream social were given either a small or large bowl, and a small or large serving scoop with which to serve themselves [61]. Larger bowls lead to serving increases of over 30%, while larger spoons lead to increases of around 15%.

The take-home points from all this are pretty clear.

First off, we're not very good at judging how much food and drink we consume. That's exactly what makes counting calories for a week such a valuable experience.

Furthermore, the plates, bowls and containers we use can have a huge effect on how much we end up consuming. All without us even realizing, or feeling any more satisfied than if we'd consumed less.

This is actually great news because it means we can reduce calorie consumption without feeling that we're denying ourselves. Simply by switching to smaller food containers and tableware.

Wansink's all-you-can-eat Chinese buffet study paints a similar picture.

People with a higher body mass index (BMI) were more likely to: use larger

plates, go for forks instead of chopsticks, and dive straight in rather than browse first [62]. They also chewed less per bite of food.

The bottom line is if we make eating a bit more of a chore, we're likely to consume less. That could mean using chopsticks or smaller forks and spoons.

We can then complete the self-deception by using smaller dishes. It seems that our brains regard a plate of food as a plate of food.

It doesn't matter whether it's a regular size plate or an extra-large one. *Clear your plate, and you'll be satisfied.*

So if you use a smaller plate, you get the same satisfaction bang from a smaller caloric buck. End result, effortless weight loss.

Now even if Chinese buffets aren't your thing, it's likely that you eat out pretty regularly. In fact, some estimates suggest that as many as one-third of the calories we consume come from eating out.

Which is no bad thing in itself, but here's something we should be aware of. The calories listed on the menu can be way off what actually makes it to the table [63].

Inconsistent amounts of sauces, dressings and portion sizes can send calories skyrocketing. Some restaurant items were actually found to contain *double* the listed calories.

And get this, some free side dishes bumped up the calorie count of the entrees they accompanied by even more than that! So when you eat out, it's best to stick with simple stuff without sauces, dressings or oils.

Have those on the side so you can decide how much you add to your plate. Keep in mind that a big glug of olive oil can easily add a couple of hundred calories to your meal.

And beware of the free side dishes.

In fact, it's a good idea to order something high in protein, like a big steak. Then fill up on fibrous vegetables as these are low in calories and provide essential micronutrients, as well as fiber.

Just like protein, fiber increases satiety and decreases feelings of hunger. As a result, we end up consuming fewer calories.

It's actually been found that increasing total fiber intake to 25-30 grams per day can decrease energy intake by close to 20% [64]. Let's just think about that for a moment.

A full-on 20% energy deficit just by eating sufficient fiber.

Now if you're not sure what a fibrous vegetable is, this list is a good place to start.

Alfalfa sprouts, arugula, asparagus, bamboo shoots, bean sprouts, bok choy, broccoli, cabbage, cauliflower, celery, cucumber, eggplant, endive, kale, leeks, lettuce, okra, onion, peppers, radishes, sauerkraut, scallions, spinach, string beans, tomatoes, zucchini

Just avoid consuming them slathered in butter or oil, as that defeats the purpose. We're after the fiber and micronutrients, not a whole bunch of calories tagging along for the ride.

The reality is fibrous veggies can be a key player to help us drop body fat and improve health. So don't overlook them, they punch well above their weight

Finally, let's look at something a bit out of left field. *Can drinking water really help us lose weight?*

Apparently, it can. Drinking a 16 oz glass of water 30 minutes before eating can reduce subsequent calorie consumption by 10% or more [65].

What could be a more effortless way to reduce calorie consumption than that? But let's just keep something important in mind.

More doesn't necessarily mean better.

So, we shouldn't assume that drinking twice the amount of water (32 oz) will cause twice the effect (a 20% reduction in calorie consumption). Excessive amounts of anything, even water, can be harmful to health [66].

Remember, the dose makes the poison. So let's resist any urge to go overboard.

Effortless Calorie Burning

We've just seen how drinking water before a meal can help reduce subsequent calorie intake. Now that's awesome news, but it gets even better.

In reality, water is far from being just a one-trick pony. It can help us on the energy-out side of things, too.

Drinking water actually makes us burn more calories by giving our metabolic rate a nice little boost. A 2003 study estimated that consuming four pints of 72 °F water would burn an additional 100 Calories [67].

For many of us, that's equivalent to a 5% or so increase in resting metabolic rate. Which is well worth having, and another good reason to stay hydrated.

What we choose to eat can also have a big effect on our metabolic rate. Remember that protein has by far the highest "transaction fee", followed by carbohydrate in second place, and fat a distant third.

But there's a bit more to it than that. *How we consume the calories* can also have an impact.

For example, a whole-food meal can actually have double the digestive "cost" to our bodies than a processed meal of identical composition and calories [68]. A bigger digestive "cost" meaning more calories burned.

That makes perfect sense when we think about it. Every time we drink a

smoothie instead of eating the fruit in its natural state, we're denying our bodies the work that was performed by the blender.

And that means we end up burning fewer calories to digest what we've consumed. This is another reason to go for minimally-processed whole foods whenever possible.

Not only will that help us get in essential vitamins, minerals and fiber, it will also give our bodies the extra work required for digestion. And extra work equals more calories burned.

The upshot is, minimally-processed whole foods mean both fewer calories in and more calories out. Which is exactly what we need for effective weight loss.

Now, here's something that gives a whole new meaning to the phrase "sleeping it off". Research has found that reduced sleep can put your appetite into a tail spin and cause you to eat hundreds of extra calories [69].

Even worse, sleep deprivation can also shoot us in the other foot. Not only can it cause an increase in hunger and subsequent calorie intake, *it can also depress energy expenditure*.

It does this by lowering activity levels while simultaneously reducing both resting metabolic rate and the thermic effect of feeding [70]. Talk about a treble whammy.

On top of all that, insufficient sleep has an adverse effect on testosterone levels [71] , [72]. Which is a real kick in the nuts that we can all do without.

The bottom line is we need to do whatever it takes to get in 8 hours of sleep every night. Switch off the TV, quit fiddling with your iPhone, and make a committed effort to getting some quality sack time in.

When it comes to body fat, it really is a case of you snooze, you lose.

Finally, let's take a very quick look at some of the fat burning supplements that are commonly available. Now it's best to tread carefully here as some folks can

have an adverse reaction to these.

The combination of caffeine and ephedrine (aka the "EC stack") is probably the go-to option, and has a decent track record in studies [73]. When it comes to dosages and effectiveness, Examine.com's free online supplement database should be the first place you head [74].

Other fat burners include green tea (as we mentioned earlier), yohimbine HCl and dehydroepiandrosterone (DHEA). Just be sure to do your homework before taking any of these products.

That way you're going into things with your eyes wide open and one hand firmly on your wallet. The reality is the vast majority of supplements are nowhere near as effective as their marketing makes out.

Now, none of these metabolism-boosting tricks should be seen as an alternative to activity. Increasing general activity is a great way to keep calorie expenditure high.

And let's not forget that some types of exercise can boost metabolic rate for days at a time. We'll get into those when we start looking at movement, exercise and training.

But for now, let's summarize how we can keep calorie intake down and calorie expenditure up without even breaking a sweat:

- Hit your target calorie and protein intake each day over the number and frequency of meals of your preference.
- Chew thoroughly – remember to *drink your food*.
- If you drink alcohol, it's better to consume it while eating a meal.
- Use smaller tableware (plates, glasses, etc.)
- Make sure you're getting in 25-30 grams of fiber a day. *Fibrous veggies are your high-fiber/low-calorie friend.*

- Drinking 16 oz of water 30 minutes before a meal can help put the brakes on your appetite.

- Drinking 4 pints of water per day can increase energy expenditure by around 100 Calories.

- Consuming unprocessed food has up to double the digestive energy "cost" of consuming an otherwise identical amount of processed food.

- Getting adequate sleep is one of the most important things you can do for your waistline and health.

- There's strong evidence that fat burning supplements such as ephedrine/caffeine work. These may not be suitable for everyone.

Now, some of these may sound basic or obvious, but that doesn't mean they're ineffective. If you use some (or all) of these tips, you'll be making a giant stride in the right direction.

Always keep in mind that massive results don't come from the occasional big effort. They come from consistently stacking up small increments of progress.

Owning Your Fat Loss

By this point we've put a whole bunch of different things into action, we've seen the results, and we're motivated to achieve even more. We've got this thing dialed.

Believe it or not, applying what we've learned so far will take most of us all the way to our fat-loss goals. Now, it's worth reading that last sentence again – it may just be one of the most important in the book.

Progress doesn't come from just learning, it comes from *consistently applying what we've learned.* OK, I realize that's completely obvious, but it's often overlooked.

So if you haven't managed to milk much progress out of the simple changes outlined earlier in this book, you may want to go back and take another look. That's where we'll get maximum results for minimum effort.

But for folks who like to push the edge of the envelope, we've still got a little gas left in the tank. So what we'll do is jump right ahead to the ideal scenario.

Then all we need to do is join the dots to there from wherever we are right now. Think of it as entering the destination into your in-car navigation system before you set out.

Even though the destination is set, the route you select and the time it takes to get there are completely up to you. Well, what we're doing works exactly the same way.

There's no obligation to make wholesale changes to your diet overnight. You could make one change per day or even one change per week.

What matters more than anything is that the changes are sustainable and keep you moving in the right direction. So here's how to go about it.

First off, we need to figure out our target daily calorie intake. Naturally, that depends on the individual and their goals: weight loss, weight maintenance or, for some guys, even weight gain.

As we know, weight loss requires a caloric deficit, weight gain a caloric surplus, and weight maintenance occurs when calories in equals calories out. So once we've figured out our target caloric intake, we can get things rolling.

Just keep in mind that having a solid grasp of your target daily caloric intake means you should have first:

1. Tracked calories and protein for a week, and

2. Made some decent progress by starting with a 10% caloric deficit, and then adjusting this deficit based on how your weight loss is proceeding

That will familiarize you with your body's energy demands better than any theoretical equation ever could. Plus you'll know how your body responds to different levels of caloric restriction.

No two people will be exactly the same, so it's really up to us to know our own bodies. We should then make sure that:

Ninety percent of our target daily caloric intake comes from minimally-processed, calorically sparse, nutritionally dense whole foods.

That means single-ingredient foods that our great-grandparents' generation would have recognized and eaten. That way we'll cover all our nutritional bases, while still leaving room for what are known as *discretionary calories*.

OK, that may sound science-y and dull, but it's actually pretty awesome. It basically means we can consume 10% of our daily calories from ice cream, cookies, beer or whatever else we want.

Now, the obvious question is "won't consuming junk food make us fat?" Answer: *Not if we're still eating at maintenance calories or lower.*

Remember how a nutrition professor at Kansas State University made the headlines a few years back? His infamous junk-food diet allowed him to lose close to 30 lbs in only two months [75].

But while that may sound tempting, keep in mind that there's more to good health than just losing weight. Which means we'll stick with our 90/10 rule.

So, what's a good way to start working towards that? Well, for most of us processed carbs provide the most potential for cutting back.

That doesn't mean they need to be eliminated altogether, we just need to keep a lid on their consumption. That's because they tend to be high in calories and are easy to consume in massive amounts.

Pasta, rice and bread all come to mind here. Of course, these aren't inherently fattening – no food is – so it really comes down to moderating intake.

Now, if there's still some suspicion that eating foods like these automatically leads to fat gain, we should take a quick look at the mother of all weight-loss studies. Cue the infamous Minnesota Starvation Experiment carried out during World War II [76].

In a nutshell, 36 conscientious objectors volunteered for a six-month long semi-starvation diet which caused them to lose at least 25% of their starting bodyweight. Not that these men were overweight to begin with.

One volunteer, Charles Smith, dropped over 30% of his bodyweight, and ended up at an emaciated 99 lbs. Not a single man failed to lose a massive amount of bodyweight.

And the kicker? The few calories that these men did consume came from things like potatoes, bread and macaroni.

In other words, the very things some folks claim make us fat!

And while we're talking about bread, here's something from a more recent weight-loss study. A low-calorie diet that included bread actually had better results than a low-calorie diet that didn't [77]. Of course, this doesn't mean we should all start ramping up our bread intake. But it does mean consuming stuff we actually enjoy is essential if we're going to stick to our eating plan in the long term.

Ultimately, caloric *quantity* determines weight loss, caloric *quality* determines health, and eating foods we enjoy makes it all sustainable.

Now, it's about time that we said something about the paleo diet. So, what exactly is it, and why does it work? First off, it's pretty much impossible to pin down what the paleo diet is. There's a lot of disagreement even among paleo diet devotees.

Some omit dairy, others don't. Some omit corn, others don't. So, it's kind of a pick 'n' mix. Seriously, to some folks it's almost a religion, and it can be taken to some pretty crazy extremes. Such as avoiding tomatoes, potatoes and bell peppers

because they come from the nightshade family of plants.

Bizarre.

But eating paleo will make the average person lose an impressive amount of weight. So what's the deal?

Fundamentally, the paleo diet ruthlessly eliminates the calorie-dense foods that are easily consumed in excess. Going paleo basically means waving goodbye to things like processed carbs, potatoes, peanut butter, and dairy.

So we lose weight because we've adopted a highly restrictive diet. Although it's been cleverly packaged to not appear as one.

Now, if you have issues with moderation and self control, maybe eating paleo (or a watered-down version of it) could work well for you. After all, the end justifies the means.

But we're better off seeing paleo for what it really is: a set of simple eating rules that make us spontaneously decrease our caloric intake. There's no more magic to it than that.

The reality is it's still possible to become overweight and unhealthy while eating paleo. It's just way harder to do than by eating french fries and donuts.

So if you're keen to give paleo a shot, we've got an extreme version coming up. It's ideal for folks who want to eat as much as they can while losing a lot of weight, fast.

But it's important to keep in mind that food should be enjoyed, not just endured. It isn't something to be feared, or tagged as "healthy" or "unhealthy".

That kind of thinking has actually helped create a new eating disorder where some people derive pleasure through *not consuming* things. It's true.

Orthorexia nervosa...is characterized by an excessive or extreme preoccupation with avoiding foods perceived to be unhealthy [78].

As we know, claiming that a food is "healthy" or "unhealthy" without specifying the context in which it's being consumed is completely meaningless. It's like saying an airplane is "better" than a ship.

OK, if you want to deliver express mail around the world, a 747 may be ideal. But it's useless for transporting crude oil or new cars.

Our 90/10 approach focuses on the whole rather than obsessing about individual foods. In other words:

If you hit your target daily calorie and protein intake from a wide variety of minimally-processed, nutrient-dense whole foods, you've got all the nutritional bases covered.

And the great news is there's enough wiggle room in there to enjoy a beer, too!

It really doesn't need to be any more complex than that. Now, the obvious question is how quickly we should make the transition to a 90/10-style diet.

Well, that really comes down to the individual. Some folks may be able to dive straight in and make the change overnight.

You know the kind of person: they smoked two packs a day for years, then one day they just quit. No nicotine gum or patches, no gradual cutting down.

On the other hand, some people will take a lot more time to make the change. And that's fine, too.

Keep in mind that it's not about how fast you can make changes, it's about making the changes stick. A year or two down the track, how long it took will be practically irrelevant.

What matters most is that you stick with it and get the results you want. So make changes at a pace that keeps momentum going, while not derailing your life.

Now, the best way to make gradual changes is to have a plan. And it's better to

have your plan written down instead of trying to keep it all in your head.

That way you'll be a lot more focused and accountable.

Here are a few ideas for simple changes to get you started:

1. Make extra food at dinner, and take the leftovers to work for lunch the next day.

2. Reduce the number of times you eat out by one per week.

3. Plan your meals for the week in advance instead of ducking into the nearest place when hunger calls.

4. Learn to cook a new meal each week, even if this is something simple like chili, frittata or taco rice.

5. Anticipate. If you're on the road, pack food in advance and take it with you. Some beef jerky, fruit and a protein bar beats eating at a pizza joint.

6. Save the money that you would've spent on stuff like waffles and donuts, and splurge it at the end of the month. Take your kids go karting or your other half to a fancy restaurant.

Now, if this is beginning to sound like your days of eating big are all over, think again. Once you get the feel for how it works, it almost becomes a game.

Here's a real-world example.

Your kids suddenly decide they can't eat the breakfasts you ordered for them, so you end up eating yours and theirs. That means the thick end of 2000 Calories or more – all that bacon, fried egg, sausage and hash browns sure does add up.

And it's still before 9 am.

Is it possible for dad to maintain his six pack and 2400 Calorie per day diet under those conditions? *Hell, yeah!*

He realizes by 9 am that his target calories for the day are pretty much taken care of. So lunch is a protein shake made with water, and dinner the same.

Not forgetting a large mixed salad with no dressing or oil. He doesn't eat any more than this because he knows that he doesn't need to.

But that wasn't his only option. There are always alternatives.

Like he could've opted for a regular lunch and dinner, and just knocked out some calories from the next day or two instead. The net result being an intake of 2400 Calories per day when averaged over those two or three days.

Incidentally, that's exactly how modified alternate-day fasting works. And we'll be taking a look at that very soon.

Alternatively, he could simply write it off as a bad day - it's just a blip, after all. There's no harm in that.

He just needs to make sure that one bad day doesn't turn into two, then a week. The reality is everyone falls off the wagon from time to time.

But that's not an excuse to set the wagon on fire and push it off a cliff. Having the right mindset – that we're in control of how much we consume – is massively important.

Winning The Mental Game

The mechanics of weight loss is easy. We just need to maintain an energy deficit for enough time, and we'll lose all the weight we want to.

So why do most people fail? *Because they have the wrong psychology.*

More than anything else, the real battle is in controlling our state of mind. Ultimately, our bodies and our lives are shaped by the decisions we make.

The reality is our lives can change forever the moment we make a decision.

Sure, it may take weeks or months for the weight to actually come off, but the instant we make the decision is when everything changes.

We've all experienced this at one time or another: the moment you decided to quit the job you'd endured for years, or the moment you decided to ask your other half out on a first date.

Something happened inside you that said "*from now on, this is how it's going to be*". You didn't merely express a preference, or think "*wouldn't it be nice...*".

You made a real decision that cut off all other possibilities. What you decided became a "must".

That's the moment your life changed. Deep down you knew that you were going to do it, no matter what.

And did you notice how you felt once you'd made the decision? It was like mentally you'd already achieved the goal.

It was then just a case of following through physically to make it real. That's the power of a real decision.

And have you ever noticed how *pull* is so much more powerful a force for change than *push?* Even if the desired outcome is pretty much the same.

I'm going to be lean and strong is a much better motivator than *I've had enough of being fat and weak.*nBecoming lean and strong sounds exciting, while no longer being fat and weak focuses on the negative from the outset.

The bottom line is we're better off creating positive goals that inspire us and draw us toward them than impotent goals that leave us cold. We can also learn a lot from any successes that we've had in the past.

It doesn't really matter what the situation was, since applying the same strategy works across the board. Ultimately, massive success comes down to five simple steps.

1. Have a clearly defined goal

A pilot doesn't take off from LAX with a vague idea of landing "somewhere else". He knows exactly where he's headed, and that's exactly where he ends up.

So, a vague goal like "lose weight and tone up" isn't going to get us very far. But if we make it "lose 30 lbs and fit into my 34" waist jeans by my next birthday" we've then got something we can really get our teeth into.

2. Be clear about why your goal is a must

If your goal is more a preference than a decision, it's going to be tough to stay the course. Remember that a real decision means cutting off any other outcome, or possibility of retreat.

So we need to find or create a big enough reason to make achieving our goals a must. That's where making the reason bigger than ourselves can really pay off.

Instead of focusing on ourselves, switch the focus to our families or kids instead – *we're doing it for them*. That can see us tackling things head on that we'd otherwise back away from.

For example, some studies show that having an obese father significantly increases the odds of having an obese child [79] , [80]. That's even if the mother is a healthy weight.

On the other hand, having an obese mother and healthy weight father was not a predictor of child obesity. Sorry guys, but it looks like the ball's in our court.

3. You've got to follow through

You have to take action and get busy working toward your goal right now. *What doesn't get started today will never be finished tomorrow.*

This is where having a goal that motivates and inspires you is paramount. If it's something you're desperate to achieve, then you'll do it.

Keep in mind that you don't have to achieve it all at once. Any goal can be broken down into a series of small, manageable tasks.

It's then just a case of picking those off one at a time.

4. Is it working?

Remember the pilot setting out from LAX? He doesn't just set his course and speed, then kick back with a cup of coffee and a good book.

He keeps a close eye on things so he can make whatever adjustments are needed to keep him on course and on schedule. Well, it works exactly the same way for you and me.

We need to be measuring progress towards our goals to ensure that we stay headed in the right direction. Having targets and milestones – and rewarding yourself when you hit them – is essential for continued success.

5. Change until it does work

OK, here's what usually happens. We start out full of enthusiasm and good intentions, and we make some decent initial progress.

But after a little while, progress begins to slow down. Or maybe even stall altogether.

Now we've all experienced this at sometime or other: whether it's losing weight or learning to play guitar. Things start out fine at the beginning, then just kind of fizzle.

That's where we get tested for the first time. How serious are we, and how badly do we want it?

We really need to understand why we're no longer making the progress we wanted and expected. For weight loss, this could come down to:

- *Were our original expectations realistic?*

- *Did we go too hard, trying to make progress at a rate that was never really sustainable?*

- *Did we go too easy, never really doing enough to bring about the desired change?*

In any case, we need to make some changes to get back on track. Either to our expectations, or to the way we're going about things.

And once we make a change, we need to allow enough time for it to filter through and appear as a measurable result. So, if weight loss has slowed down, we need to increase the caloric deficit slightly.

Then give it a week or so, and see what the results are. If you're now back on track, just keep on going.

But if the results are less than expected, open the caloric deficit up a little more. The reality is every single one of us has the ability to do whatever it takes to get the job done.

As long as we have a big enough reason.

Now, we instinctively know this stuff because we follow these same steps every time we have success. Even if we don't realize it at the time.

It really comes down to having the right mindset.

In the book *Psycho-Cybernetics*, Dr Maxwell Maltz describes how we will neither outperform nor underperform the basic self image that we hold in our minds. According to him, "*All your actions, feelings, behavior – even your abilities – are always consistent with this self image*".

So there's a world of difference in believing you're "a person who needs to lose some weight" rather than "an overweight person". The first is simply a statement, the second is a self-fulfilling prophecy.

Studies have even shown how important belief can be when performing basic tasks. Now, most folks are familiar with the placebo effect.

That's where the simple act of believing that something works is enough to bring about a positive result. It's the main reason why sportspeople tend to have so many weird habits on game day.

Bizarre rituals, lucky underpants, rabbits' feet – you name it. Well, a study back in 2000 took this one step further [81].

Experienced athletes were split into two groups. One group was given a substance that was said to improve repeat-sprint performance.

The other group was given a substance that was said to impair repeat-sprint performance. Both groups' repeat-sprint times were then tested.

Unsurprisingly, the first group's times became progressively faster with each successive sprint. And, as expected, the other group's sprint times did just the opposite - they got progressively slower.

But here's the kicker. The substance that both groups took was *identical and completely inactive.*

Basically, their minds convinced their bodies that the substance's effect was real. So it became real.

And here's something even more interesting. The second group's sprints got slower by a bigger margin than the first group's sprints got faster.

The upshot being that if we have a negative mindset, there's no limit to what we can't achieve. This leads us on to powerful techniques such as:

- *Positive visualization (imagining how you'll look, feel and act when you achieve your goals)*

- *Writing your goals down on a card that you carry with you at all times*

OK, these techniques may sound a bit wiggy, but they're used regularly by some of the world's most successful people. So chances are that they'll work for you, too.

Now, if this is starting to sound like a bunch of useless theory or positive-thinking woo woo, here's a real-world example of the importance of mindset. This is the true story of the fishing boat *West One* as described by British bushcraft expert Ray Mears [82].

The boat sank in the Pacific Ocean off Hawaii, and the crew took to two connected life rafts. Both rafts contained identical provisions, with the ship's captain in charge of one raft, and the first mate in charge of the other.

The men in the first mate's raft took control – they rationed food and water, and mopped out the seawater to prevent salt-water sores. The men on the other raft did none of this, and appeared to resign themselves to their fate.

After two weeks adrift, they were finally picked up. The men in the first mate's raft were able to climb on board the rescue ship unaided.

However, those in the captain's life raft were too weak to climb on board by themselves. Tragically, the captain himself had died the previous day.

Here's what an expert in the psychology of survival had to say:

"Those people who survive report an ability to break their survival down into separate tasks – smaller tasks – and to take it one step at a time. Survival is not a big task, survival is a whole series of small tasks".

Just like becoming a black belt in kung fu, learning to read Japanese, or losing 40 lbs of body fat.

Lose Weight Without Counting Calories

To lose weight we have to consume fewer calories than we expend. Ultimately, that's all it comes down to.

And we have only two ways to do that: by reducing energy intake or by increasing energy expenditure. There is no magical "third way".

If our weight is stable, it means our energy intake is matching our energy expenditure. That's true no matter how little we believe we're eating, or how much exercise we think we're doing.

Of course, it is *possibl*e to eat as much food as we want, and still not get fat. After all, dragging a 500-lb sled to the South Pole could burn through a whopping 10,000 Calories per day.

Which means we'll lose weight even if we eat a Big Mac for every single hour that we're awake. Beat that Morgan Spurlock.

Now, dragging a sled to the South Pole is kind of extreme. But what about, say, road cycling?

Some guys put in huge miles on their bikes so that they can eat and drink as much as they want. So it may be possible to out-exercise a bad diet.

However, that comes at a price. Dedicating endless hours each week to intense calorie-burning activities is neither practical nor fun for most folks.

But here's where we have some great news. There are a couple of ways we can skip calorie counting, eat whatever we want (within reason) and still manage to lose weight.

So let's check them out.

First off, we can restrict ourselves to foods where it's practically impossible to over-consume calories. This is basically how the paleo diet works, although it's still possible to put on weight with paleo if you overdo it with coconut oil and fatty cuts of pork.

That's not possible with our version. You can consume as much as you want, any time you want, of any of the following, and still lose weight.

Our old friends fibrous vegetables

Alfalfa sprouts, arugula, asparagus, bamboo shoots, bean sprouts, bok choy, broccoli, cabbage, cauliflower, celery, cucumber, eggplant, endive, kale, leeks, lettuce, okra, onion, peppers, radishes, sauerkraut, scallions, spinach, string beans, tomatoes, zucchini

Low-fat meat

Lean beef, skinless chicken breast, venison, buffalo and ostrich fit the bill here. Any other low-fat meat is fine, too.

Low-fat fish

Cod, halibut, red snapper, sole and tuna are good options. Any other low-fat fish also works.

Any calorie-free drinks

Water, green tea, black coffee and calorie-free soda.

The ground rules are very simple:

1. Vegetables must be eaten raw or steamed

2. Meat or fish must be cooked with minimal oil

3. Low-fat/low-carb whey protein powder is OK

Now there's no prize for guessing how this diet works. It's high in protein from all the meat and fish, and high in volume and fiber from all the vegetables.

This will both increase our metabolic rate and keep hunger pangs at bay. And, let's be honest, it's also going to be mind-numbingly boring – so chances are you won't feel like eating very much.

In reality, this is the dietary equivalent of wearing a hair shirt, but the upside is

you'll lose a lot of weight fast. Just keep in mind that this will be mainly water weight at first.

But the bottom line is this diet works. So, could you stick with it for a few weeks or maybe a couple of months?

Sure, if you're determined and focused enough. Increase energy expenditure a little while you're doing it, and you could be looking at 30-40 lbs of weight loss in under two months.

Now that's awesome progress, but there's a fundamental problem with this approach. *What happens when you hit your goal weight?*

After all, you only know two ways of eating. Your previous diet that ended up making you overweight, and the protein and fibrous veggie endurance test.

So people may start flip-flopping between the two extremes because they haven't discovered the middle ground where moderation lives. As we know, the key to long-term success is to eat the foods you want so that you can actually enjoy the process of losing weight.

Now, there is another way you can lose weight without counting calories. Plus you get to consume all the foods you enjoy.

Enter intermittent fasting, the new poster boy for fat loss. So, what is it and how does it work?

Basically, fasting means either not eating (duh!), or severely restricting caloric consumption for periods of around 16 to 36 hours at a time. So it's actually very simple.

But people really love to overcomplicate things. Which means there's a whole slew of competing theories, with each one claiming to be the Holy Grail of fasting.

In fact, Amazon.com shows around 400 book titles under "intermittent fasting". Let's just think about that for a second: four hundred books about *the best way of not eating*.

Well, you can keep your money in your pocket because here's all you really need to know about fasting. To keep things simple we're going to focus on fasts that require minimal calorie counting.

So, why does fasting work? Basically, it's an easy way to create an energy deficit without having to do too much thinking.

One of the simplest methods is alternate-day fasting, otherwise known as ADF. You eat as much as you want one day, and then you consume no calories at all the following day.

You then just keep repeating that two-day cycle. So it's really straightforward.

The basic idea is that although you'll be storing some body fat on your non-fasting days, you'll be burning all that *plus a bit more* on your fasting days. Here's an example.

Let's say you require 3000 Calories per day just to maintain your current bodyweight at your present activity levels. Now, on your non-fasting day you'd eat whatever you wanted.

That may be as much as 4000 Calories. Then the following day you consume no calories at all.

So, over the two days you've *expended* 6000 Calories in total (two days at

3000 Calories per day). But you've c*onsumed* only 4000 Calories.

That means you've achieved a 2000 Calorie deficit in only 48 hours. Which is pretty impressive stuff.

But there's a downside. Some folks may not be willing to endure the feelings of hunger on fasting days [83].

Waking up hungry on your fasting day knowing that you're not going to be consuming any calories until the following morning can be brutal. But there's a way around that, too.

Enter *modified alternate-day fasting*. Studies have shown that this is an effective way to lose weight with minimal calorie counting [84], [85]. Here's how it works.

On non-fasting days you consume whatever you want (within reason). Then the following day you consume only 25% of your normal calories.

So what would that mean for the person in our previous example? Well, on non-fasting days they might eat 4000 Calories.

The next day is now a modified fasting day. How many calories will they be allowed to eat?

Well, their normal intake was 3000 Calories per day, so we just take 25% of that

$$3000 \times 0.25 = 750 \text{ Calories}$$

Basically they're alternating days of 750 Calorie and 4000 Calorie consumption. So how does that pan out over the two days?

Well, in total they'll have consumed 4750 Calories over the two days. And because their energy expenditure over that time was 6000 Calories, they'll end up in a 1250 Calorie deficit. OK, let's just run through that quickly below.

Weight maintenance calories = 3000 per day

Over two days = 3000 x 2 = 6000 Calories

Caloric intake over two days = 4000 + 750 = 4750

Energy deficit = 6000 – 4750 = 1250 Calories

As we know, a sustained energy deficit is the key to weight loss. So, if you can't stand the idea of counting calories, modified alternate-day fasting may be just the thing you're looking for.

That said, we need to keep in mind that fasting isn't magic. Calories don't just disappear – they always make it through.

So if your non-fasting day means a 6000-Calorie orgy at Pizza Hut, look out. You could still end up in an energy surplus over the two days.

And an energy surplus means weight gain. So let's not go too crazy on those non-fasting days.

Then on your fasting days use your 25% Calorie allowance wisely. That means plenty of lean protein and fibrous vegetables.

Studies have shown that modified alternate-day fasting allows similar weight loss to a linear diet where folks ate at a 25% energy deficit every day [86]. Now that really shouldn't come as a surprise – after all, they're just two different ways of achieving the same thing.

Ultimately, it comes down to personal preference. The approach that's best for you will be the one that's easiest for you to stick with.

This is where we can really make things work for us because we don't need to be tied down to any particular fasting strategy. We can easily come up with our own.

As long as you're in an overall energy deficit each week, how you go about

achieving that is completely up to you. OK, here's another example of how that might work.

Let's say that you exercise three days per week.

Now, you could eat your regular diet on those days, and knock out some calories from the non-exercise days. Three days of normal intake, say 3000 Calories per day, and 1500 Calories (50% of normal intake) on the other four days each week will really get things moving.

That actually knocks out the equivalent of 2 days' worth of calories over the course of a week. Keep that going and incredible weight loss is guaranteed.

The deal maker is whether you're in an overall energy deficit when you average out your caloric intake. It really is that simple.

And it doesn't matter how you proportion carb/fat consumption as long as protein intake is kept high. Research shows that matching calories and protein while varying the proportion of calories from carbs/fat yields pretty much the same result [87].

That means weight loss, reduced waist circumference, and improved blood lipids (LDL-c and triglycerides). The bottom line is fasting is nowhere near as complex as some folks make out, and there's no single best way to go about it.

Now this is great news for us.

It means we have a tremendous amount of freedom to come up with a strategy that will work for us as individuals. Ultimately, fasting simply allows us to achieve a sustained caloric deficit without too much micromanaging.

And if you're fasting but still not losing weight, it really comes down to increasing the energy deficit until you do. Let's take a quick look at that next.

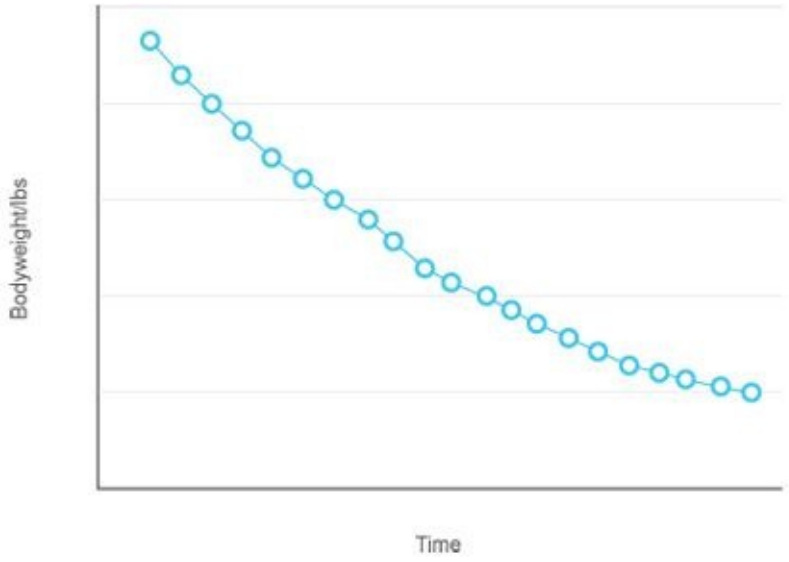
HELP - It's No Longer Working!

Wouldn't it be awesome if weight loss was nice and linear? You start out at

whatever weight you are, and steadily lose fat until you hit your target weight.

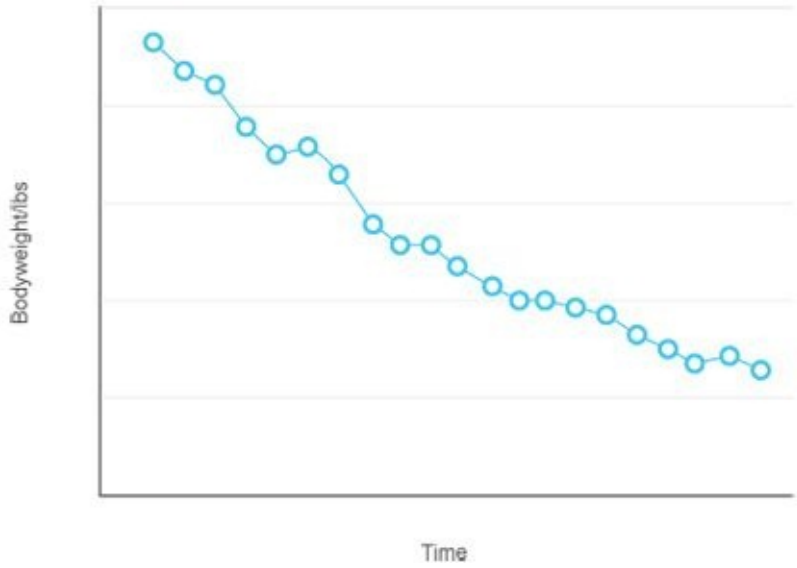
Now, we know it's not as simple as that. We know it's easy to lose weight at first, but progressively more challenging as the weight comes off.

So maybe our weight loss should look like this.



No hiccups, no blips, no "is it still working?" anxiety – just predictable, sustained progress. Well, sorry to break it to you, but it simply doesn't work that way in reality.

Out in the real world, weight loss will look more like this.



Sudden and dramatic drops in weight followed by frustrating plateaus, and maybe even a little *weight gain*. Sometimes it feels more like a rollercoaster ride.

Now that's to be expected. Our bodies are inherently dynamic and complex, so it would actually be really weird if weight loss was nice and linear.

Ups and downs are a normal part of losing weight.

But at some point our weight loss will stall. And progress will come to a grinding halt.

What was previously working so well now no longer works at all. So what should we do?

First off, keep calm and don't panic. The answers are to be found in the simple rather than the complex.

So let's not jump to conclusions like we've got a thyroid problem or some other undiagnosed condition. And let's not abandon what we're doing and jump ship to some fad diet in the hope of reigniting our progress.

Now, some folks may even convince themselves that they're physically unable to lose any more weight. Almost like they've reached some kind of genetically

pre-determined ceiling where further progress is impossible.

Fortunately, none of those things is likely to be true. The real culprit is that we're now caught in the throes of m*etabolic slowdown.*

Now that may sound a bit sinister, but it's actually quite normal and predictable. Here's how it works.

You're still consuming the same number of calories as before, but you're no longer losing weight. That can only mean one thing – your energy expenditure (metabolic rate) has taken a dive. Remember that if bodyweight is staying constant, it means you're eating at maintenance calories. In other words, energy intake is matching energy expenditure.

So, what causes this drop in metabolic rate, and what can we do about it? Well, now that you've lost weight your body is smaller, and a smaller body requires fewer calories to maintain than a larger body.

It works the same way with your car. See how your gas mileage improves when the three sumo wrestler hitchhikers get out of your Fiat 500.

Put simply, lugging around less weight requires less fuel. But that's just the beginning.

Remember that our dwindling fat reserves are interpreted by our prehistoric brains as a sign that we're slowly starving to death. It doesn't matter that we're surrounded by convenience stores and drive thrus.

The body launches its counter attack to safeguard its resources and ensure our long-term survival. Resting metabolic rate (the calories we burn chilling out) will actually slow down by more than predicted by weight loss alone.

Here's an example of what that means.

Take two otherwise identical people; one who has dieted down from 240 lbs to 200 lbs, and one who has always been 200 lbs. The person who has dieted down to that weight will have a slower resting metabolic rate than the natural 200

pounder.

This alone can amount to some 200 Calories per day or more [88]. The upshot is even lying down asleep no longer requires as much energy as it used to.

And that's just one of the ways that metabolic slowdown can occur. Then there's NEAT (non-exercise activity thermogenesis) which covers spontaneous, unplanned movement like fidgeting, maintaining posture, and so on.

When we lose significant amounts of body fat, NEAT can take a real hammering. The body reduces energy expenditure by making us fidget less, slump instead of sit upright, and be just plain more sluggish.

And get this. Even if you do take some exercise, the body can fight back by further reducing unconscious energy expenditure during the time you're not working out.

Metabolically, you're frozen in carbonite. And this restriction in NEAT can come to several hundred Calories per day [89].

So here's what it boils down to. Even though you may be consuming the same calories that previously allowed you to lose weight, your metabolic rate could have dropped by something like 500 Calories per day.

Which is more than enough to blunt your expected energy deficit or even cancel it out altogether. As a result, weight loss slows to a snail's pace or comes to a grinding halt.

So what do we need to do to get it moving again? Obviously, we need to open up an energy deficit – that's always weight-loss rule number one.

Which means we could continue to pare back our calorie consumption. But if you're already at a pretty low intake – say 2000 Calories per day or fewer – life could start getting pretty miserable.

But if you're consuming considerably more than this, poke around and see where you can weed out some more calories from your intake. Another strategy

you may want to consider is taking a diet break.

If you've been steadily losing weight for a couple of months or so, this could be exactly what you need. A week or two of eating at maintenance calories can put you in the right headspace before continuing with your weight loss.

Just be careful that a diet break doesn't turn into seven days of feasting like a starving man. As always, moderation is your friend. Where diet breaks are concerned, there is no one-size-fits-all approach. Some folks may like the occasional milestone of a diet break, while others may not find it necessary.

And if we do decide to take a diet break, we shouldn't regret it as time that would've been better spent losing weight. If it plays its part in the process of taking us towards our goals, it's time well spent. Right now we're coming to the end of what we can achieve from working the energy in side of the equation. When it comes to weight loss, this always holds the greatest potential for progress. Let's keep in mind that the best exercises for 6-pack abs are:

1. Fork putdowns

2. Table pushaways

3. Head shakes

So it's now time to start looking at boosting our metabolic rate through movement, exercise and training. And, as we saw earlier, our metabolic rate is something over which we have a huge amount of control.

Even better, movement isn't just the key to increasing and maintaining weight loss. It can make us stronger and in better shape than we would have ever imagined possible, even in our 20s and 30s.

So let's get to it.

Movement, Exercise & Training

Motion Is Lotion

You and I have a lot to be grateful about. After all, it's a trillion-to-one shot that we're even here at all.

We're the end result of millions of ancestors over thousands of generations. In fact, you and I probably share more than a few of them.

But here's the thing. The world that those folks inhabited was a very different place to the world that we know today.

Our ancestors had a hard physical existence in an unforgiving environment. And that's precisely what their physiology adapted to deal with over hundreds of thousands of years.

Like it or not, that also happens to be the same physiology that we've inherited. It's programmed deep in our genetic code.

And the reality is a couple of generations of sitting in cars and at desks isn't going to do much to change that. We're hardwired so that physical activity is essential for us to function as normal human beings should.

The bottom line is we're designed to move. However, most of us are doing less of that than at any time in human history.

Obviously, that's something we need to fix.

Just to be clear, movement isn't only about hitting the gym or working out. We don't need to be wearing sweats or getting out of breath for activity to pay dividends.

Remember how we get an unconscious reduction in non-exercise activity thermogenesis (NEAT) when we lose weight? Sure, that may be frustrating for us, but it's actually a good thing.

Without mechanisms like that our ancestors wouldn't have survived and we wouldn't be here today. So, what should we do when we experience a drop in NEAT, and weight loss starts to slow down?

Ultimately, we need to make a conscious effort to move more. That means we'll be increasing energy expenditure and burning more fuel.

And remember - all movement matters.

Chasing your kids around the park, building sandcastles at the beach or making a snowman all count. As does more mundane stuff like vacuuming, hanging up the laundry or taking out the trash.

Obviously, not all activities burn the same amount of energy. That's where the *Compendium of Physical Activities* [20] comes in handy.

This tells us how all kinds of physical activities compare in terms of relative energy expenditure.

Want to know whether vigorous sex burns more calories than traditional New Zealander dancing?

You'll find the answer in there.

Sadly, a roll in the hay isn't the fast track to fat loss that some claim it to be, and most wish that it was. According to the compendium, vigorous sex only burns calories at around the same rate as using the toilet or riding a bus.

Bummer.

But there's much more to the compendium than seeing how many calories all kinds of unusual activities burn. It really highlights the unsung heroes of fat loss.

Those are the seemingly trivial activities that burn a ton of calories because they're being performed for a long duration. That's the exact opposite of heading to the gym and working yourself into a sweaty mess for 20 minutes, three times per week.

Here's a good way to think about it.

Imagine you're driving from New York to Los Angeles. That's a distance of around 3000 miles.

So, if you drive at a steady 50 mph, it will take you something like 60 hours. Now, what would happen if you did 50 mph all the way except for 10 minutes where you drove at 150 mph?

How much time would that shave off the 60-hour journey? *Only around 20 minutes*.

Even though those 10 minutes will leave you breathless and exhausted, and you'll be talking about them for weeks afterwards.

On the other hand, if you increase your steady speed from 50 to 55 mph, you'll cut *over 5 hours* off the total journey time. Sure, a paltry 5 mph increase in speed doesn't sound as sexy as a 150 mph blast, but it delivers a much bigger result.

Small changes applied over long durations really add up.

That's the reason why those short, high-intensity "fat-blast" workouts have a negligible effect on fat loss. The reality is they simply don't burn that many calories.

The bottom line is the body doesn't know, or care, if we're burning calories sweating on a treadmill or playing with our kids. The secret to turbocharging weight loss (and keeping it off when we've hit our target weight) is to increase the amount of energy we expend on a day-to-day basis.

As we know, massive results come from the small things we do consistently

rather than the occasional big effort. So we're better off focusing on increasing general daily activity.

If you're at work, set a reminder every hour or so to get up and stretch your legs for a few minutes. This alone can easily add up to more than an hour of activity per week.

And since we're just as likely to *over*estimate activity levels as we are to *under*estimate calorie intake, it's a good idea to have some hard numbers to help keep us honest [10]. A cheap pedometer (or a *free* smartphone pedometer app like Walker) is a simply awesome tool that you shouldn't be without.

It will help keep activity at the front of your mind, and makes moving more almost like a game. So do yourself a favor and get hold of one today.

Now, there are much more expensive devices out there such as the *Fitbit, Bodybugg* and *Nike Fuelband*. Although these can cost $100 or more, they're seldom as accurate as the manufacturers would like us to believe [90].

The main benefit of any device (expensive or cheap, simple or complex) is that it promotes awareness of activity levels. A more expensive device doesn't automatically lead to more awareness.

While it may not sound particularly sexy, accumulating activity by walking around the office and parking your car at the far end of the lot burns calories for very little extra effort. The body is very fair: calories always count when you consume them and they always count when you expend them.

And let's keep in mind that increasing activity does more than simply burn more calories.

Being physically active and spending less time sitting is also linked to decreased mortality as well as reducing the risk of diabetes [91] , [92]. Folks who engage in increased levels of exercise are also more likely to keep off any weight that they've lost [93].

Becoming more active is basically a win-win situation. Not only does it help burn more calories, it also provides health benefits that we won't be able to obtain through weight loss alone.

The bottom line is we need to keep moving - so just do something, *do anything*. And the more you do it, the better.

Now all this makes it sound like hitting the gym isn't really necessary after all. We know that changing our eating habits holds the most potential for some serious weight loss.

Then we can keep weight loss going simply by moving more. And if we continue to move more after we've lost the weight, it will help to keep the weight off.

So does that mean we can forget about formal exercise? Well, some researchers decided to look into exactly that.

They compared three different approaches over 12 weeks [94] :

1. Diet only

2. Diet and aerobic exercise

3. Diet, strength training, and aerobic exercise

Here's what happened.

All three groups lost an impressive amount of weight, something like 20 lbs. Not bad at all in 12 weeks, but there were some striking differences between the groups.

The strength training group's weight loss came almost exclusively from fat (97% to be exact). Meanwhile, the other two groups' weight loss was only around 69-78% from fat.

That means the folks who didn't do strength training lost around 4-7 lbs of lean body mass. So it's pretty much certain that they lost muscle.

And, as we know, losing muscle mass leads to a drop in strength and resting metabolic rate. Both things that we're better off avoiding, especially once we hit middle age.

Now, in addition to minimal loss of lean mass, the strength training group also experienced some dramatic increases in strength. The upshot is if we want to preserve muscle mass while losing weight, we need to be doing some resistance training.

In other words, we need to lift weights.

Lifting Weights Is The Best Medicine

Lifting weights is the closest thing we middle-aged guys have to a fountain of youth. Now that sounds like a pretty bold claim, right?

But resistance training is by far the most powerful tool we have to reverse age-related physical decline. Plus it has some other awesome benefits that tag

along for the ride.

A good resistance-training workout can actually increase the number of calories you burn, even while you're asleep. Even better, this effect can last for several days – *all from a single training session!*

This is known as the afterburn, and it works in a similar way to buying an Apple product. Here's what we're talking about.

First off, you've got the initial outlay: during the workout you burn calories, while in the Apple store you burn cash. But that's just the beginning.

With Apple, there's the further cost of downloading apps and buying things on iTunes. Similarly, after a resistance-training session, your resting metabolic rate is increased by around 10% for 2-3 days following the workout [95].

Now, for a 200-lb man this afterburn could amount to something like 500 Calories or more. Remember that's *in addition* to the calories burned during the workout itself.

And before you ask, you won't get this afterburn effect from activities like mowing the lawn or walking the dog. So, here's what that means for us.

We need to eat right

That means consuming sufficient calories and protein. These should come predominantly from minimally-processed, nutritionally-dense, calorically-sparse whole foods.

We need to sleep right

Make sure you get your 8 hours in. That means 8 hours asleep – time spent in bed reading, watching TV or playing with your smartphone doesn't count.

We need to keep moving

Do more of anything that doesn't involve sitting on your butt. Always be

looking for ways to add movement to whatever you're doing.

We need to do progressive resistance training

This doesn't mean we need to become bodybuilders or powerlifters. It does mean we need to provide our bodies with the physical stimulus they require to function normally as they evolved to.

Lifting weights is the medicine that our bodies are crying out for. Let's keep in mind that we guys can expect a natural decline in strength of around 1% per year once we hit 40 or so [2].

And here's what really sucks: this happens so gradually that we won't even perceive it. Especially if we're in the habit of not doing very much that challenges our strength.

The less of our potential that we use on a regular basis, the less aware we are of any decline in that potential.

So, a sedentary 60 year-old man may still be able to lift a 45-lb suitcase into the trunk of his car. But it's now much closer to the limit of his ability than the same task was 20 or 30 years before.

What used to feel ridiculously easy now feels incredibly hard. Like it or not, that's precisely what's going to happen to us all, *unless we do something about it*.

Resistance training is that something.

Now, if you still need some convincing, let's check out a groundbreaking study which followed close to 9000 men age 20-80 years old for nearly two decades [96]. This is what the researchers concluded:

Muscular strength is inversely and independently associated with death from all causes and cancer in men, even after adjusting for cardiorespiratory fitness and other potential confounders.

Translation: The stronger a man is, the less likely he is to develop cancer. And

the less likely he is to die from any cause.

The bottom line is we all need to make getting stronger a priority. This works the same way as saving for retirement: while it's never too late to start, the younger we start doing it, the better.

Now, many folks have a preconceived idea about the benefits of cardio exercise (low intensity activities like walking, jogging, and riding a bike) and the benefits of resistance training. We've been conditioned to believe that cardio is for weight loss and general health, while resistance training is useful only for building muscle.

But resistance training is far from being just a one-trick pony. There's some pretty compelling evidence that resistance training actually trumps cardio in a range of different areas.

For example, it was found that there was little difference in 24-hour fat burning between men who exercised with weights and men who did cardio [97]. So, as far as fat loss is concerned, there's nothing uniquely effective or magical about cardio.

Resistance training can also lead to better blood sugar control than cardio exercise [98]. Now that's a *really* big deal as it's estimated that around 29 million people in the U.S. have diabetes, with a further 86 million being prediabetic [99].

Resistance training also beats cardio when it comes to preserving bone health [100]. That pretty much goes without saying since bone, like muscle, is living tissue and responds positively to being loaded in a progressively increasable way.

In fact, elite junior weightlifters aged 17 or so were found to have significantly greater bone mineral density than the *adult* reference data [101]. This is a huge deal, especially for guys heading into middle age and beyond.

As we get older, balance tends to suffer – a lack of physical strength being a major factor. And when older folks fall, a hip fracture is a likely result.

Now, breaking a bone may not sound that serious. After all, just check out RedBull TV – people smash themselves up doing all kinds of crazy stuff, and they always seem to get away with it.

Well, that may be the case when you're 21 and indestructible. But that's no longer us.

The reality is the 5-year mortality rate after a hip fracture is just through the roof. It's actually similar to some types of cancer [102].

The upshot is keeping our bones nice and strong is a *very* good idea. And resistance training is hands down the most effective way for us to do that.

Now, all this makes it sound like cardio deserves no place in anyone's exercise program. After all, watching what we eat, keeping active in general and doing resistance training appear to cover all the bases.

Strictly speaking, cardio is probably unnecessary for most folks. But just because it's unnecessary doesn't mean it has to be avoided.

Fundamentally, it comes down to personal preference. So if you see cardio as a chore or necessary evil that you feel obligated to do to stay in shape, feel free to give it a pass.

But if it's something you genuinely enjoy doing for its own sake, there's no reason to stop doing it. Just avoid getting sucked into the "*killer 15-minute workout to blast off fat and get your metabolism revving*" nonsense.

Always keep in mind that caloric expenditure and fat loss are more about the little things we do consistently than the occasional balls-to-the-wall effort. Thirty minutes of vigorous stationary bicycling three times per week will burn only around 1500 Calories in total [17].

Over a week, that's around the same number of calories you'd burn playing vigorously with your kids for 15 minutes each day. Now that's more fun, more rewarding, and you don't need to head to the gym to do it.

Ultimately, cardio offers no unique health or weight-loss benefits that can't be obtained elsewhere. So, by all means do it if you really want to, and feel free to skip it if you don't.

But while cardio may be optional, getting stronger most definitely isn't. Especially if we want to get in the best shape of our lives and be able to give the grandchildren a run for their money someday.

So let's find out how to do it.

How To Get Stronger

Getting stronger is actually really straightforward. We simply perform some kind of progressive resistance training where the body becomes able to handle increasingly heavier loads over time.

That works exactly the same way as learning to read or play guitar. The key thing is *progression*.

If we merely keep repeating something we can already do, we're doing nothing to drive progress. We're maintaining, not improving.

But before we get to all that, first we should define what *strength* actually is. After all, "strong" seems to mean different things to different people, so it's better if we all understand it the same way.

Strength is the ability to produce force against an external resistance

Where the external resistance could be literally anything: your 3 year-old's bodyweight when you pick him up, the lug nut that you're trying to unfasten, or the dumbell that you're doing curls with. Fundamentally, if you're producing force against an external resistance, you're displaying strength.

And in every situation, the person who is able to produce more force is the stronger man. That's why the guy who can pick up an 85-lb bag is stronger than the guy who can only pick up an (otherwise identical) 45-lb bag.

So if we want to get stronger, we need to become able to produce greater amounts of force. And we do that by training our bodies to overcome an increasingly large external resistance.

Now, our lug-nut guy could do this by unfastening progressively tighter and tighter lug nuts. That would probably work fine, but there's a big downside – it isn't terribly efficient.

The problem is that kind of specific strength increase wouldn't carry over well to other physical tasks. Putting the lawnmower into the back of the truck would probably still be as hard as it ever was.

Only instead of his grip being the limiting factor, it might now be his legs or lower back. Unfastening lug nuts didn't do much to make those stronger.

That's why it's much more effective and efficient for us to get strong in the most general sense first. That means developing useful whole-body strength from fingers to toes.

Then, once we've built that strength, we can apply it to any task we want. Whether it's carrying children, chopping firewood or anything else.

Here's what that means for us.

The best way to build strength is by using progressively heavier weights with exercises that train the body as a complete system. After all, we use the body as a system, so it makes sense to make it strong that way, too.

And, as we said earlier, using progressively heavier weights is essential for making long-term improvements in strength. So if you're using the same weights now as last week, last month or last year, it's unlikely that you've become any stronger.

That's because using the same-old weights for more repetitions or a longer duration doesn't automatically translate to increased strength. But it does lead us nicely to our definition of *endurance*.

Now, some folks seem to believe that endurance has nothing whatsoever to do with strength. That couldn't be further from the truth.

Endurance is the ability to produce sub-maximal levels of force for extended periods

Here's a quick example of how that works.

Let's say someone is *just* strong enough to pick up two 60-lb bags. He's unable to walk a single step because simply standing there with them in his hands is the absolute limit of his strength.

That makes it a maximal task.

Now, instead of the 60 pounders, let's try it with two 30-lb bags. Of course, he can pick these up easily because it's now a sub-maximal task.

In fact, it's so sub-maximal that he can even walk while holding them. Maybe he makes it as far as 400 yards before he has to drop them to the ground.

For him, this is obviously an endurance task. And, according to our definition, he can display improved endurance in two ways:

1. He could carry the same 30-lb bags for a longer distance, say 450 or 500 yards.

Or,

2. He could carry something heavier, say two 35-lb bags, for the same 400-yard distance.

Now, it's completely possible for his endurance to improve without any increase in his maximal strength. We know instinctively that this is true.

It's the reason why 100-meter sprinters don't jog endless laps of the track in training. Becoming better at running longer distances doesn't mean you'll be faster at sprinting 100 meters.

So improved endurance doesn't automatically result in increased strength. But how about the other way around – can increased strength improve endurance?

OK, let's say our bag carrier increases his strength by 50% – a very reasonable improvement. Now he's able to lift two 90-lb bags where previously he could only manage two 60 pounders.

And right here's the money shot.

What happens when he lifts the 60-lb bags now? Well, as his ability to produce force has increased, these bags now represent a sub-maximal task.

That means he may well be able to carry them for several hundred yards. His increased strength caused improved endurance to come along for the ride.

Now, this is *really* important for guys our age. A lack of strength, not a lack of endurance, is the reason why older folks struggle to cross the street or climb a flight of stairs.

For them, each step is close to a maximal task.

But in spite of all this, some folks may still believe that endurance is somehow more fundamentally important than strength. So here's something to keep in mind.

For a task to be an endurance activity, you need to have the strength to complete the task in the first place.

The bottom line is being stronger makes every task easier. That's why it's the husband rather than the wife who carries the suitcases at check-in, and the kids when they get tired.

Now just imagine how much easier your other half would find every physical task, and life in general, if she had your current level of strength. Then imagine that same degree of improvement applied to you as you are now.

That's how profound an effect increasing your physical strength can have. And

the great news is we've all got the ability to get much, much stronger than we currently are.

But that ability will remain largely untapped if we don't go about things the right way. So let's figure out what that is.

First off, you already have a good understanding of how and why the body gets stronger. *Even if you think that you don't.*

Ultimately, if you know how to get a suntan, you know how to get strong. So let's take a really quick look at how that works.

When we sunbath, we're simply applying a dose of stress of sufficient intensity and duration to the skin. In this case, the stress is sunlight (if we wanted to develop a callus instead, the stress would be friction).

We cover up, wait a day or two, and then head back out for a *slightly increased* dose of sun. In other words:

1. We apply a sufficient dose of stress to drive the adaptation we want

2. We then give the body enough time to recover and make the desired adaptation

3. We then apply a slightly increased dose of stress to drive a further adaptation

If we keep repeating this process over and over, we'll get as deep a tan as our genetics will allow. And here's a secret: the magic is pretty much all in step number three.

That's because each individual adaptation will probably be very small. After all, one sunbath won't change your skin color by that much.

But we can get a big cumulative effect by stacking successive small, individual adaptations on top of each other. That's what builds a suntan, a callus, strength, and everything else.

And here's something that's easily overlooked.

Once we've adapted to a stress, repeated exposure to that same stress won't bring about any further adaptation.

Think of it this way: reading *The Cat In The Hat* will help to improve a typical 6 year-old's reading ability. But if he reads only that book for the next 20 years, he'll still read like a kid of 6, not an adult of 26.

This principle works for pretty much everything we do. If you always get exactly the same dose of sun, you'll get to a certain skin color, and never get any darker.

Likewise, if you always apply the same training stress (say, bench pressing 135 lbs 10 times) your body has no reason to get any stronger than it already is. *Your body doesn't know that you want it to get stronger – it can only do what you tell it to.*

A progressively increasing stress tells the body exactly what adaptation we're demanding. And the body will then deliver.

Now that may sound really obvious. But it's the single biggest reason why so many folks who work out make nothing like the progress they want and deserve.

Ultimately, getting stronger means we just need to manipulate the same three variables that we do when we get a suntan. Those are:

1. Intensity

High-intensity sun would be Hawaii in June, low-intensity sun would be Alaska in December.

2. Volume

This is simply the duration that we're exposed to the sun.

Taken together, *volume* and *intensity* give us the total dose of stress. Ten minutes of winter Anchorage sun being very different to 10 minutes of sun in mid-summer Waikiki.

3. Frequency

You get an appropriate dose of sunlight, and then leave it a day or two before exposing yourself to the sun again. You don't make faster progress by sunbathing three or four more times that same day.

Recovery and adaptation have to be allowed to take place. And they occur at their own pace.

So those are the three variables: *intensity, volume* and *frequency*.

Now, the great news is the training program later in this book manages these variables for you. But it's good just to be aware of them.

There really is no more magic to getting strong than there is to getting a suntan. It's nowhere near as complex as some folks appear to believe. And we can all do it.

Why Everything "Works"

First off, a couple of quick questions:

1. Can sitting in a chair make someone stronger?

2. Can deadlifting 405 lbs make someone weaker?

Sounds pretty obvious, right? But let's think about it for a moment.

When we're not already strong, almost any activity, exercise or program will help make us stronger. For a while, anyway.

Now that usually gets interpreted as evidence of the program, activity or exercise's effectiveness. But it's really more a reflection of our physical

condition.

Here's why. The further we are from our ultimate physical potential, the more easily and rapidly we're able to increase our strength.

The same way fat loss is quicker and easier when we're overweight compared to when we're lean. *The more progress we've made, the harder it becomes to make further progress.*

That's why a previously sedentary person can increase their strength by more in one week than an Olympic athlete can in four years. Ultimately, anything that constitutes a stress that we are, or have become, unadapted to can make us stronger.

Which brings us nicely to the answer to the first question.

If a person has spent three months lying in a hospital bed, even sitting in a chair will help make them stronger. They've become so adapted to being completely inactive that any activity will be enough of a stress to make them stronger.

And will they be satisfied once they're able to sit in a chair? Hell, no – they'll want to build back up to standing, walking, and resuming normal everyday activities.

By continually trying to do slightly more challenging tasks, they're gradually exposing themselves to progressively greater stresses. And that makes them even stronger.

It's an upward spiral. And, before you know it, their pre-hospital strength has fully returned.

Then the rate of strength improvement just flatlines. They're not getting any stronger because they're no longer giving their body a reason to do so.

Keep in mind that:

Once we've adapted to a stress, repeated exposure to that same stress won't bring about any further adaptation.

So, if you're already strong enough to climb a flight of stairs, simply climbing more stairs isn't sufficient to make you stronger. Something is only a stress to the extent that you're unadapted to it.

That's the reason why a 405-lb deadlift can make someone weaker. If a man has adapted to deadlifting 600 lbs, lifting "only" 405 lbs isn't enough of a stress even to maintain his strength.

This makes perfect sense when we think about it.

A home-workout DVD may provide enough stress for a previously sedentary person to get some modest results. But that same program will do precisely nothing to improve an Olympic athlete.

Now the reality is most of us are so far from our physical potential that we can make continued progress for a long time. We still have the ability to make massive improvement, fast.

As long as we keep exposing our bodies to the appropriate amount of training stress.

But what usually happens is something like this.

The sedentary person with the home-workout DVD program gets some decent enough results for the first few weeks. Those are mostly due to their initial low level of physical condition rather than the specifics of the program itself.

Within around 10-12 weeks, progress slows down and eventually stops. What worked before now no longer does, no matter how much more effort they put in.

But by this time they're already convinced that the program "works" because they had some decent results at the beginning. They interpret the current lack of progress to mean a lack of effort, so they try even harder.

Perceived effort then becomes the yardstick for workout performance. *As long as I sweat more or it hurts more than last time, I must be making progress BECAUSE THIS PROGAM WORKS DAMMIT!*

The only thing is, hammering yourself into the ground doesn't seem to work either. It's like you're pressing the throttle to the floor while simultaneously standing on the brake pedal.

But all that ignores the real reason why you're no longer making headway. The program doesn't work anymore because **you're no longer physically the same person you were when it did**.

The same way sitting in a chair will do nothing to make your back stronger, and reading *The Cat In The Hat* will do nothing to improve your English reading ability. *As we improve, a greater dose of stress is required to drive further improvement*.

Now that doesn't mean the answer lies in going harder, making things unnecessarily complex, or trying to confuse our muscles. We just need to keep delivering a measured dose of physical stress that ensures we make the desired progress at the fastest possible rate.

Planned workouts with small, manageable increases in the weight used are the most effective and efficient way to achieve that. So let's see what our options are.

Training Or Exercise?

OK, I know what you're thinking. Aren't these exactly the same thing?

But understanding the difference between *training* and *exercise* is really important. It could save you literally years of effort along with thousands of dollars in gym fees, equipment and personal training sessions.

So listen up. *Training* means we have a clearly defined long-term objective. Each workout is a stepping-stone between where we started out and our pre-determined goal.

Building up to a 100-mile bike ride, 315-lb squat, or half marathon all require training. You don't just do them on a whim.

From the outset, progress is planned for – we don't merely hope or assume it's taking place. And it's measurable so we know that we're staying on target.

With *training*, we want to achieve the long-term goal in the shortest possible time and with the least amount of work. Minimum effort for maximum results.

So, what makes something *exercise* rather than *training?* Well, there's more to it than simply the choice of activity.

Things like running, swimming, cycling and lifting weights can be *exercised* or *trained*. The difference basically comes down to the focus.

Training is the process we use to achieve a clearly defined long-term goal. While *exercise* is mostly about making ourselves feel a certain way in the short term.

That could mean burning lungs, aching muscles, or getting soaked with sweat. Instead of being a small part of a much bigger picture, each workout becomes its own separate entity with the focus on *today*.

Performance tends to be measured subjectively – in breathlessness, perceived effort, soreness, or sweat. And since progress tends not to be planned for, it can end up being rather hit-and-miss.

Furthermore, what progress there is may be impossible to quantify, since performance is being judged by subjective feelings.

So, which is better – exercise or training? Well, that really depends on what you want to achieve.

Exercise can provide some decent strength gains when you start out, it gets your heart rate up, makes you feel good, and can burn a lot of calories. It can also be a good way to ease yourself into a more active and healthy lifestyle.

For many folks that will check all the boxes. Just like diets, the best workout program is the one you can actually stick to.

So if exercise is your thing, we have a great workout template headed your way in the next section. You can do this workout pretty much anywhere with little, if any, equipment.

But if you've decided that you want to get as strong as you can, as fast as you can, that requires training. You'll get more results from less effort and in less time if you plan for them.

Fundamentally, the decision of whether to exercise or train comes down to personal preference. But for many folks it's not a decision that's made consciously, or a choice they're even aware exists in the first place.

The reality is countless people are stuck in a kind of middle ground. They want the results of training (and may even believe they are training), but they're actually just exercising.

And the desired results simply aren't coming. Now that's really frustrating, and something we all want to avoid.

So here are a few questions that should help to make things a bit clearer.

- Do you have a clearly defined long-term goal? This could be bench pressing your bodyweight by your next birthday, or running an 8-minute mile within the next six months.

- Is each workout based around doing only the *minimum* amount necessary to bring about the desired adaptation?

- Is each workout planned in advance, and do you do only what's scheduled that day – no more and no less?

- Is the progression in subsequent workouts based on the successful completion of the previous workout?

- Are all workouts planned and recorded in a log that you carry with you while you're working out?

- Can you identify in numbers the progress you've made towards your goal in the past week, month and three months?

If the answer to these questions is mostly "no", then you're exercising, not training. Which isn't a problem if that was your intention, but could be frustrating if it wasn't.

Now, this isn't a case of trying to argue that training is "better" than exercise. Ultimately, both are nothing more than tools.

If you want to get as strong as possible, as fast as possible, training is the better tool for you. On the other hand, if you're more interested in workout variety, exercise may be a better fit.

And if exercise is what you're after, next up is an awesome routine that's guaranteed to get the blood pumping. Welcome to peripheral heart action, otherwise known as PHA.

PHA Exercise Routine

So, what is PHA?

Basically, it's a whole-body exercise circuit that's massively flexible, so it can be tuned to work for just about anyone. Even better, it can be performed almost anywhere, with minimal equipment, and in minimal time.

So it's ideal for when you're on the road, on vacation, or you're not able to get to a gym. And if you can get to a gym, it will take your PHA workouts to a whole new level. Now, in case you're wondering, PHA isn't some new-fangled flavor-of-the-month exercise routine. It was actually developed over 50 years ago, so it's really stood the test of time.

In fact, many of the "cutting edge" exercise programs around today can trace their origins back to PHA. Like much of the old-school stuff, it's effective and

refreshingly BS-free.

And there's no better way to gradually introduce yourself to exercise and start building some serious momentum. But don't take that to mean PHA is always a walk in the park.

Go easy, and it will provide a gentle workout that's energizing and invigorating. Go hard, and it will take down a Silverback gorilla.

Naturally, how hard or easy you go is completely up to you. So it really can work for everyone.

The other awesome thing about PHA is how much you can pack into such a short space of time. There's absolutely no fluff – this is all about using time efficiently and effectively.

So anyone should be able to fit it into their schedule, no matter how busy. In fact, you could blast through a good PHA workout in as little as 20 minutes.

Now, you probably want to know what the workout looks like. So here's the basic template.

1. An upper-body "push" exercise

2. A lower-body exercise

3. An upper-body "pull" exercise

4. A cardio exercise

Simple enough, right? But let's not confuse simple with ineffective. So, an easy PHA workout could be:

Upper-body push: Push-ups against a table

Lower body: Bodyweight squats

Upper-body pull: Inverted rows Cardio: Step ups

While a brutally hard PHA workout could be:

Upper-body push: Weighted dips

Lower body: Barbell squats

Upper-body pull: Weighted chin-ups

Cardio: Weighted sled push

Now don't worry if you're not familiar with some or all of these exercises. We'll cover them in the instructional videos that we'll be linking to very soon.

Just keep this one thing in mind. No matter what your starting level is, there will always be exercises that are just right for both your ability and the equipment you have available.

OK, now we've looked at the basic template, let's see how we should perform the workout in a little more detail.

- **Perform one set of the first three exercises in turn, without resting**
- **Immediately do 3 - 5 minutes of the cardio exercise**
- **Rest for 1 minute**
- **Repeat this circuit 1 to 4 more times**

That's it.

A simple, quick and effective workout that can be performed almost anywhere in around only 20 – 40 minutes.

Now, this exercise template is pretty much bombproof, but here are a few things to keep in mind.

- Always warm up thoroughly beforehand by doing 3 - 5 minutes of cardio, followed by a light version of your circuit (this should feel really easy)

- Use a weight (or exercise variation) that allows you to perform 8 - 12 repetitions per exercise

- Don't go to failure on any exercise – always leave 1 or 2 full repetitions in the tank

- If the weight doesn't allow perfect form, it's too heavy to use

- The cardio exercise should be *intense* – if you're able to hold a conversation while doing it, you need to push a bit harder

- Always try to use a little more weight each workout, even if it's only ½ pound

- Log your workouts (exercises, weight used, repetitions completed, number of circuits performed, and the total time taken)

- Perform a PHA workout 2 or 3 times per week, leaving at least one full day between workouts (for example, work out Mon/Thu or Mon/Wed/Fri)

- If you're not used to exercise, take it easy for the first couple of workouts. Do the warm up and then no more than one or two full circuits

The Exercises

The great news is any exercise that meets the criteria can be used. That means upper-body push, lower body, upper-body pull, and cardio.

The combinations are practically endless. So you'll never have to complete the same workout twice if you tend to get bored easily.

And you can use almost any equipment with a PHA circuit. That means dumbells, bodyweight exercises, barbells, sandbags, kettlebells, suspension trainers like the TRX, and much more.

Now, if all that sounds a bit overwhelming, don't worry. You can find videos covering both example exercises and example workouts **here**.

There's one video each demonstrating:

Upper-body push exercises

Lower body exercises

Upper-body pull exercises Cardio

There's also one video each covering an example:

Bodyweight PHA workout

Dumbell PHA workout

Kettlebell PHA workout

TRX PHA workout

Barbell PHA workout

As you can see, it really is possible to do a PHA workout pretty much anywhere, with pretty much anything.

So just get out there and get started! And let's talk a little bit about the results. Once you've been doing PHA for a couple of weeks or so, you'll start noticing some welcome changes in your body.

Muscles that were a little soft and weak are now definitely firmer and stronger. What felt kind of taxing in the first workout or two now feels a lot more manageable.

You like what you're getting, and it's natural to want more. So how do we keep driving progress? Ultimately, we need to be working against a slightly greater resistance each time we do an exercise. Keep in mind that strength is the ability to produce force against an external resistance.

Getting stronger means we can now work against a bigger external resistance. And working against a bigger external resistance will make us stronger still.

It's an upward spiral. So, if you bench pressed 135 lbs for 8 repetitions last time, make it 140 lbs, or even 137.5 lbs, for 8 repetitions next time. It's always easier to add a small amount of weight than it is to add repetitions.

If you're performing exercises with dumbells, you may find the jumps in weight a bit harder to manage. After all, adding two 2.5-lb plates (making 5 lbs in total) to a 25-lb dumbell is a full-on 20% increase in load. Say you managed 12 repetitions with the 25-lb dumbells last time, you may only get 5 or 6 repetitions with 30 lbs. But there's an easy way around this (assuming your dumbells are plate loaded).

Simply add the smallest plate you can to the "thumb side" of the dumbell only. Then hold the dumbell shaft as close as you can to the heavier side, with your thumb/first finger pressed up to the plates. That allows a much smaller jump since you've added only 2.5 lbs instead of 5 lbs. Plus the off-center grip position nicely counterbalances the unevenly loaded dumbell.

If you're doing bodyweight exercises like squats and lunges, you can add weight by holding dumbells in your hands. In a pinch, you could use an old rucksack filled with plastic bottles loaded with water or sand.

If you're doing chins or dips, you can hold a small dumbell between your feet or hang plates around your waist. Use either a dipping belt or a length of chain with a carabiner – you can purchase these cheaply from any good hardware store.

If you're doing push-ups, make these progressively harder by focusing on lowering your hands relative to your feet. Here's how that might work, from easiest to hardest.

Level 1: Push-ups with hands against a wall

Level 2: Push-ups with hands against the edge of a desk/table

Level 3: Push-ups with hands on a low bench

Level 4: Push-ups on the floor

Level 5: Push-ups on the floor with feet elevated on a low bench

Level 6: Push-ups on the floor with feet elevated on a table

Level 7: Push-ups while doing a handstand against a wall

The bottom line is we need to make each successive workout just a little harder than the one before by increasing the resistance we're working against. That's how we get stronger.

If we're still working against the same resistance next week, next month or next year, we're merely maintaining our strength, not improving our strength.

Small increments of progress are absolutely essential if we want to avoid spinning our wheels. And those small increments of progress really stack up.

Adding only 1 lb to an exercise once per week for a year means over 50 lbs of progress. Anyone who has become strong did it by a few pounds at a time.

Whatever you do, resist falling into the trap of trying to force progress by simply hammering yourself harder. Sure, more circuits, taking every exercise to failure, or working out six days per week may make you tired and sore.

But tired and sore doesn't automatically equal stronger. The only thing that equals stronger is being able to work against a greater external resistance.

Now, you may also find that using a bunch of different exercises for your PHA workouts makes it hard to judge progress. Variety may help to prevent boredom, but it means you don't have a consistent benchmark to compare against.

Fortunately, PHA is flexible, so if you want to keep using the same exercises that's not a problem. In fact, someone doing only the standing barbell press, barbell squat, and chin-ups (plus a cardio exercise) could keep making steady progress for many months as long as they gradually increase the weights they're using.

But at some point all of us outgrow exercise's ability to make us stronger. Remember how weight loss becomes increasingly hard as our body-fat levels drop?

Well, getting stronger works the same way. The further someone is from their ultimate physical potential, the faster and easier it is for them to get stronger.

So when they start out, pretty much any program will work. And their strength could increase by 10% or more in only a week.

But as they get stronger, it becomes increasingly hard to develop further strength. That's true for PHA and every other exercise program.

And how long it takes to run out this "newbie gains" period is specific to the individual. It could be six months, it could be six weeks. Everyone is different.

From then onwards, progress really has to be planned for. And that means *training*.

Now there's no harm in sticking with exercise and staying in maintenance mode. It all comes down to personal preference.

But maintenance tends not to be a very strong motivator. Progress is.

And there's some great news if you do decide to switch from exercise to training. It doesn't take any more effort than you've already been putting in, and in some ways it may actually be easier.

So let's see what the deal is.

Training 101

Strength is something we coax by progressively loading the body in a carefully programmed way. Ultimately, if we can't lift heavier stuff, we haven't become any stronger.

And, after the initial "newbie gains" period, strength improves only a few pounds at a time. We don't suddenly wake up one day and discover we can squat 315 pounds.

Now, it almost goes without saying that not all exercises are equally useful for making us strong. So we need to be careful to choose the exercises that give us the biggest bang for our buck.

And we want to keep things as simple as possible. Strength comes from steadily adding small increments of weight to a handful of basic exercises.

It doesn't come from making things unnecessarily complex or trying to use every piece of equipment available in the gym. So let's figure out what the most effective exercises are.

First off, we want zero barrier to entry. That means the same basic exercises can be used by everyone because the load is scalable to the ability of the individual.

In other words, the very same exercise can be done by both an unconditioned 60 year-old and the world's strongest man. The only thing different is the weight being used.

The weight also needs to be incrementally increasable so that we can make it slightly heavier this time compared with last. That could mean being able to add as little as 1-2% of the weight used.

This fine level of adjustment is way beyond important. *It's absolutely essential*.

Returning to our suntan example, let's say you stayed out in the sun for 15

minutes, and your skin went slightly pink. How long would you head out for next time?

Maybe 18 or 20 minutes, right? It would be just plain crazy to bump it up to a full hour.

Likewise, if you lifted 100 lbs last time, you might make it 105 lbs (or even 102.5 lbs) next time. It would be crazy to go for 135 lbs.

This is a perfect example of the Goldilocks effect. *Not too much, not too little*.

Too much will cause progress to come to a griding halt. While too little will simply drag out the process unnecessarily.

What should take a few weeks could end up taking months. And that's not the most productive use of our time.

As with weight loss, we want to make the fastest possible progress at a rate that's sustainable in the long term.

So, the exercises we choose should be both doable by everyone and easily loaded with small increments of weight. What else?

They also need to be performed the exact same way every time we do them. Increasing the weight used at the expense of safe and correct exercise form isn't genuine progress.

Finally, the exercises should use a lot of muscle mass and multiple joints through a large effective range of motion. All of these things are crucial.

So here's what it boils down to: we take normal human movement that uses multiple joints and a large range of motion. We then load that movement in a way that's repeatable, incrementally increasable, and scalable to the ability of the individual.

Now there are literally hundreds of different pieces of exercise equipment

available, so it may seem like we have a pretty wide choice. But unfortunately, that's not the case.

For example, dumbells may be just fine for *exercise*, but they aren't very effective for *training*. That's mainly because of the difficulty of loading them incrementally.

After all, a 25-lb dumbell can't easily be increased to 25.5 lbs next time (a 2% increase). The next available dumbells could be 27.5 lbs or even 30 lbs – which is way too big a jump to allow sustainable long-term progress.

It's like a 6 year-old kid finishing *The Cat In The Hat* and then opening a copy of *War and Peace*. That's too much, too soon.

There's no faster way for training progress to get stuck (and sloppy exercise form to be introduced) than by making weight increases that are too big.

Unfortunately, it isn't only dumbells that have this problem: the same is true for kettlebells, resistance bands, medicine balls and almost every other piece of equipment. Even bodyweight exercises and suspension trainers like the TRX aren't immune.

OK, we know that a push-up with the feet elevated on a chair is harder than one performed with the feet on the floor. And a handstand pushup is harder again.

But it's practically impossible to: 1. quantify what "hard" is, and 2. incrementally increase "hard" by 1-2% next time.

Of course, that doesn't mean it's *impossible* to get strong using some of the above. After all, gymnasts manage to do just fine on bodyweight exercises.

Then again, it helps that gymnasts invariably have a coach to manage the progressions, and yell at them if they slack off. We average Joes don't have that luxury.

The point is getting strong is challenging enough even under ideal circumstances. So we're better off avoiding all the distractions, and sticking with

what's been proven over decades.

We want to keep things simple and effective. And that means the humble barbell.

Sure, it may be old-school but there is no more efficient way to build useful whole-body strength, fast. Really, it's true.

Now this isn't because I have some weird devotion to barbells. After all, they're just a tool.

But the fact is some tools are simply more useful than others. If we could build strength more easily and effectively by doing something else, I'd be recommending that instead.

But the reality is nothing else comes close. So why is the barbell the best tool for the job?

It's scalable to the ability of the individual: This means the same basic exercises can be performed by all normally functioning people. The only difference is the weight loaded on the bar.

The load is incrementally increasable: A 20-lb bar can easily be loaded to as little as 20.5 lbs next time. No other exercise equipment can be incrementally increased with this degree of precision.

Exercise selection: Exercises like the squat, standing press, and deadlift have been the staple movements for getting men strong for over 60 years. These cannot be done anywhere near as effectively with any other equipment.

Skeletal loading: Bone health is a big deal as we get older, and the barbell provides the most convenient way to load the entire skeleton. A dumbell or kettlebell squat that feels challenging (because it's awkward) doesn't have the same degree of skeletal loading as a barbell squat that feels challenging (because it's heavy).

Now, there's nothing magical about barbells. Keep in mind that people get

strong the same way they get a suntan.

Apply a dose of stress (not too much, not too little), rest long enough for the adaptation to occur, then apply a little more stress next time so that successive adaptations accumulate. That's it.

Naturally, how strong we start out and the rate we get stronger at comes down to a bunch of factors that are unique to us as individuals. The same way we don't all suntan at the same rate or have the ultimate ability to turn the same color.

But the bottom line is barbell training works for everyone. It's simply the most effective tool we have for applying a finely controllable dose of training stress to the entire body.

OK, now we've established what the best training tool is, we just need to decide exactly which exercises we should do with it. So here's the criteria we're going to use:

1. The exercises need to use a large amount of muscle mass. The more muscle mass used, the more effective the exercise is for building strength.

2. The exercises should have a large effective range of motion (ROM). That means the bar moves a large vertical distance during each repetition.

3. The exercises should involve multiple joints. This goes hand in hand with points 1 and 2 – in general, more joints involved means both more muscle mass used and a greater effective range of motion.

4. The exercises should use a normal human movement pattern. This is one of the definitions of a functional exercise.

So, here are the exercises that best meet our criteria.

- **Squats**

- **Deadlifts**

- **Bench presses**

- **Standing presses**

- **Chin-ups (and alternatives – covered later)** (Instructional videos for squats, deadlifts, bench presses, and standing presses can be found **here**)

That's it. Just five basic exercises are required to build awesome whole-body strength, fast.

Of course, training isn't just about selecting the right equipment and exercises. We also need a tried-andtrue program that will allow us to make planned, measurable progress.

Think of it this way: if the equipment and exercises are the ingredients, then the program is the recipe. So both need to be on point.

The program's job is actually very simple. It must deliver a pre-determined and precise dose of training stress that can be recovered from in time for the next scheduled workout.

A little more stress can then be applied in that workout, so progress accumulates. A good program can keep this process running for many months.

Now, the program we're going to use is very simple and has proven itself over many decades. Its origin can be traced back to the late, great Bill Starr ("the father of modern strength coaching").

So let's get to it.

The Program

Workout A

Squat

Standing press

Deadlift

Workout B

Squat

Bench press

Chins (or alternatives)

OK, if you're anything like most folks, you're probably thinking "*is that all?*" But that's precisely what makes this one of the most effective training program templates on the planet.

The program is best performed twice per week alternating workout A and workout B, with either three or four days between workouts. That means a Monday/Thursday or Tuesday/Friday schedule will work fine.

Training only twice per week is ideal for us slightly older guys since it provides a bit more time for recovery between workouts. That's really important because we're operating on less testosterone and less sleep than we did back when we were 20 years-old.

Two days per week also allows us a bit of wiggle room for when life gets in the way. *Something came up, and you can no longer make Monday's planned session?*

Easy, just do the workout on Tuesday instead, and push Thursday's session back to Friday. Then it's back to normal the following week.

Now, this program may seem like there are way too few exercises. It's almost too simple.

That's because we tend to associate effectiveness with complexity. The more complex and confusing it seems, the more cutting edge and effective it's got to be, right?

But the reality is we're better off concentrating our efforts on the handful of basic movements that really deliver. We're *training* now and that means making things only as complex as they need to be for us to get results.

It also means sticking with the program as written, and not doing a bunch of extra stuff just for the sake of it. This is all about doing the minimum work required to get the maximum results.

Always keep in mind that doing more than the program calls for won't lead to faster and better progress. In fact, that's more likely to bring progress to a grinding halt.

As with sunbathing, more doesn't automatically mean better.

OK, for each exercise we're going to perform the following number of repetitions and sets. A set being simply a group of repetitions.

Squat: 5 sets of 5 repetitions (written as 5 x 5)

Standing press: 5 x 5

Deadlift: 5 x 5

Bench press: 5 x 5

Chins (or alternatives): 3 x maximum repetitions

Now, we'll be using a method called "ramped sets". This basically means we'll use progressively heavier weights for each of the 5 sets of each exercise.

This is a real advantage for us slightly older guys as it provides:

1. A more gradual warm up

2. More opportunity to practice correct movement

3. A shorter and more time-efficient workout

Here's how ramped sets might look for the squat. Warm-up set: Empty bar (45 lbs) x 5 repetitions

Set 1: 75 lbs x 5

Set 2: 90 lbs x 5

Set 3: 105 lbs x 5

Set 4: 120 lbs x 5

Set 5: 135 lbs x 5 (this set is known as the top set)

Here's how that works:

Weight of the 5th set (top set) = 135 lbs

10% of this weight = 135 x 0.1 = 13.5 lbs

To make it easier we'll round this up to 15 lbs

Which makes the 4th set: 135 – 15 = 120 lbs

And the 3rd set: 120 – 15 = 105 lbs

And so on

Assuming that you work out on Mondays and Thursdays, this means your exercises, sets, and repetitions will look like this.

Monday

Squat 5x5

Standing press 5x5

Deadlift 5x5

Thursday

Squat 5x5

Bench press 5x5

Chins 3x maximum repetitions

Now, the workout frequency, exercises, sets, and repetitions are all geared towards one thing. *Letting us add a little more weight to the exercises each time we work out*.

After all, lifting progressively heavier weights is what makes us stronger.

So each workout, we'll add 10 lbs to deadlifts, and 5 lbs each to squats, standing presses, and bench presses. We'll add this same weight to all five sets of each exercise.

OK, let's go back to our squat example and see what that would look like in practice.

Set	Weight x reps (Workout 1)	Weight x reps (Workout 2) – add 5lbs
1	75 lbs x 5	80 lbs x 5
2	90 lbs x 5	95 lbs x 5
3	105 lbs x 5	110 lbs x 5
4	120 lbs x 5	125 lbs x 5
5	135 lbs x 5	140 lbs x 5

As you can see, sets 1 to 5 are performed with increasingly heavier weights. The difference in weight being equal to around 10% of the fifth set's poundage.

Notice how 5 lbs has been added to each of the five sets. And we keep

everything else constant: the exercises, the number of sets, and the number of repetitions.

The only thing we're increasing is the weight on the bar. Each workout can then achieve two really important things:

1. It confirms that the previous workout made us stronger. That's because we're able to lift more weight this time compared with last.

2. It sets a further strength increase in motion. This increase will be realized in the next workout.

And that's exactly how progress accumulates.

The reality is you can keep this process going for many months, as long as you don't get greedy with the weight increases. Here's an example of the kind of strength increase you can expect from this program.

Add 100 lbs to your squat and deadlift Add 50 lbs to your standing press and bench press

...in only 12 weeks!

Now these aren't some theoretical figures plucked out of thin air. It's perfectly normal for the body to adapt this quickly when we give it the right stimulus.

The bottom line is this training program can make someone stronger in 12 weeks than they might get from a decade of exercise. And it doesn't just stop there – progress can continue for much longer than that.

Getting strong using these big, basic exercises also ensures that there are no "holes" in your strength. Everything from the neck downwards, from fingertips to toenails, will become stronger than you ever believed possible.

So let's take a closer look at how to do it.

Program Details

1. Figure out your starting weights

In the first "workout A" and "workout B" we're going to take it nice and easy. Remember, getting strong is a marathon, not a sprint.

It's not about how hard you go in the first 100 yards. What counts most is getting started and then maintaining sustainable forward progress.

So for each of the exercises, we'll start out with the empty bar for 2 or 3 sets of 5 repetitions to warm up. Then we'll add fixed increments of weight for the subsequent sets, again for 5 repetitions each.

In the first "A" and "B" workouts, the weight added will typically be 20 lbs for squats and deadlifts, and 10 lbs for standing presses and bench presses. Keep in mind that the first session's weights should feel only moderately challenging.

Don't worry – this workout will still be sufficient to drive progress. If you're not used to training, even this moderate stress will make you stronger in time for your next workout.

So in your first "workout A", continue to add small increments of weight each set (20 lbs for squats and deadlifts, 10 lbs for standing presses) until the fifth repetition of the set feels noticeably slower than the preceding repetitions. This will be the top-set weight that day.

Here's how someone's first "workout A" squat weights might look:

Empty bar (45 lbs) 3x5 (3 sets of 5 – all felt easy)

Add 20 lbs to the bar,

65 lbs 1x5 (all reps felt easy)

Add 20 lbs to the bar,

85 lbs 1x5 (all reps felt easy)

Add 20 lbs to the bar,

105 lbs 1x5 (5th rep was noticeably slower)

That makes 105 lbs your squat top-set weight for the first "workout A". Congratulations – your squats for the day are all done!

Now simply repeat this same procedure for the remaining exercises in "workout A": the standing press, and deadlift. For this first workout only, remember to use 10-lb weight increases for the standing press, and 20-lb weight increases for the deadlift.

Once you've established your standing press and deadlift top-set weights in the first workout, you're all finished. Just resist any temptation to do more – it's really not necessary.

Then 3-4 days later, you'll be doing your first "workout B". In that workout you'll use the same procedure to figure out your bench press starting weight (remember to use 10-lb weight increases).

Of course, you'll already know your squat weights for "workout B" as these are based on the top-set weight from your first "workout A". So let's take a look at that right now.

2. Figure out your second workout's weights

OK, the weights you'll squat in "workout B" will be based on the top-set weight from your first "workout A". Basically, you'll be performing five ramped sets with gradually increasing weights, with the top set being *slightly heavier* than in your first "workout A".

Let's assume that someone's first "workout A" squats had a top-set weight of 105 lbs. Here's how they would figure out the squat weights to use in the following "workout B".

Squat top-set (from first "workout A") = 105 lbs

Increase in weight = 5 lbs

This increase in weight is essential if we're going to get stronger. Simply repeating something we can already do will just maintain strength, not improve it.

So, this workout's top-set weight will be:

105 5 = 110 lbs

Now, to figure out the weight increase of the ramped sets, we take approximately 10% of this number.

110 x 0.1 = 11 lbs (which we'll round up to 15 lbs)

This means our five ramped sets of squats in this workout will be:

Set	Weight x reps
1	50 lbs x 5
2	65 lbs x 5
3	80 lbs x 5
4	95 lbs x 5
5	110 lbs x 5

Notice how the top-set weight is 110 lbs, and the four lighter ramped sets are each 15 lbs lower.

Now, this same principle applies to all the exercises.

1. Determine your starting weights in the first workout "A" or "B". Then the next workout where you perform the exercise, add a little more weight to the top set.

Remember, that's 10 lbs for deadlifts, 5 lbs for squats, standing presses, and bench presses.

This will give you your new top-set weight.

2. Then take 10% of this weight, and round up to the next 5-lb increment. So "11 lbs" would get rounded up to "15 lbs", and "8 lbs" would get rounded up to "10 lbs".

This rounded number gives the weight difference between each of the five ramped sets that you'll perform. Now, the great news is you'll only have to figure all this out once for each exercise.

Phew.

In subsequent workouts you'll be increasing each of the ramped sets by the weight increments bolded above. That means 10 lbs for deadlifts, and 5 lbs for squats, standing presses, and bench presses.

Here's how the next three workouts' weights would look for our squat example:

Set	Weight x reps	Weight x reps	Weight x reps
1	55 lbs x 5	60 lbs x 5	65 lbs x 5
2	70 lbs x 5	75 lbs x 5	80 lbs x 5
3	85 lbs x 5	90 lbs x 5	95 lbs x 5
4	100 lbs x 5	105 lbs x 5	110 lbs x 5
5	115 lbs x 5	120 lbs x 5	125 lbs x 5

It's simply a case of adding a fixed increment of weight to each ramped set, each workout. Again, that's 10 lbs for deadlifts, and 5 lbs for squats, standing presses, and bench presses.

And here's something very cool. Just notice how quickly the squat top-set weight from the first workout (which was 105 lbs) becomes one of the lighter ramped sets.

That's the magic of incremental progress.

3. What if I can't do chin-ups?

Chin-ups can be tough, especially if you're carrying a bit of extra bodyweight. Fortunately, there are some awesome alternatives.

If you have access to a lat-pulldown machine, this is a great option. Use a shoulder-width grip with palms facing towards you, and perform 3 sets of 8-10 repetitions.

If you don't have access to a lat-pulldown machine, inverted rows can be performed with a barbell set at squat height in a power rack. Again, 3 sets of 8-10 repetitions is a good number to shoot for.

Rows can also be performed pretty much anywhere by anyone if you have a suspension trainer like the TRX. Again, 3 sets of 8-10 repetitions works well.

Finally, chin-ups can be done with bands that assist the movement, especially the hardest part at the bottom where you're hanging with your arms straight. Bands are a great way to get used to the chinning movement while using assistance that's both quantifiable and adjustable.

They're also a great way to gradually build up to performing your first bodyweight chin-up in years, decades, or maybe ever. If that sounds good, you may want to check out the **RAGE Pull-Up Assist.**

Examples of the above exercises can be found in the "Upper-body Pull Exercises" video (**here**).

4. Always warm up

As the saying goes, *if you don't have time to warm up, you don't have time to work out*. And that's especially true for guys our age.

Your knees and shoulders will thank you for it.

An effective warmup prepares us both physically and mentally for the work ahead. And the good news is it doesn't need to be long and drawn out.

So how much warming up is necessary? Well, that really depends on a whole

bunch of factors that are specific to the individual and their situation.

A 35 year-old man working out in his garage at 3pm in mid-summer Florida doesn't need the same warmup as a 55 year-old man doing a 6am workout in his basement during a Minnesota winter.

A few minutes (say, 3-5) on a rower or stationary bicycle will provide a good general warm up. That works the knees, hips and ankles through a bigger range of motion than walking or jogging will.

Now, if no rower or stationary bike is available, just perform a few minutes of vigorous whole-body activity until you start to feel warm. For most folks that will be sufficient.

Then move on to the first exercise (squats) and perform two or three sets of five repetitions with the empty bar. That provides a very specific warmup for that movement.

Since we're training now, we know exactly what weights we'll be using for each exercise. So if your first ramped set is close to the empty-bar weight, you may not need any additional warm-up sets.

Just follow the empty-bar sets with the ramped sets. On the other hand, if you feel better performing an extra warm-up set, slide one in with a weight midway between that of the empty bar and the first of the ramped sets.

Here's what the weights could look like for someone squatting 165 lbs for their top set. Notice that we've included an extra warm-up set between the empty bar and the first ramped set:

Five minutes on rower

Empty bar (45 lbs) 2x5 (2 sets of 5 repetitions)

Warmup: 75 lbs x 5 (midway between 45 & 105lbs)

Set 1: 105 lbs x 5

Set 2: 120 lbs x 5

Set 3: 135 lbs x 5

Set 4: 150 lbs x 5

Set 5: 165 lbs x 5

Note: Ramped sets 1-5 are known as "work sets"

For subsequent exercises (standing press, bench press, etc.) there's no need to repeat the general warmup on the rower or bike. Just perform a couple of sets of five repetitions with the empty bar, followed by a warm-up set (as required), then go straight into your work sets.

If you're flexible enough to perform the empty-bar sets, it isn't necessary to stretch beforehand. The ramped sets will act as a highly specific, progressively loaded stretch for that movement.

5. Why we use sets of 5 repetitions

The weight we use for an exercise does more than just affect the number of repetitions we can perform. It also determines the adaptation that the body makes.

If we use weights that are heavy enough that we can perform few repetitions, we build strength. On the other hand, if we use weights that are light enough that we can perform many repetitions, we build endurance.

In other words, lifting heavy weights enables us to lift even heavier weights. While lifting light weights enables us to lift a light weight a greater number of times.

As we're focused on getting stronger, sets of five repetitions are ideal. They allow us to use enough weight to increase strength, while performing enough reps to practice technique without fatigue-induced "form creep" from rearing its head.

Just to be clear, this doesn't mean we perform five repetitions with a weight that we could probably get 12 or more repetitions with. It also doesn't mean struggling under a weight that's at the very limit of our ability, compromising safety and good form.

Work sets should be challenging, they should never feel easy. But they should also never feel impossible.

6. Rest periods between work sets

Rest as long as you need to get all five repetitions on all work sets. When you start out, you may find that 1-2 minutes is enough, but as you get stronger this could increase to 5 minutes or more.

As we know, the driver for strength gains is consistently adding small increments of weight to the bar. But we do that only when we've successfully completed all the reps for all the work sets as planned.

Keep in mind that nothing slows down progress like missing reps on work sets. And nothing makes missed reps more likely than resting too little between sets.

Don't be impatient, but don't be lazy either. Rest only as long as you need to get the planned reps for all the work sets.

Now at the beginning, your workouts may take only 30-40 minutes in total. And as you get stronger, they could end up taking still only an hour or so.

Two hours per week for the most dramatic strength gains you will ever experience is an incredible return on investment. No other activity comes close.

7. Rep tempo

In order to drive a strength increase we'll be working with top-set weights that make it a challenge to complete all five repetitions. Those weights will feel "heavy" – not impossible – but "heavy" nonetheless.

And here's a fundamental truth: despite well-intentioned advice such as "lower the weight in 4 seconds, then lift it in 2 seconds", *nobody has ever moved anything "heavy" while focusing on doing the movement slowly.* It's just not possible.

Anyone that has had to push their car for any distance has experienced this firsthand. Try pushing your 3500lb sedan as fast as you can over 10 yards, and see what happens.

Even though you're trying to move it quickly, it will actually move very slowly. OK, next try pushing it as *slowly* as you can over 10 yards.

Now the chances are it won't even budge. The reality is that with heavy weights the speed of the repetition is pretty much dictated by the weight loaded on the bar.

The intention should be to lift the weight quickly in a smooth and controlled way. Now even if the bar doesn't end up moving quickly, that's fine.

But without the intention of speed, it's unlikely to move at all.

8. The Valsalva maneuver

Now, when you hunkered down to push your car, what was the last thing you did before you tried to get it rolling? *You took a huge breath and held it.*

This is known as the Valsalva maneuver, and it helps to turn your trunk (not the car's) into a rigid cylinder that can effectively transmit force between your feet on the pavement and your shoulder against the door frame. The Valsalva maneuver also happens to be your best friend when it comes to protecting your back against injury.

That applies to any task that involves lifting something heavy or awkward – whether it's taking your child out of their car seat or hoisting your mountain bike into the back of the truck. *Always lift weights with a big breath held.*

Try watching a mom pick up her child: she'll take a quick breath, hold it, and

lift him/her up just as fast as she can. That's a real-world demonstration of both effective rep tempo and the Valsalva maneuver.

9. Smaller weight increases

Eventually the law of diminishing returns starts kicking in. The stronger you get, the slower the rate of further strength increase.

Sometime down the track, 10-lb jumps in the deadlift will need to drop down to 5 lbs. And 5-lb increases in the standing press and bench press will need to be reduced to 2-3 lbs, or even less.

The exception to this is the squat. Keep moving up in 5-lb increments as that was a fairly conservative increase from the outset.

Don't be discouraged by any perceived slowdown in improvement. After all, progress is progress, and even a 1 lb per week improvement in your standing press still adds up to over 50 lbs in a year.

Being greedy with the weight increases is a surefire way for progress to hit a brick wall. So be prepared to make haste slowly.

10. The importance of mindset

At some point this program ends up being almost as mental as it is physical. As with pretty much anything, having the right mindset is essential for continued progress.

If your mind is filled with doubt, it means you're preparing to surrender to the weight at the exact time when you need to be dominating it. But the great news is that doing the program will build focus and confidence, and help forge an iron will.

Trying to get all five reps on a work set, seeing how it goes, or unracking the bar and thinking how heavy it feels today have no place in this program. Commit to making all the repetitions – after all, it's only a few pounds heavier than last time.

Take on the weights with controlled aggression. And when you succeed, you'll be that much stronger.

This is how training builds mental toughness. The body follows the mind, and the ability to control your mindset is where success or failure is ultimately decided.

Things like positive visualization, loud music, and caffeine can help here. Research has even found that watching erotic, aggressive, or "training motivational" videos can increase subsequent strength-training performance [103].

11. What happens when you miss a rep?

If you start missing reps on your work sets, the first thing to do is make sure you're resting long enough between sets. Bumping up the rest time by a minute or two is usually all it takes to restore progress.

As we know, the other thing to avoid is getting greedy with the workout-to-workout weight increases. Even if you felt like Superman during Tuesday's squats, resist the urge to add an extra 20 lbs to the bar for Friday's session.

Stick with the prescribed 5-lb increase. That way you'll still make all the repetitions even if it's Clark Kent who shows up that day.

But let's say one day you just can't make all the repetitions on your top set. You've done nothing wrong – life just gets in the way sometimes.

Poor sleep, travel, illness or a lack of quality food can all take their toll. So let's look at an example where you bench pressed 135 lbs for your top set, but didn't make all five repetitions.

Now, the golden rule is:

Don't increase the weight on the bar the next time you do that exercise

Remember, we earn the right to add weight each workout by first completing

all the reps for all the work sets. So, next time you bench press, repeat all the work sets using the same weights as the previous workout.

After you complete set 4, rest a full 5-7 minutes before tackling set 5 (the top set). You should then be able to complete all five reps with 135 lbs.

If you do, reduce the bench press weight increases to just 2-3 lbs each time from now onwards. That way progress will be restored as fast as possible.

On the other hand, if you again don't make all five reps for your top set, repeat all the work sets with the same weights in your next bench press workout. If you make all five reps for your top set in that workout, you then increase the weight by 2-3 lbs each time you bench press.

But what happens if you still don't make all the repetitions? In that case, you should *deload by approximately 10%* the next time you bench press.

So instead of using 135 lbs for your top set, you reduce the weight by 15 lbs to make it 120 lbs. You also drop 15 lbs from all the other work sets.

Then you work back up, adding 5 lbs to all the work sets each time you bench press. Within a few weeks, you're back at 135 lbs – this time you'll blast through it as the deload allowed you some extra recovery while rebuilding the momentum.

Here's how the **top sets** over 10 consecutive bench press workouts could look:

135 x 3 (didn't get 5 reps - strike one)

135 x 4 (didn't get 5 reps - strike two)

135 x 4 (didn't get 5 reps - strike three)

120 x 5 (approx. 10% deload for all work sets)

125 x 5

130 x 5

135 x 5 (from now on add 2-3 lbs to all work sets)

137 x 5

140 x 5

142 x 5

In a nutshell, you get up to three strikes with each top-set weight. If you don't make all the reps for three consecutive workouts, you deload by 10%.

Then, once you've built back up to the weight you stalled at, you reduce the weight increases. That means 2-3 lbs for standing presses and bench presses, and 5 lbs for deadlifts.

12. Back-off sets

Now, the most likely reason for stalled progress is inadequate recovery. That's particularly true for guys our age.

Lack of quality sleep, food or rest means that we haven't got sufficient resources available to adapt to the stress of the previous workout. So progress grinds to a halt.

But there's another reason why progress can stall. That's if we haven't provided enough stress to cause an adaptation in the first place.

Remember, the stronger you get, the harder it is to get even stronger. More effort is required for a smaller absolute result.

So, if you're stalling repeatedly, first look at improving your recovery. Make sure you're sleeping enough, eating properly, and getting in sufficient protein.

And if that doesn't get progress back on track, we'll need to look at slightly increasing the training stress. That's where back-off sets come in.

Let's go back to the bench press example. We'll assume that you've already deloaded, but still can't get five repetitions with a top-set weight in excess of 155 lbs.

So, once you've completed all your work sets, we'll add in a back-off set. This back-off set is basically a repeat of set 4.

Here's how that works:

Set 1: 95 lbs x 5

Set 2: 110 lbs x 5

Set 3: 125 lbs x 5

Set 4: 140 lbs x 5

Set 5: 155 lbs x 5

Back-off set: 140 lbs x 5 (same weight as set 4)

Next time you bench press, you'll do:

Set 1: 97 lbs x 5

Set 2: 112 lbs x 5

Set 3: 127 lbs x 5

Set 4: 142 lbs x 5

Set 5: 157 lbs x 5

Back-off set: 142 lbs x 5 (same weight as set 4)

Now, back-off sets don't follow any hard-and-fast rules. They're just a good way to get in a controlled amount of additional training stress.

One (or perhaps two) back-off sets with the same weight as the 4th work set is a good rule-of-thumb. But dialing in the right amount of back-off work requires a little trial and error.

Judge its effectiveness by the results you're getting. If the top-set weight is increasing again, you're doing enough back-off work.

But if the top-set weight isn't increasing, you may want to think about adding in a second back-off set.

13. Dialing heavy squats back to 1x per week

At some point, squatting heavy twice per week will become too much to recover from. At that point (or, ideally, just before it) it's a good idea to dial heavy squats back to just one workout per week.

Let's take another look at the basic program:

Monday (workout A)

Squat 5x5

Standing press 5x5

Deadlift 5x5

Thursday (workout B)

Squat 5x5

Bench press 5x5

Chins 3x maximum repetitions

When you decide to squat heavy just once per week, make "workout B" the heavy squat day, and "workout A" the light squat day. Doing light squats that day will keep you fresh for deadlifts, while allowing you to practice the squat movement pattern and get in some active recovery.

So, how light should "light" be? Something like 70-80% of the "heavy" day top-set weight.

For us that means simply repeating the first three work sets of your last heavy-day squat workout. Here's what that could look like.

"Workout B" (last heavy-day squat workout)

Set 1: 105 lbs x 5

Set 2: 125 lbs x 5

Set 3: 145 lbs x 5

Set 4: 165 lbs x 5

Set 5: 185 lbs x 5

Workout "A" (light squats – repeat sets 1-3 above)

Set 1: 105 lbs x 5

Set 2: 125 lbs x 5

Set 3: 145 lbs x 5

The next heavy-day squats ("workout B") are then:

Set 1: 110 lbs x 5

Set 2: 130 lbs x 5

Set 3: 150 lbs x 5

Set 4: 170 lbs x 5

Set 5: 190 lbs x 5

The next light squats ("workout A") are then:

Set 1: 110 lbs x 5

Set 2: 130 lbs x 5

Set 3: 150 lbs x 5

The light day should feel easy. Just enough weight to keep the movement pattern fresh, but without inducing unwanted fatigue.

For us older guys, having a light squat day can make a huge difference to recovery and continued progress. So don't be afraid to take advantage of it.

14. Recovery

While deloads and light squat days are important tools to have available, the longer we can delay using them, the better. The importance of recovery shouldn't be underestimated.

Remember that we don't get strong by lifting weights, we get strong by recovering from lifting weights. And as we get older, the ability to recover from pretty much anything tends to head south.

Naturally, we have more control over some factors than others. Work and family commitments may really put recovery in the toilet – don't expect to set many PRs (personal records) if you have a new baby in the house.

But staying up until 2am watching TV or surfing the Internet isn't a good idea if you want to make consistent long-term progress with getting stronger. You don't have to live like a monk, but just keep in mind that you're not 18 anymore.

Missed reps can be caused by poor sleep, a lack of quality food, or one too many glasses of wine the night before. Sleeping and eating well are two of the simplest and most effective things we can do to get progress back on track.

Just because there are endless things we don't have much control of (business trips, overtime, kids), we shouldn't ignore the things we can control. We all have limited physical resources, so we need to make the best use of them that we can.

15. Personal equipment

There's no need to buy expensive "cutting edge" workout clothes. A pair of sweat pants or shorts made from a stretchy material, and a plain cotton t-shirt will work as well as anything.

The one place it is worth spending money on is shoes, since the majority of the exercises in this program are performed while standing on the floor. The importance of appropriate footwear can't be overstated.

Your workout shoes should have an incompressible sole and a low effective heel height (around 0.5-0.75 inches). Running shoes won't cut it – that's a bit like trying to squat while standing on a mattress.

Although Converse's Chuck Taylor shoe is a reasonable halfway house, your best bet is to invest in a pair of proper lifting shoes. One workout in them will be all it takes to convince you that it was money well spent.

My personal favorite is **Nike's Romaleos 2**. They make it feel like your feet are bolted to the floor.

A bit further down the track, you may want to think about getting hold of a decent lifting belt. A 4" wide belt works well for squats and presses, and a 3" wide belt is usually preferable for deadlifts.

Finally, while lifting gloves aren't necessary, chalk definitely is. It keeps your hands dry and allows you to have a better grip on the bar.

If your gym doesn't allow conventional chalk, you may want to try a bottle of liquid chalk as an alternative.

16. Eating for strength gain

If you're getting stronger while losing weight, be extra careful to consume sufficient protein. Remember, one gram of protein per pound of bodyweight per day is a good figure to aim for.

On the other hand, if you actually want or need to *put on* weight, increase your daily calorie consumption by 300 Calories at first (again, while consuming sufficient protein). Keep an eye on the scale weight and how your pants feel around the waist.

If there's no change in 1-2 weeks, increase daily intake by a further 300 Calories. When your scale weight increases and/or your pants start feeling a little snug around the waist, you know that you're in a caloric surplus.

This is exactly what skinny guys need for growth.

Now this doesn't mean you need to get fat. It does mean there's a balancing act between consuming enough calories to support training, recovery and growth while minimizing unnecessary fat gain.

Like so many other things, that balance is unique to the individual, and finding it requires some trial and error. Increasing intake in steps of 300 Calories is a good way to find your own sweet spot.

Regardless of whether you're looking to lose weight or gain weight, it's not a good idea to train on an empty stomach. Consuming 40 grams of whey protein both an hour before and after training will help with recovery.

This shouldn't be regarded as optional. We older guys need all the help we can get.

17. Supplements

The reality is 99% (or more) of the supplements out there are simply a waste of money. Well-controlled studies consistently show that the slick marketing claims fail to hold water out in the real world.

Out of the countless products available, only a handful are worthy of your hard-earned cash. Those are:

Whey protein

Actually more a food than a supplement, whey protein allows us to hit our daily protein intake target without breaking the bank. Unless you consume massive amounts of lean animal protein at every meal, whey protein is an absolute must.

A multivitamin/mineral

While the jury's still out on this one, it's a good idea to take a cheap daily multivitamin/mineral as an insurance policy. Just keep in mind that this shouldn't be seen as an alternative to consuming a nutrient-rich diet.

Case in point, the six-a-day study back in 2005 showed how an intake of fruit and vegetables has health benefits beyond the known minerals and vitamins that they contain [104].

Creatine monohydrate

Perhaps the only supplement that comes anywhere close to living up to the hype. It provides a range of health benefits in addition to boosting power output.

Fish oil

A good general health supplement, especially for folks who consume little, if any, oily fish.

No other supplements are worth spending money on, regardless of what the advertisements may claim. I've wasted many thousands of dollars finding this out the hard way.

18. How strong can this program make me?

For a physically normal male in his 40s, this program can typically lead to the following numbers:

1.5 x bodyweight squat

1.75 x bodyweight deadlift

0.7 x bodyweight press

1 x bodyweight bench press

To put these numbers into some context, that would make him stronger than the vast majority of commercial gym goers anywhere in the world. Not too shabby for a few months of effort.

Now these numbers aren't carved in stone. The reality is some folks may exceed them easily while for others it may be more of a challenge.

As much as anything, we want to keep away from the idea that a bodyweight squat or deadlift, or a 135lb bench press are really pushing the envelope. If we create that kind of self-imposed limitation, we'll underestimate our own ability and end up aiming low.

The bottom line is that if we're steadily adding small increments of weight to the bar, we're making measurable progress. And sustained measurable progress is really all that matters.

Now, it's worth keeping in mind that while we can't all expect to make progress at the same rate (or to the same ultimate degree), the method for making progress is always the same. So don't compare yourself with other people, compare yourself against how good you could be.

Accept the fact that demanding workouts are never going to feel light or easy. You just get stronger.

And, unless you're already strong, the best way to make a bodyweight squat feel light is to build up to a 1.5x bodyweight squat. Ultimately, "heavy" and "light" is all relative.

19. How long can I stick with this program?

As a basic template, you could stick to this program and make continued strength gains for many months. *If it ain't broke, don't fix it.*

But it won't work forever – no program will. The stronger you get (and the closer you come to your ultimate physical potential), the more specifically the program has to be adapted for you as an individual.

Fortunately, you'll have a much better instinct for how your body responds after you've done the basic program for a good few months. Not only will you then be stronger than most men on the planet, you'll have also developed a good practical grasp of the key training variables: volume, intensity, and frequency.

Manipulating those is the key to further progress. Not adding in a bunch of new exercises or making things needlessly complex.

20. Can I do more?

While it may be tempting to add in a whole bunch of other stuff, it's best to stick with the program as written. That way your precious recovery ability is dedicated to getting you as strong as possible, as quickly as possible.

But if you absolutely can't live without some conditioning work, it's best to do it the day following training. Do the minimum intensity and minimum volume that keeps you happy.

Going for a hard 5-mile hill run the day before training is never a good idea.

Let's keep in mind that if you're not already strong, focusing on getting stronger will do so much more for your endurance than conditioning will. Improved conditioning is like fitting your car with a larger gas tank, while

increased strength is like fitting a bigger engine.

21. Are five exercises really enough?

The program uses the five basic exercises that are the most useful for building general, whole-body strength. For over 100 years, genetically-blessed individuals like Reg Park, Doug Hepburn and Bill Starr have used them to build almost superhuman strength.

Now that doesn't mean they work only for the genetic elite. They work for everyone, just to different degrees.

Other exercises are simply nowhere near as effective – if they were, they'd be in the program. And adding a bunch of unnecessary movements would just dilute the program's overall effect.

Now some folks may argue that these exercises don't work the body in specific movements, such as rotation. But that ignores the fact that these five exercises make all the muscles of the body strong, including the ones that produce rotation.

How? Because the muscles that produce rotation work incredibly hard to stabilize the body and *prevent* rotation during these exercises.

Consistently adding small increments of weight to squats, deadlifts, standing presses, and bench presses makes all the muscles involved in them progressively stronger. That's the case regardless of whether those muscles are involved in generating movement or preventing movement.

This new-found strength can then be displayed when you perform rotation or any other kind of movement. Whether that's a golf swing, a tennis serve or a roundhouse kick.

22. Don't my muscles need to be confused?

We've all heard of this one, and it makes no sense at all. Let's just think about it for a moment.

If we want an adaptation that leads to a specific result – get stronger, speak French or play the guitar – the last thing we need is confusion. We want to do things that yield a progressive, quantifiable result in the direction we want to head.

"Confusing" our muscles through intense, random exercise may make us tired and sore, or feel like we've been pushed through a cheese grater by a steamroller. But that doesn't automatically equal progress.

Generating massive amounts of physical stress shouldn't be the objective, getting the desired results should. The physical stress is just a means to an end.

We don't need to "confuse" our muscles into getting strong any more than we need to "confuse" our skin into getting a suntan.

23. Can I use machines?

Every day we move in three-dimensional space using an incredibly complex system of muscles, joints and nerves to apply force to the outside world while balancing on our feet. All this training program does is take that a step further by adding an incrementally increasable load.

If a machine is taking care of the balance aspect while dictating the path through which the load moves, we're not training to be functional out in the real world. We're practicing getting better at using that machine.

Now machines *can* have a place. If someone is so unconditioned that they can't perform a bodyweight squat (without a bar), a machine like the leg press can be a good way to build up enough strength so that they can.

Likewise, a lat-pulldown machine can be a good halfway house for someone who isn't yet able to perform a chin-up.

But in general, if you're able to perform a movement with a barbell (even if it's just the empty bar), don't waste time with machines. Machine-built strength can end up translating to real-world weakness.

Research has actually found that while barbell training strengthens the muscles that stabilize a movement, that fundamental benefit is lost when a similar movement is performed using a machine [105].

24. How about training on an unstable surface?

These days it's become fashionable to exercise on an unstable surface. Head into almost any gym and you'll see folks perched on rubber balls, balance boards or whatever else is currently the rage in California.

The basic idea is that doing a squat while standing on a rubber ball makes the movement more difficult. With the assumption being that "more difficult" has to mean "more effective".

Unfortunately, "more difficult" doesn't automatically mean stronger. In fact, a study on elite athletes found that 10 weeks of unstable surface training yielded less performance improvement than the same training performed on a stable surface [106].

The bottom line is if you want to get strong, use the exercises that most effectively allow you to develop whole-body strength. That new-found strength

can then be applied to whatever activity you choose through practice or participation *in the activity itself*.

Put it this way, a speed skater wouldn't perform squats while wearing his blades. At the very least he'll be picking up some bad habits – squatting more tentatively being one of them – and at worst he's setting himself up for a nasty injury.

He's better off developing general strength by squatting on a stable surface, and then using skating practice to develop the balance, coordination and other skills specific to his sport.

25. Finding a good role model

Genetically-blessed people manage to get strong doing some of the goofiest stuff imaginable. It's then easy for genetically-average folks like you and me to start thinking that all the goofy stuff will be effective for us, too.

But the reality is the genetic elite often get strong *in spite of* what they do rather than *because of* what they do. Unfortunately, we aren't able to get away with that, so they're the last people we should be taking training advice from.

They simply can't comprehend what it's like to be normal or average. For example, word has it that the 13 year-old Mike Tyson bench pressed 250 lbs a dozen times *the first time he ever touched a weight*.

Mike Tyson can't comprehend what it's like to not be strong. And he can't appreciate the effort or the process it takes for someone to go from a 110-lb bench press to a 225-lb bench press.

Now it's tempting to believe that naturally strong people know some secret or method that will fast-track regular folks into being just as strong as them. But that's just plain wrong – it's like assuming LeBron James or Yao Ming know how to make a short person tall.

Ultimately, the best role model for us is the average person who worked hard to get good, not the genetically-blessed person for whom merely good came

naturally.

26. Don't waste precious time stretching

Stretching may just be one of the most misguided things that we can spend time doing. The problem is we've all been conditioned to believe that stretching is always good, and something we should all be doing more of.

But here's the deal, if you can get into all the positions required for daily life, recreation, and sports, your flexibility is already perfectly adequate. And taking the effort to increase flexibility beyond that isn't likely to be time well spent.

It may even do more harm than good.

The authors of a 2013 review in the *Strength and Conditioning Journal* did a comprehensive takedown of the claimed benefits of stretching [112]. Among their conclusions:

"...one would be wise to question the relevance and effectiveness of stretching in sport, particularly stretching for recovery.

Possibly the most heretical remark to make about stretching is to suggest that the dedicated use of stretching sessions may not even be necessary, especially since many athletes dispense entirely with special stretching or even warm-up sessions before or after training without suffering injury in training or competition."

The bottom line is don't automatically assume that you need to stretch. Ramped sets act as very specific loaded stretches for the exercises themselves.

If you find that some stretching is beneficial for certain movements (as it may be for some folks), then go right ahead. But do only the minimum necessary – as always, more doesn't automatically mean better.

Wrapping It Up

Testosterone

As we mentioned way back at the beginning of the book, testosterone levels start to slide by around 1% per year once we head into our 30s. This can result in a loss of muscle mass and strength, reduced libido, decreased bone mass, fatigue, insomnia, and depression.

Now that's a pretty grim list, so it almost goes without saying that we want to keep testosterone levels as high as possible. But the reality is there's very little evidence that we can do much to boost testosterone, beyond simply looking after ourselves.

Eating a good diet

Maintaining a healthy level of body fat

Minimizing alcohol consumption

Getting adequate sleep (8 hours per night)

Minimizing stress (often easier said than done)

Performing progressive resistance training

And while resistance training has not been shown to increase long-term testosterone levels, it is by far the best tool we have to reverse the age-related decline in strength and muscle mass. Use the program in this book and it's completely possible for you to become stronger in your 40s or 50s than you were in your 20s or 30s.

When it comes to diet, body-fat levels, stress, and sleep, most of us have plenty of room for improvement. And the answer is almost always better found in the simple rather than the complex.

Follow the advice in this book and your testosterone levels are almost certain to increase. But the same thing can't be said for expensive and over-hyped "testosterone boosting" supplements.

While supplementing with zinc, magnesium and vitamin B6 is frequently advertised as an effective way to naturally increase testosterone, there's something you need to know. *That works only if you're deficient in those things to begin with.*

Consuming amounts in excess of correcting a deficiency will do little for testosterone levels. Effectively, you'll be flushing your money down the toilet [107].

Likewise, "testosterone boosters" such as tongkat ali, tribulus terrestris, and nettle root extract have not been found to live up to the marketing hype [108], [109]. Now this shouldn't really come as a surprise.

If they were effective, they'd need to be classified as prescription drugs instead of being on sale at *The Vitamin Shoppe*.

But there is some good news if you have a thing for tofu or soy sauce. The idea that soy products reduce testosterone levels is just a myth.

A meta analysis (basically a big study that looked at a bunch of other studies) back in 2010 concluded that soy foods don't alter testosterone levels in men [110].

Now if you are doing everything you can to look after yourself, but symptoms of low testosterone (lethargy, depression, reduced libido, and so on) still persist, the best thing to do is talk to your doctor. While testosterone replacement therapy isn't without risk (like everything else), you may decide that the improvement in your immediate quality of life is worth it.

So don't suffer in silence.

Is there a magic food, supplement or workout that can melt off body fat quickly and easily?

Unfortunately, no. Anyone who has ever lost weight did so because they opened up and maintained an energy deficit.

That's *always* the case. No matter how strongly they may believe that they didn't, and that their weight loss was all down to something else.

Here's the deal: no person in history has ever lost weight by consuming more energy than their body expended. And that's a really good thing.

Why? Because if it was possible to eat yourself thinner, we'd all have big problems.

For starters, none of us would have a clue about how much we should be eating. The idea of eating yourself thin is rather like trying to spend your way to incredible wealth.

The bottom line is it's way easier to consume energy than it is to expend. Think how fast you can fill your car with gas, and then think how much time it takes to drive around and burn through it.

Fueling our bodies works the same way. That's why we can spend only 30 minutes or so eating each day, leaving plenty of time for more productive stuff.

And if you've ever wondered how much fat a "10-minute fat blast" workout can actually burn through, here's your answer.

Even if you sprinted at 40-yard dash speed for the entire 10 minutes, you'd burn little more than 2 oz of fat. That's a few tablespoons of peanut butter.

Remember that it's not about those titanic efforts we do only occasionally, it's all the small stuff we do regularly that makes a big difference.

I'm big boned/can't lose weight

Anyone can lose weight – remember that nobody left the Minnesota Experiment fat [76]. Of course, that doesn't mean some folks don't find it harder than others.

Some people put on fat more easily, the same way some folks put on muscle or get strong more quickly than others. Or some get a nice golden tan while others turn the color of a freshly plowed field.

Welcome to the dice roll that is genetics.

But while genetics loads the bullets, it's the environment that pulls the trigger. We're not just hostages to our genetic fate – all of us can get leaner and stronger if we consistently apply the principles contained in this book.

Don't get distracted by pointless details

Some guys may really get off on understanding how their car's braking system works. But understanding the theory may not translate to practical benefit.

Knowing all about pedal ratios and friction coefficients won't slice any meaningful time off your morning commute to the office. Theoretical advantages easily get lost in the background noise of the real world.

The Internet is full of folks scaremongering about things like insulin, fructose, the glycemic index and whether sweet potatoes are "better" than white potatoes. All majoring in the minors.

Even diabetics have been found to do well on a range of different diets including low-carbohydrate, low GI, high-protein, and Mediterranean [111]. The researchers concluded that:

Dietary behaviors and choices are often personal, and it is usually more realistic for a dietary modification to be individualized rather than to use a one-size-fits-all approach for each person. The diets reviewed in this study show that there may be a range of beneficial dietary options for people with type 2 diabetes.

Right now there are people happily losing weight while eating foods that other folks swear are the very things that are making us fat. Always keep in mind that it's meaningless to claim something is "healthy" or "unhealthy" without knowing the amount that's being eaten or the context in which it's being consumed.

The final word

The reality is getting in shape is nowhere near as complex as the health and

fitness industry would have us believe. Guys have been getting strong and lean way before the Internet, infomercials, and Men's Health come on the scene.

The same basic principles that make us lose body fat, build muscle and get stronger apply to every one of us. Sure, that doesn't mean we'll all make progress at an identical rate, or to the same ultimate degree.

But if you follow the principles in this book, you'll be looking at a very different person in the mirror a few weeks and months down the track. The bottom line is all of us can improve, no matter what age we start, or what disappointments or setbacks we may have had in the past.

We're not promising shoulders like Jason Statham or abs like Bruce Lee. We want you to be so much more than that – the best version of yourself.

So eat right, train right, rest well, do work that you love, and spend as much time as you can with your kids. That way you'll no longer be just a dad.

You'll be a **super fit dad.**

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