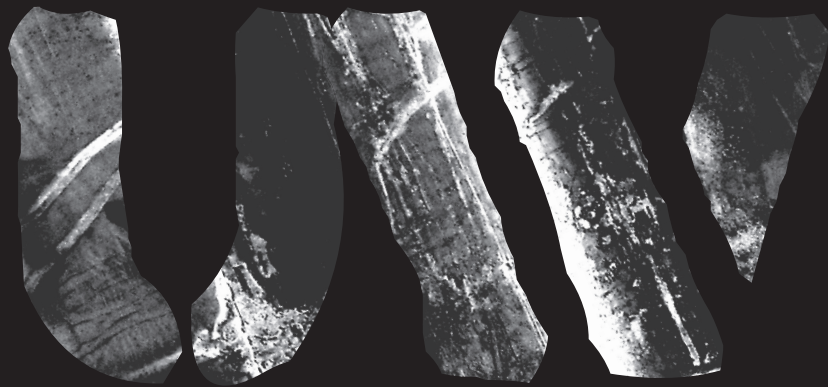


THE DARK SIDE OF FAT LOSS

Lessons from the Underground



SEAN CROXTON

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ABOUT THE AUTHOR

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CHEK Certified Holistic Lifestyle Coach

Functional Diagnostic Nutritionist

The word most often used to describe Sean Croxton is PASSIONate! This passion comes from a lifelong love of fitness and health and a dream to revolutionize the way THE WORLD thinks about health. Recognizing the failures of health care, Sean promotes the concept of self care. In order to regain and/or maintain superb health, we must become more responsible for ourselves.



After graduating from San Diego State University in 2001 with a Bachelor's in Kinesiology (emphasis: fitness, nutrition, and health), Sean began his journey as a certified personal trainer. Despite his extensive education in health, he was met with much failure as clients got heavier and sicker. Client programs consisted of endless cardio and the horrific Food Guide Pyramid. Rather than accept defeat, Sean took his failures as an opportunity for growth. He has since spent thousands of hours educating himself on the many truths that eluded him throughout his formal education, often joking that he got his Master's from Amazon.com.

Sean works from his home office in San Diego, CA. He takes a holistic, functional approach to rebuilding health from the ground up and is solely concerned with uncovering the **root cause(s)** of health challenges. The focus is on **FUNCTION**. Identifying and repairing malfunctions in the hormonal, digestive, detoxification, and immune systems is the key to regaining health. The goal is to restore the body to the balance and harmony it was intended to enjoy.

Sean is spreading the word about real food and true health by way of various social media outlets, including his [blog](#), the [Underground Wellness Radio show](#), [YouTube](#) channel, and internet TV show on the Healthy Power TV network.

SHOUT OUTS!

This book has been a long time coming. It's something I've wanted to do for at least 7 years, long before Underground Wellness ever came about. I can't believe it's finally done and in your hands. (Or on your screen!)

These past five years have been a heck of a ride. I am honored and privileged to have met and spoken with so many experts in this fascinating field of real health and fitness. It has been more than a pleasure connecting with so many Undergrounders from literally all over the world via email, [Facebook](#), [Twitter](#), and Skype. The internet is an amazing thing! I appreciate your support more than you will ever know. This book would not have been possible without each and every one of you.

Please allow me to extend a special thank you to a handful of people who have played a special role in making Underground Wellness what it is today and will become in the future. I'm sure I will forget a few people. My apologies, in advance. Here goes!

Patricia Lopez and Fred Croxton, for bringing me into this amazing world.

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INTRODUCTION

Yo! What's Up, Y'all!!

“The first problem for all of us, men and women, is not to learn, but to unlearn.”

- Gloria Steinem

We just don't get it.

They say the definition of insanity is doing the same thing over and over again and expecting a different result.

When it comes to fat loss and health care, I'd say we're downright certifiable.

How many calories can we count?

How many miles can we run?

How many "burn fat in 5-minutes-a-day" infomercials can we watch?

How many times can we lose it and gain it all back, only to do it all over again while counting the same calories, running the same miles, and sweating to the same DVDs?

Madness, I say!

If I were a cynic I would just chalk it up as a hopeless state of affairs and move on with my life. I definitely wouldn't spend several months of my life writing a book about it. Believe me, I would much rather be nerding out reading some obscure research on the beta-oxidation of fatty acids in hibernating squirrels. Now *that's* what I call a good time.

Someone has to do it. It may as well be me. Actually, I'm more than happy to write a manifesto on why you can't fit into your jeans. But I only agree to do this on one condition: that you forget everything you *think* you know about diet, health, fitness, and fat loss and have an **open mind** to what you are about to read.

Do we have a deal?

If you are attached to the idea that fat loss is simply a matter of calories-in and calories-out, or that saturated fat will make your heart stop, you may want to prepare yourself in advance for a few bouts of cognitive dissonance. I guarantee it's going to happen. You're human. It's what we do. And it is this unfortunate expression of human nature that has us in the big fat mess we're in.

This book is nothing but the honest truth. If you can't handle it, I'm cool with it. You can just jump right back on that treadmill for another hour. You can wake up tomorrow, step on the scale, and feel bad about yourself yet again. You can keep ignoring the animalistic growls roaring from your belly. They're only your body's way of telling you it needs food. No big deal. You know what's right for you.

I can relate. I've been there. I willingly subjected myself to those daily brainwashing sessions

called university nutrition courses. I walked across the stage at graduation thinking I knew all there was to know about fitness, nutrition, and health. In hindsight, I didn't know jack. I wasn't a college graduate. I was a representative for the processed food industry. You couldn't tell me anything I didn't already know. And if you did, I would have called you a quack and handed you my well-highlighted *Perspectives in Nutrition* textbook.

If I wasn't handing you an overpriced 5-pound book of nonsense, I was directing you to the USDA's website to get familiar with their Food Guide Pyramid. High in carbs and low in fat, it protected us from the evil forces of bad cholesterol, heart disease, and obesity. The government said so. And we all know the government knows what's good for us.

I'm embarrassed for being so naive. I feel worse about the fact that a lot of really nice people paid me really good money to help them reach their health, fitness, and fat loss goals while following my instructions to devour up to 11 servings of grains and starches a day. I recommended that they replace *supposed* artery-clogging butter with *really* artery-clogging margarine. I had them take the skin off the chicken and the yolks out of the eggs. I even encouraged them to get off the cow's milk and replace it with soy. Whoops.

My bad.

As horrendous as my dietary recommendations were, my approach to personal training may have been worse. I promised my clients speedy fat loss and gave them, well, cardio. Brutal cardio! I can recall the "calorie sign-in sheets" I had posted in my office. Each week, clients were commanded to come in and burn as many as 7,000 calories on their cardio machine of choice. A 7,000-calorie deficit burns off two pounds of fat, right? Never mind the fact that according to the sign-in sheets these cardio sessions would sometimes go on for 2 hours. Some clients did it in shifts, 500 calories in the morning and 500 at night. That's dedication.

Not only was all that cardio brutal and inhumane, it was just plain stupid and a remarkable waste of time. It simply didn't work. Bi-weekly weigh-ins often turned into crying sessions. After all of the treadmill mileage and prolonged semi-starvation, their weight seldom budged. Sometimes it even went up. But that was because they put on muscle (wink, wink!). And when the scale moved in the right direction, the results never lasted for more than a few months. The pounds always came back. And then some.

Like a typical trainer, I got on the defensive. They must have been lying on their sign-in sheets. They must have cheated on their diets. Whatever was going on here had nothing to do with my ingenious scientifically proven program. Calories-in. Calories-out. It's the law of thermodynamics! How hard could this be? Next week, you're doing 8,000 calories of cardio *and* you're logging your food! That didn't work either. Whoops.

My troubles didn't end with my clients. I had problems of my own. The health challenges I was dealing with weren't so outward and obvious. My body was always lean and fit. Yet under all of

that muscle and energetic façade was an exhausted, depressed, anxious individual who seldom left the house. When I wasn't at work, I was lying in bed recovering from the "high energy personal trainer" act I put on throughout the day. My digestion was way out of whack. My temper was borderline scary. I often binged on chocolate chip cookies and cherry pies. And my mood got so bad that I eventually turned to prescription antidepressants. I was a fraud.

Apparently, my brilliant health program wasn't working for me either. Eventually, I found zero satisfaction in knowing that I spent tens of thousand of dollars and six years—yeah, I was a professional student—studying health so I could be sick and get paid to make people fatter. So instead of lying in bed for 8 hours a day staring at the ceiling, I hit the books. Maybe I could figure out what I was doing wrong with my clients and at the same time find out what the heck was wrong with me.

Initially, I found myself reading books that confirmed what I already knew. There's that human nature thing again. (Our minds tend to gravitate toward confirmatory information.) But at some point I had just about had it with wasting my time learning what didn't work in real life. So I took the leap.

I joined the Dark Side.

WHAT IS THE DARK SIDE?

The Dark Side is the place where health renegades from all parts of the world come to convene. It is where scientists, researcher, authors, and health enthusiasts gather beyond the purview of the all-seeing corporate eye. It is where notes are compared, theories are tested, findings are shared, and ideas are refined so that the best health information is available for the greater good.

The Dark Side has no textbook. Nor does it have any government sponsorship. It is a club of independent thinkers, many of whom have stories just like mine. The things they say fly in the face of conventional nutritional dogma. They say that saturated fat is good for me, that soy is *not* a health food, that "heart-healthy" vegetable oils actually *cause* heart disease, and that most people are better off without grains. It was blasphemous. And I loved every bit of it.

I'm an expert in blasphemy. But it's all good because I'll take blasphemy over insanity any day. Living a blasphemous existence required that I break out of what I like to call **The Box**.

What's in The Box, you ask? Three things:

1. Diet and exercise.
2. Diet and exercise.
3. And diet and exercise.

It's the gift that keeps on giving. That darn Box is all we know. We're addicted to The Box! Whenever we want to improve anything about our health, we bring The Box down from the attic, dust it off, and jump right back in it.

You may even have a few keepsakes in your Box, like the swimsuit you wanted to fit into 3 summers ago. A handful of New Year's Resolutions. Bad cholesterol scores from last year's physical. You just might have a successful weight loss story or two in there. But that's the problem. You can't keep the weight off!

Wake up, peeps! The Box doesn't work. It never *has* worked and never *will* work. If it did work, you wouldn't be reading this book right now. You'd just eat less and move more. Easy peezy. Let's all go home now.

I can't be the only one in the gym who notices that the vast majority of the morning treadmill gang never drops a pound. And once the ones who do have some success get burned out from the same old crummy routine, they tend to disappear for weeks—maybe months—at a time only to return heavier than ever before.

I worked in a gym for 8 years. I kind of know what I'm talking about here. Of the tens of thousands of Box dwellers who walked through those gym doors, I can probably count on one hand how many long-term fat loss success stories I witnessed with my own two eyes. How many can *you* count?

See what I mean?

Am I the only one who notices that the more you exercise, the hungrier you get? Or that the more calories you cut out of your diet, the slower your metabolism burns? Kind of ironic when you blamed your slow metabolism for the weight you gained in the first place. Hit a fat loss plateau? There's probably a perfectly good reason for that and the cure *isn't* less calories and more gym time. The solution can't be the problem!

Am I making sense here?

BANG! BANG! BANG!

Clinging to a long-held belief because it's *supposed to* work is pretty darn whacky if I should say so myself, especially when you've not only witnessed plenty of evidence to the contrary but also personally experienced it on multiple occasions.

Quick story. When I was about 5-years-old, I had reached just the right height to bang my head on the edge of the counter literally every time I walked into the kitchen. *Bang!* That thing would come out of nowhere! My mom eventually taped a cloth to it (the counter, not my head), but

it only softened the blow. Regardless of how badly it hurt or how many times I cried, it was the same thing over and over again. *Bang!*

We're a big bunch of fat loss five-year-olds! No offense. Just keeping it real. The good news is you're about to grow up real fast. This book is like fat loss puberty. But this time the changes you'll see to your body will be a lot less confusing.

So what's my solution for this madness? Should you just give up, go hog wild at the buffet, and cancel your gym membership? Absolutely not. The solution is to get *outside* of The Box, to come and join me on The Dark Side. Fat loss and health in general aren't just about diet and exercise. They're just two pieces of the giant puzzle that we'll be discussing in this book. On top of that, the ways in which we eat and exercise to lose fat and gain health are based on an incredibly flawed model that defies not only science but the laws of common sense.

Most fat loss authors are as stuck in The Box as you are. They've never seen The Dark Side. They scoff at the very notion of its existence while selling you the same old advice wrapped in brand new packaging. Over and over again. This has to stop.

When I'm not studying those hibernating squirrels, I play a health and wellness coach in real life. I cannot tell you how many overweight men and women I have consulted with who *just* want to lose weight. They *just* want a diet and exercise plan. But that's not how I work. Why? Because the overweight or obese are seldom *just* overweight or obese. They don't have just a calories-in and calories-out problem. Many have trouble falling asleep or staying asleep. Libidos are nonexistent. Long-term digestive dysfunction is almost always present. Having a bowel movement once every few days is not unheard of. Brains are fuzzy. Memories are sketchy. Hands and feet are cold. They itch. They scratch. They're always hungry. And they're overwhelmed by ravenous sugar cravings, *especially* at night.

Sound like someone we know?

My point is that diet and exercise alone seldom solve obesity. Even if they did, would you be happy being thirty pounds lighter while still an insomniac who can't poop, can't find the car keys, and can't get it on with your mate?

I didn't think so.

The Box tells you that you need to lose fat to get healthy. This book will convince you that you need to get healthy to lose fat. Interesting concept, huh? Most people have never thought about it that way. It's as if we separate our outward appearances from our internal health. But to lose fat permanently is to shift the focus away from the scale and to simply *live well*. Unfortunately, this whole concept of living well has become so foreign to us civilized folk that we don't even know what it means anymore, thus The Box.

Living well is actually a pretty simple formula. But I gotta warn you. It requires that you actually **DO something**. Another interesting concept. You're going to have to make some lifestyle changes. Sorry, they're part of the deal! These changes go well beyond diet and exercise and include often overlooked factors like sleep, stress management, listening to your body, detoxification, and maximizing digestion. These are the ingredients for the recipe of health, long-term fat loss, and disease resistance. Each ingredient is dependent upon the others. Screw with one and you've screwed with them all.

If changing your lifestyle isn't sexy enough for you, I don't know what to tell you. What did you expect? Were you counting on these first pages to be all about fat loss secrets and empty promises of ripped abs in 6 weeks or less?

Been there. Done that. And so have you.

FIND THE CAUSE!

You've been told that your weight gain is a disease. Well, I beg to differ. In my humble and experienced opinion, excess fat storage is not a disease. It is a **symptom**. And beneath every symptom is a **root cause**.

We're a funny bunch, I tell you. We whine and complain about our doctors who spend all of seven minutes with us before writing a prescription for an expensive, toxic drug that only suppresses our symptoms and never addresses the cause. But when it comes to fat loss, we cling wholeheartedly to the

very same approach! We attempt to suppress a symptom (excess fat) with no regard for the actual cause(s). If you think overeating is the cause of your weight gain, have you ever taken the time to consider the root cause of your overeating? WHY do you eat too much?

We'll be covering a ton of WHYS in the pages that follow. But consider this, the sugar cravings you go to battle with every day could be due to the four hours of sleep you got last night. That spare tire you can't get rid of may be due to your overbooked schedule and the unabating anxiety it brings. Or maybe you *didn't* inherit your slow metabolism. It just might be the chemical soup clogging up your liver and its effect on your thyroid gland.

"The Box tells you that you need to lose fat to get healthy."

This book will convince you that you need to get healthy to lose fat."

The diet books seldom broach the topic of WHY you're fat, tired, and sick. The reason they never bring this stuff up is because most people don't want to hear it. You can't pack that kind of info in a pretty little Box. It requires a permanent lifestyle change in exchange for permanent fat loss. Sounds like a fair trade to me. How about you?

Modern fat loss dogma is no more than exchanging one symptom for another. Counting calories is not only stressing you out mentally, but physiologically and nutritionally as well. Stress makes you fat! And the endless cardio sessions are dispatching hormonal messengers that signal your body to store even *more* fat! Yes, common fat loss strategies are actually making you fatter. However, you've had no choice in the matter. To effectively choose is to be aware that you have options in the first place. No one bothered to tell you that there are two sides to this story: The Dogma and The Dark.

CRACKING THE CODE

The Dark Side keeps it real. It doesn't apologize for making you feel a bit uneasy or accountable. At first glance, its code is simple yet daunting, logical yet underground. It's where minds and bodies illuminate and resonate on another level. It's where moving toward the light is to return to the familiar confines of your Box.

The Dark Side is where I dwell and where you're going. Following *The Code of the Underground* gave me my health back. I am no longer a depressed, anxious muscle head with a raging temper and Twinkie breath. These very same truths have also helped thousands of clients, podcasters, readers, and viewers become leaner and healthier than ever before. In the following chapters, I will give you all of the fun and scientific details on WHY the Code has proven so effective.

On November 4, 2007, I launched the *Underground Wellness* YouTube channel to share my learnings with the world. The channel quickly became a hub for fellow Dark Siders and a recruitment center for those whom conventional wisdom had repeatedly failed.

One year later, almost to the day, I went on the air with *Underground Wellness Radio*, a live internet broadcast that allowed me to speak with and pick the brains of some of the most notable experts of our time. The show also served as a forum for those with health and fitness challenges to call in and join the conversation.

Meanwhile, I have continued to read hundreds of books, articles, and scientific papers on diet and health. Not the standard approved texts, but books by experts daring enough to challenge conformist thinking and ineffective advice; experts willing to go against the grain in order to give voice to the truth as they understand it.

I have attended and completed courses taught by people getting real results with real people. And with the launch of my latest endeavor, *The Underground Wellness TV Show*, I have had the

privilege of visiting the homes of many of the most prominent leaders of the Dark Side. What they had to tell me in person as well as through their writings was so mind-blowing that I was compelled to share it with you.

Through my own personal and professional failures, I have had the great fortune of going on an unbelievable journey that very few have had the pleasure of experiencing. For me, the journey to the Dark Side was a long one and the streets are made of cobblestone. The ride is bumpy and the trip can seem endless. However, I have enjoyed every moment of it.

During my time running The Underground, I have kept a record of my journey, a catalogue of the advice gathered from the intrepid experts I have encountered along the way. Consider this book a compendium of the best of that advice. You won't need years to learn it all as I did. *The Dark Side of Fat Loss* represents the distillation of knowledge and experience from the preeminent minds of the Dark Side, a download of the best info all in a single volume. I walked to the other side on foot. You'll be taking a bullet train.

Along the way we'll be making a few pit stops to meet face to face with some of my favorite Dark Siders; the ones who DO things that actually work, the ones whose names go missing from mainstream nutrition textbooks.

I'll introduce you to Gary Taubes, a man who spent 5 years of his life searching for the scientific evidence in support of our current public health and dietary recommendations. You'll be shocked by what he found.

You'll meet Zoë Harcombe, a British author who came up empty in her exhaustive attempt to track down the origin of what appears to be *The 3,500-Calorie Myth*.

We'll stop by the C.H.E.K. Institute and hang out with Paul Chek, an outspoken advocate of listening to your body language and learning about your health by looking at your poop.

We'll go deep with Dr. Cate Shanahan, author of *Deep Nutrition: Why Your Genes Need Traditional Food*, and learn how the dietary choices you make today may affect the health of your grandchildren.

And we're bound to bump into T.S. Wiley, a self-proclaimed citizen scientist, who scoured our government's own research to shine light on the fact that our health is suffering due to a lack of darkness.

While I'll try my best to keep this book as short as possible, I won't make any promises. If you've ever watched, heard, or read any of my stuff, you know that I can really get on a roll. But I do pledge to keep it simple. You won't get a lot of technical jargon from me. In fact, effectively presenting complicated information in a way that everyone can understand is what I am most known for. That certainly won't change here.

Don't forget to keep your mind wide open. And at the same time, stay critical. Don't take my word for it. Do your own research and decide what makes sense to you. It's your body. In the end, it all comes down to you. Keep an eye out for recommended books and links to relevant podcasts at the end of each chapter. Also, watch your email for FREE updated versions of this book so you can keep up with the latest, best science coming from the leaders of the Underground.

Within these pages resides the blueprint to abundant health that has until now remained shrouded in secrecy.

This is The Code of the Underground.

Welcome to the Dark Side.

THE CODE OF THE UNDERGROUND

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01

HOLD NO MYTHS TO BE TRUE **The Greatest Myth Ever Sold**

“Over the years, the calories-in/calories-out paradigm of excess fat has proved to be remarkably resistant to any evidence to the contrary. Imagine a murder trial in which one credible witness after another takes the stand and testifies that the suspect was elsewhere at the time of the killing and so had an airtight alibi, and yet the jurors keep insisting that the defendant is guilty, because that’s what they believed when the trial began.”

- Gary Taubes in *Why We Get Fat:
And What to Do About It*

DROPPIN' TRUTH BOMBS!



The laws of thermodynamics have limited application when applied to human beings. They also say nothing of WHY you overeat.



There is no scientific proof that there are exactly 3,500 calories in a pound of fat.



Calories-in and calories-out are dependent variables. You cannot change one without impacting the other.



Weight loss and fat loss are two completely different objectives. The former is a matter of focusing on scale weight with no regard for what kind of weight (muscle, water, or fat) is being lost. The latter is about changing your diet and lifestyle as well as exercising smart to preserve muscle tissue while losing fat.

The Dark Side doesn't count calories.

Our mealtime decisions have nothing to do with food logs or arithmetic. We *will not* buy, consume, or rationalize 100-calories packs of *anything*. And you won't catch us eating "6 small meals a day" or doing our bests to ignore intense hunger pangs between meals. We know better than that.

These strange behaviors are often rooted in modern fat loss folklore with zero regard for reality or scientific validation.

Of all people I can relate to the need for simplification in matters more complicated than the lay public can comprehend. However, the blatant oversimplification of popular weight regulation strategies provides us with insight on par with a bumper sticker.

After a century of obesity research, this is the best we can come up with? It is as if anyone with a basic grasp of elementary mathematics along with a little willpower can watch the fat melt away by merely eating less and moving more. And the few who wish to increase their weight can intelligibly eat everything in sight while spending the majority of their days sitting.



**To lose weight, burn more calories
than you consume. Period.**

**To gain weight, consume more
calories than you burn. Period.**



Simple is not always better, especially when it is simply wrong.

Following the edicts above led me and my personal training clients down the road to failure. Chances are you're on the same course. However, in this chapter I will expose this dogma for what it is: a shortsighted half-truth with no other possible outcome but defeat at the hands of hunger, deprivation, and mental/physical exhaustion.

Again, I ask that you maintain an open mind as I challenge and dismantle what have come to be long-held myths regarding why we get fat. I will call into question the validity of one of the most quoted laws of weight loss: that there are exactly 3,500 calories in a single pound of fat. I will debunk the erroneous assumption that we can somehow alter the number of calories we consume and/or calories we expend without one affecting the other. And I will show you how "fat loss" and "weight loss" are two entirely different objectives. One leads to permanent changes to your physique. The other practically guarantees you'll gain the weight back.

Once you can wrap your brain around the fact that just about everything you know about fat loss is rooted in fallacy, you will begin to understand why The Box has failed you and how you can break out of it.

But first, let's put this little issue of thermodynamics to rest.

THERMODYNAMICS? OH, STOP IT!

DARK SIDER PROFILE

Gary Taubes

Author of the books
Good Calories, Bad Calories &
Why We Get Fat



Gary studied Applied Physics at Harvard and Aerospace Engineering at Stanford.

He is a contributing correspondent for Science magazine, and his writings have also appeared in The Atlantic, The New York Times Magazine, and Esquire.

His work has been included in The Best of The Best American Science Writing (2010), and he has received three Science in Society Journalism awards from the National Association of Science Writers, the only print journalist so recognized.

He is currently a Robert Wood Johnson Foundation investigator in Health Policy Research at the University of California, Berkeley School of Public Health. He lives in Berkeley.

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UW Radio Appearances
[*Good Calories, Bad Calories*](#)
[*Why We Get Fat*](#)

I can already hear the calorie counters screaming at the tops of their lungs, accusing me of thermodynamic blasphemy. I told you guys in the Introduction that blasphemy is what this book is all about! I wasn't kidding.

The "law of thermodynamics" argument always seems to pop up during any meaningful fat loss dialogue. It never fails. Like everything else, these "irrefutable" laws are not as simple as they seem when applied to living, breathing human beings.

In his landmark book *Why We Get Fat: And What to Do About It*, two-time UW Radio and Underground Wellness TV Show guest Gary Taubes bravely states that "*obesity is not a disorder of energy balance or calories or overeating, and thermodynamics has nothing to do with it.*"

There are 4 laws of thermodynamics. The first law is the one that the calorie clergy uses as a flotation device in the event of an emergency (i.e. when presented with fat loss facts that actually make sense in real life). Also known as *the law of energy conservation*, it states that energy is neither created nor destroyed. Rather, it changes from one form to another.

This means that when you consume too many calories (energy) and you fail to burn those calories, they don't just disappear into thin air. They are stored as fat on your hips, thighs,

and belly for a rainy day. It's like a fat savings account that you can dip into whenever you feel like eating less and/or exercising more.

Is the law of energy conservation wrong? Well, not exactly. It works out quite precisely, but only within a **closed system**. A closed system is defined as one having relatively little interaction with other systems or the outside environment. That doesn't sound like my body! How about yours?

The human body seems pretty darn open if you ask me. It pees, poops, and sweats into the environment. It inhales oxygen from the environment and exhales carbon dioxide into the environment. It even consumes food from the environment. Sounds like quite a bit of environmental interaction. Last time I checked, human beings didn't live in bomb calorimeters, nor did we burn off energy in Bunsen burners.

Taubes writes, *"Thermodynamics tells us that if we get fatter and heavier, more energy (calories) enters our body than leaves it. Overeating means we're consuming more energy than we're expending. It says the same thing in a different way. Neither happens to answer the question WHY. Why do we take in more energy than we expend? Why do we overeat? Why do we get fatter?"*

The first law of thermodynamics only tells us what happens *when* we overeat. If you punched me in the face, it would leave a mark. But that says nothing of *why* you punched me. The answer to why we overeat is a complicated one. It is a matter of biodynamics, not thermodynamics. We'll save the biochemistry of fat loss for the next chapter. Let's keep this debunking train rolling along. Debunking is fun!

THE 3,500-CALORIE MYTH

How many times have you heard or read somewhere that there are 3,500 calories in a pound of fat and that all you have to do to lose that pound is have a **negative calorie balance** of 500 calories for 7 days in a row? Everyone reading this book has heard that before. Many have tried it. And rarely has it ever worked long-term! Why? Because it's a myth. It's all a bunch of hoey!

The calorie counters, dietitians, and fat loss authors cling to this myth. Yet, I can say to an absolute certainty that not a single one of them has ever looked for and found a shred of evidence—either scientific or anecdotal—proving that it is actually true! The truth is that no such evidence exists. And the problem is that no one seems to care! We just keep repeating this fabricated calorie claim despite the fact that no one really knows where it even came from.

British obesity researcher and *UW Radio* guest Zoë Harcombe, author of *The Obesity Epidemic*, made it her own personal mission to uncover the source of this tale. Harcombe writes, *"Not one of seven government and obesity organizations can provide evidence for either part of this (3,500-calories) formula."*

Even though these organizations had openly posted the 3,500-calorie claim on each of their websites, none had any clue of its origin, nor could they offer one iota of scientific evidence as to its legitimacy. In fact, the scientific literature on weight loss echoes the frustrating experiences of everyday dieters, with results showing an initial weight reduction for several weeks—maybe months—followed by a swing in the opposite direction.

Lose the weight. Gain it back. Sound familiar?

Even science is a yo-yo dieter.

THE DARK SIDE LIVES IN THE REAL WORLD

Let's set the numbers aside for a moment and come back to reality. In *Why We Get Fat*, Taubes paints an unfortunate picture that we are all too familiar with. It is of a woman and her young child living in a third world country, both suffering from undernutrition, or insufficient food availability. The child is stunted and thin, however his mother is obese.

DARK SIDER PROFILE

Zoë Harcombe

Author of *The Obesity Epidemic*

Zoë graduated from Cambridge University. She is a qualified nutritionist with a Diploma in Diet & Nutrition and a Diploma in Clinical Weight Management but she is first and foremost an obesity researcher.

Her complete goal and drive is to reverse the obesity epidemic. She has clear views on how it started and what we need to do to stop it.

Website

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UW Radio Appearance

[*The Obesity Epidemic*](#)



Ponder that for a moment. Either this child's mother is hoarding all of the food while starving her own child, or there is a major flaw in our simplistic concept of calories-in and calories-out. The coexistence of undernutrition—caused by not enough calories—and obesity—supposedly caused by excess calories—within the same population flies in the face of common fat loss dogma.

Let us also ponder how our bumper sticker approach explains our rising epidemic of obese six-month-olds? Are these babies lazy gluttons, too? Did they eat too much and exercise too little?

I FAILED HIGH SCHOOL TRIGONOMETRY, BUT...

Try this one on. In May of 2001, I graduated from college weighing in at a lean 171 pounds. Ten years later, as I write this chapter, I am *still* 171 pounds. This is quite an amazing feat when you really think about it. Over the

past 3,652 days or so, I managed to burn *exactly* the same number of calories I consumed with absolute pinpoint accuracy. And I did it all without a calculator. Gold star for me!

If I had overeaten by **just 10 calories per day** over those same ten years, I would be 10.4 pounds fatter today (36,520 calories divided by 3,500 calories = 10.4 pounds of fat) and lack all credibility to write this book. Just 10 calories. That's one-and-a-half almonds!

After a decade of birthday cakes, late-night cervezas, and one-and-a-half almond binges, I somehow managed to maintain my body weight down to the ounce. Am I the only one who finds this absolutely incredible?

IT DOESN'T EVEN WORK FOR WEIGHT GAIN!

We can even take it to the opposite extreme and size up the mathematics of weight gain. Of course, if burning an extra 3,500 calories supposedly results in a one-pound fat loss, then an excess of the same amount should add a pound, right? Well, on paper it should, but in real life it doesn't.

You should read all of the email I get from frustrated college students who can't gain a pound regardless of how many 2,000-calorie weight gainer shakes they drink every day. If you're struggling to lose weight, you're probably jealous of these "hard gainers". But they're just as frustrated as you are. The formula doesn't work for them either! What gives?

THE DISAPPEARING CALORIE

In *The Obesity Epidemic*, Harcombe writes of a 2009 BBC program called *Larger Than Life: 33,000 Calories a Day*. Paul, one of the four morbidly obese men featured, somehow managed to consume a whopping 33,000 calories a day! However, his basal metabolic rate—the number of calories his body naturally burned daily—was calculated to be just 4,500 calories. How in the world Paul managed to throw down 33,000 calories a day while being fully bedridden is beyond me. What we do know is that since he wasn't going for a walk any time soon, he really didn't need any additional calories beyond 4,500.

But if we apply the magical weight gain formula, his excess consumption of 28,500 calories per day (33,000 cal – 4,500 cal = 28,500) should have packed on an entire nine pounds of fat *every single day* and 3,337 pounds per year!* Obviously, that did not happen. And of course, the question is where did all of those extra calories go? No one has any idea where Paul's excess calories went. They literally just vanished into thin air the very same way my extra one-and-a-half almonds (or any other 10-calorie equivalent) seemed to disappear over the past ten years.

Maybe they went to calorie heaven.

* For the real purists out there, I did not account for the Thermic Effect of Food (TEF), the number of calories burned in order to digest all of that food. But you get the point.

SIAMESE CALORIES

We all know at least one poor overweight soul who eats just 900-calories worth of rice cakes and salads a day and burns 600 calories on the treadmill every single morning, even on weekends. But she never loses a pound! The needle on the scale hasn't budged for months, so she eats less and less and exercises more and more until she eventually gives up and blames it all on her genetics.

Why didn't the fat loss formula work for her? What part of her calories-in and calories-out fell outside of the first law of thermodynamics?

Let's go back to school for a moment. In seventh grade science class, you probably learned the difference between dependent and independent variables. A **dependent variable** responds to an **independent variable**. For example, let's say you conduct an experiment on how stress affects heart rate in humans. Heart rate is the dependent variable, as it *depends* on the presence of stress. Meanwhile, stress has no dependence upon heart rate, making it the independent variable.

What does this have to do with fat loss or your friend with the rice cake fetish? Well, if she were one of my old personal training clients, I would have sat her down on day one and drawn her a nifty little diagram showing her that if she reduced her calories-in while increasing her calories-out, she would easily lose all of the fat she ever wanted to lose.

The major flaw of my errant diagram was that it was based on the assumption that both calories-in and calories-out were independent variables, that they had nothing to do with each other. I—like just about every other trainer or fat loss guru—believed that reducing how many calories she consumed would have no effect on the amount of calories that her body burned. Conversely, I figured that expending more calories (through exercise) would have zero effect on her body's drive to consume more calories (her appetite). Wrong!



The very strategy we use for losing fat is the same one we use for increasing our appetites!



Calories-in and calories-out are in fact *dependent* variables! They're like Siamese twins. You can't fool with one without fooling with the other. You may have read in *Muscle & Fiction* magazine that by holding your caloric intake steady while at the same time increasing the number of calories you burn by 500 a

day, the result would be mathematical fat loss. But when you tried it, all you got were ravenous hunger and a slower metabolism!

There's a reason for that.

A BRILLIANT COMPENSATION PLAN

There's an age-old concept called "working up an appetite" that for some reason no longer pertains to the human body when applying the calories-in/calories-out formula. The body is a master compensator. When it expends more energy—whether through manual labor or exercise—it drives you to eat more food. In other words, you get hungrier! Anyone who has ever done just one day of heavy yard work knows what I'm talking about.

Put another way, if it's Thanksgiving Day and you plan on stuffing your face, you might prepare yourself for some Turkey Day feasting by cutting back on what you eat that day and maybe hitting the gym beforehand. You eat less and exercise more!

Do you get where I'm going with this? The very strategy we use for losing fat is the same one we use for increasing our appetites! Maybe this is why you can't stick to your calorie-restricted diet for more than a week at a time. Your body thinks every day is Thanksgiving!*

Now let's dive back into the realm of common sense and consider the opposite. When your vehicle is running low on fuel, you act accordingly. You might take it easier on the gas pedal. You coast down hills. And you keep your eyes peeled for the nearest gas station.

Your body does the same thing. When less calories are coming in because you're "dieting", it sees no reason to keep firing on all cylinders. Like you, it acts accordingly by slowing things down. And worst of all, it tells your **thyroid gland** to dial down the metabolism. Not quite what you want. (You'll learn why this happens in the next chapter when we discuss the hormone **leptin** and the famine that never comes.)

This is why your friend is down to only 900 calories a day (a caloric equivalent to that of prisoners at the Treblinka concentration camp during World War II) and can't lose a pound. Her metabolism has made the proper survival-driven adjustments, slowing so considerably from such prolonged energy deprivation that she becomes dependent upon rice cakes and hourlong cardio sessions to keep her weight from creeping up.

More sooner than later, her frustration and appetite will get the best of her and she'll find herself at Hometown Buffet getting her Thanksgiving on. And with her metabolism crawling along at a snail's pace, she'll pack the pounds back on faster than ever before. This is exactly what happens when we try to outsmart the human body and its compensatory ways. The body always wins. Back to square one.

* Credit to Gary Taubes who in *Why We Get Fat* credits Chris Williams, who blogs under the name Asclepius, for this insight

THE NUMBERS GAME

The laws of thermodynamics have us playing a numbers game. We count calories. We count fat grams. Some of us even count steps with weird clip-on pedometers. And we've become obsessed with a number on a scale.

One of my most popular YouTube videos is called **Kill Your Scale!**, a 6-minute rant about the vast segment of society that wakes up every morning and marches directly to their own personal weigh stations. But what most of these weight watchers fail to consider is that the scale tells them absolutely nothing about what kind of weight they are losing or gaining.

DARK SIDER PROFILE

Jade Teta, ND
Keoni Teta, ND

Co-authors of *The New Metabolic Effect Diet*



The Teta brothers each have a bachelor of science degree in biochemistry from North Carolina State University and hold doctorates in naturopathic medicine from Bastyr University.

Both are NSCA Certified Strength and Conditioning Specialists and ACSM Health and Fitness instructors. They bring close to twenty years of personal training experience as well as five years of clinical work in natural medicine in their pursuit of helping people achieve health.

Website

www.metaboliceffect.com

UW Radio Appearances

[*The Metabolic Effect Diet*](#)

[*Ask The Tetas!*](#)

[*The Metabolic Aftershock*](#)

[*Stubborn Fat Fix*](#)

Focusing on scale weight can be quite deceptive if you don't know the facts. I imagine your scale didn't come with a disclaimer stating that you can be plus or minus four pounds at any given time of day. I bet it didn't tell you that two cups of water weighs a pound. And I'm sure it never disclosed the fact that gaining 3 pounds of fat overnight is next to impossible!

The Dark Side doesn't step on scales.

PLAYING THE WEIGHT LOSS GAME?

Remember, you don't *just* want to lose weight. You want to lose fat. As similar as they may sound, there is a significant difference between the two.

Fat loss is about mastering your hormones, exercising smart, and making the proper lifestyle modifications for *permanent* internal and external transformation.

Weight loss revolves around your daily appointment with the bathroom scale. The dark side of *weight loss* is that it is temporary. Its fleeting nature is all too familiar to those who are trapped in The Box of eating less and exercising more.

The semi-starved treadmill kings and queens, who shed tears of joy on a “good scale day”, are playing what Drs. Jade and Keoni Teta, co-authors of *The New Metabolic Effect Diet*, call **The Weight Loss Game**.

Those who play this game may lose 12-15 pounds of scale weight, but very little of it is actually fat tissue. Instead, they lose water and muscle mass. Unfortunately, tears of joy are often followed by frustration when they step on the scale the next morning and find themselves 3-4 pounds heavier. Water weight can come back with a vengeance!

If fat loss is your goal, then the last thing you want to lose is muscle tissue. That’s just plain dumb and a sure sign that you’re doing something wrong. Yet, it’s what millions of gym-goers are doing by brutalizing themselves daily on cardio equipment and starving themselves.

Living the fat loss lifestyle is what the Dark Side is all about. In our *UW Radio* interview, Dr. Keoni Teta gave us the scoop on the importance of preserving muscle while reducing fat.

“What people don’t know about muscle is that it is a powerful reservoir for metabolic signaling molecules, otherwise known as hormones...and the muscle is essentially speaking to the rest of the body...so rather than thinking of it (muscle) as speeding up the metabolism, you need to think about fat loss (preserving muscle tissue) as making the metabolism more efficient. And that’s really what fat loss is all about.”

This is exactly why a scale-based, bumper sticker approach to weight loss with no regard for the differentiation between fat and muscle tissue always ends in failure. We are attempting to fix a problem while at the same time ruining our metabolisms. It makes no sense!

Fat loss is NOT a numbers game. It’s not about thermodynamics, calories, fat grams, scales, or treadmill time. And it’s not about willpower.

It’s all about the hormones.

RECOMMENDED READING

Why We Get Fat: And What to Do About It by Gary Taubes

Good Calories, Bad Calories by Gary Taubes

The New Metabolic Effect Diet by Drs. Jade and Keoni Teta

The Obesity Epidemic by Zoë Harcombe

RECOMMENDED PODCASTS

Why We Get Fat with Gary Taubes

Good Calories, Bad Calories with Gary Taubes

The New Metabolic Effect Diet with Jade & Keoni Teta

The Obesity Epidemic with Zoë Harcombe

RECOMMENDED VIEWING

Kill Your Scale

Exercise: Fat Loss vs. Weight Loss

The 3,500-Calorie Myth

The Obese Six-Month-Old Epidemic



02

IT'S ALL ABOUT THE HORMONES You Are NOT A Gluttonous Sloth!

“Our genetics are nearly identical to those of our early H. Sapien ancestors from 100,000-200,000 thousand years ago. We are genetically wired for a lifeway that is all but gone now, and our health reflects this.”

- Robb Wolf in the *The Paleo Solution: The Original Human Diet*

DROPPIN' TRUTH BOMBS!



Your body came with its own starvation defense system intended to save you from a famine. This very system is working against you whenever you go on a calorie-restricted diet, or what your body interprets as a voluntary famine.



Your fat stores are not just energy storage depots. They are in fact an endocrine organ that produces the master hormone leptin.



Caloric restriction increases hunger and cravings by way of turning on the appetite-regulating hormones NPY and ghrelin.



Fat storage is regulated by the hormone insulin. It is impossible to lose fat when insulin is elevated.



Restoring insulin and leptin sensitivity through diet and lifestyle modification is one of the keys to successful long-term fat loss.

The Dark Side knows that dieting makes you fat.

It knows that every time you go on a diet, you end up heavier than you were when you started. This is no coincidence. It's just basic human physiology with a dash of logic.

Your weight gain is not a simple matter of overindulgence and indolence, but of survival and miscommunication. You are NOT a gluttonous sloth with a predisposition for stuffing your face all hours of the day while planted firmly on your backside. There is a perfectly good answer as to WHY you eat too much and move too little. It's just that no one bothered to tell you until now.

The answer is not one of psychological defect—you just *want* to be fat—or thermodynamics, but of hormonal imbalance.

GETTING ALL HORMONAL

Hormones are the chemical messengers that tell your cells what to do. Since your body is made up of 50-75 trillion of these cells, you certainly want to be sure that they get the right messages and do the right things. Your health depends upon it.

Hormones do it all. They are what make you a man or woman. They put you to bed at night and wake you in the morning. They govern your heart rate and blood pressure. They calm down your anxieties and relieve depression. They help you digest your meals. They control your sex drive. They fight stress and infections. They regulate your blood sugar. **And they are also responsible for the burning and storage of fat. Any and all attempts to lose fat without first restoring the proper function of the fat-burning and fat-storing hormones will be in vain.** Hunger and hardwiring trump willpower every time.

Many volumes and literally hundreds of thousands of pages have been written on how hormones impact human physiology, function, and fat storage. In fact, the human body contains more than 100 different hormones. This stuff can get pretty darn complicated! So in this chapter, we will cover the basics. If you wish to go deeper down the hormonal rabbit hole, please refer to the recommended materials and scientific references at the end of this chapter to further your understanding.

While we'll keep it rather simple here, I guarantee these fairly basic concepts will go well above and beyond anything you've ever heard or read before regarding how your body burns and stores fat. I even recommend you break out a pencil and paper for note-taking. As you take notes you'll likely end up with a messy sheet of paper with arrows pointing from each hormone to several others, demonstrating their interdependency. This hormonal interplay exemplifies the extraordinary balancing act your endocrine (hormonal) system must perform in order to keep your body's fat burning furnace fired up.

The interdependency among hormones is both a gift and a curse. Like dominoes, when one hormone falls out of balance, others soon follow. Imbalances can be a matter of excess or deficiency. In other words, you don't want too much of a hormone and you don't want too little.

To illustrate this concept of too much or too little, let's consider the amount of water you drink. If you drink too little, you become dehydrated and your body begins to shut down. If you drink too much, you can throw off your electrolyte balance—a condition called hyponatremia—and end up in the ER. Neither situation will lead anyone to believe that water is bad for us. The problem resides in its excess or deficiency.

In the same regard, too much or too little of a hormone can cause serious health problems. For example, too much thyroid hormone—called **hyperthyroidism**—may give you heart palpitations, cause chronic anxiety, and keep you awake all hours of the night. Conversely, not enough of the same hormone—called **hypothyroidism**—will cause you to gain weight, make your hair fall out, and have you feeling frostbitten on a warm sunny day.

If you are a woman, too much testosterone might give you an Adam's apple and a Tom Selleck mustache. Too little will pull your libido right out from under you and keep you from burning fat and building muscle.

Instead of too much or too little, you want *just enough*.

In the pages that follow I will show you how your body employs hormones—primarily **leptin** and **insulin**—to ensure that you have *just enough* bodyfat and blood sugar. Once these vital hormones lose their way, the result is an internal environment that is highly conducive for a reduction in metabolism, increase in appetite, sedentary behavior, and storage of fat.

Your weight gain is what I like to call **survival gone haywire**. To understand this concept, we have to go back.

Way back.

GOING CAVEMAN

How easily we forget that regardless of how modern and high-tech things may seem, you and I are still living in prehistoric bodies. If you've ever seen the movie *Encino Man*, Sean Astin stumbles upon a caveman in his backyard frozen in a block of ice. He and his best friend thaw the Neanderthal out, clean him up, give him a wicked haircut, and end up with Brendan Fraser!

Yeah, I know it's just a movie (it's actually pretty funny), but it makes some great points. From a physiological perspective, cave people were really no different from us. Give them an afternoon

DARK SIDER PROFILE

Robb Wolf

Author of *The Paleo Solution:
The Original Human Diet*



Robb is a former research biochemist and one of the world's leading experts in Paleolithic nutrition. He has transformed the lives of tens of thousands of people around the world via his top ranked iTunes podcast and seminar series.

Robb is also the review editor for the Journal of Nutrition and Metabolism, is co-founder of The Performance Menu, co-owner of NorCal Strength & Conditioning, and co-owner of Paleo Brands.

Website

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UW Radio Appearances

[The Paleo Solution](#)

[MORE Paleo Solution](#)

with the *Extreme Makeover* team and I bet you wouldn't recognize them on the streets.

We are cave people! What separates us most from our prehistoric ancestors is our environment. Caveman never imagined that there would be a such thing as a supermarket, that we could turn darkness into daylight, and that the famine would never come. He didn't have a refrigerator or freezer. No free samples at Costco. No media telling him how he ought to look or dress. In fact, the only way he knew what he looked like was by catching his reflection in a stream or puddle.

Mirrors and media were the last thing on caveman's mind. He had more important matters to deal with, like finding his next meal while not becoming one. Survival was the name of the game. Lucky for him, he had a few built-in mechanisms to ensure that he lived to see another day. And it is these very same mechanisms that have been working against you in your many failed attempts to starve and strain yourself to fat (err, weight) loss.

FAT: IT'S ALIVE!!!

Caveman never cut calories on purpose. He never caught a glimpse of his reflection and decided it was about time he go on a diet. In fact, going on a diet would have been caveman crazy talk, especially when he wasn't always sure where his next meal was coming from. Some days there would be plenty of food to go around. Other times the primordial fridge was empty. Since starving was just as uncool back then as it is today, the body had to possess some kind of starvation defense system. If not, you and I wouldn't be here. The first winter famine would have been the end of us all.

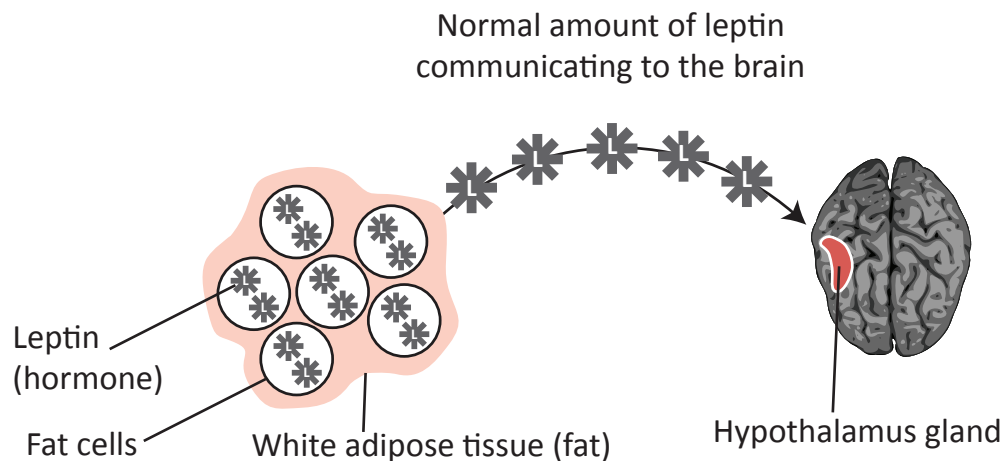
As bizarre as it might sound, your fat stores are that very defense system protecting you from the perils of famine and death. You may think of your fat as just an unsightly energy storage depot. But it has recently been discovered to be an actual hormone-producing organ just like your thyroid, adrenals, and pancreas. Yes, fat is an organ!

**As bizarre as it might sound,
your fat stores are that very
defense system protecting you from
the perils of famine and death.**

Discovered in 1994, leptin is a hormone secreted by your white adipose tissue, otherwise known as the unwanted fat collecting on your butt, thighs, and abdomen. And it's not just any hormone. Leptin is the master hormone, charged with the crucial role of keeping you from starving to death by

monitoring how much fat you have on board. That way, when the famine comes you can live off of your fat stores until it's time to eat. If the famine arrives and you've got just four-percent bodyfat, you're in big trouble, my friend!

Leptin is in direct communication with a gland in your brain called the **hypothalamus**. When your fat stores are sufficient, your hypothalamus gets a phone call from leptin saying all is well and that making it through a food shortage won't be a problem. As a result, the hypothalamus keeps your metabolism humming along and your appetite at bay since there is no need to store any additional fat.



SUFFICIENT FAT STORES = HEALTHY METABOLISM & APPETITE

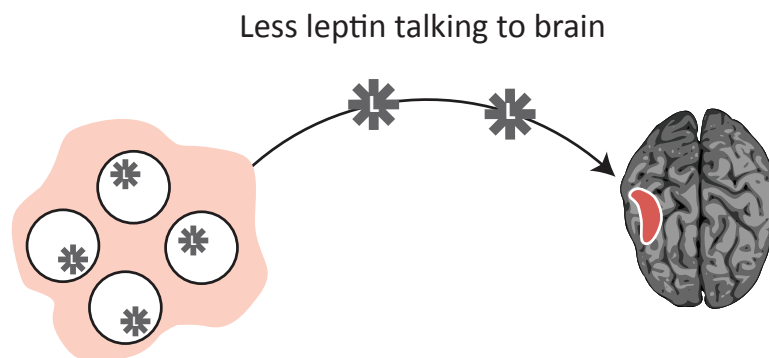
HOW DIETS MAKE YOU FAT

What's important to mention here is that the starvation defense system is under subconscious control. Your brain has no idea what you look like in the mirror. Nor does it care what or who you *want* to look like. All it cares about is your survival by way of ensuring that you have enough fat on hand to make it through the famine that never comes.

So when our caveman—we'll call him Link, like the movie character—was short on food, his body shifted to his fat stores for fuel. As his fat stores shrank over the scarce weeks or months, they produced less leptin. And since there was less leptin, the phone call being made to the hypothalamus was of an urgent nature. Fat stores down! Fat stores down! Mayday! Mayday!

When fat stores are on their way down, the last thing your body wants is a turbo-charged metabolism. In terms of survival, that would be pretty boneheaded, since a hot metabolism would only serve to burn through your fat stores at a blistering pace, thus expediting your impending doom.

So when the hypothalamus gets word that Link's fat stores are dwindling, it does a couple of really smart things. First, it tells the thyroid gland—the metabolic control center located in the throat—to turn down his metabolism. This metabolic slowdown is an ingenious survival tactic that preserves fat while matching the limited supply of food. That way Link won't run out of fat before the famine breaks. Second, the hypothalamus increases his appetite (more on this below) so he'll be super-motivated to go looking for food to replenish his fat stores. In other words, his body responds to the prolonged food shortage by slowing his metabolism and making him hungry.



INSUFFICIENT FAT STORES = METABOLISM SLOWS DOWN & APPETITE INCREASES

Wait a minute!! Isn't a low-calorie diet pretty much the same as a food shortage? Could leptin be the reason WHY you can't stick to your diet and exercise program without hitting a plateau—because your metabolism slowed—or eventually getting your daily Thanksgiving on—due to increased appetite—like the poor lady in the previous chapter? Remember, calories-in and calories-out are Siamese twins. You can't fiddle with one without affecting the other. Leptin is the glue that binds the two.

By the way, will someone please tell me why a caveman would go running during a famine? Because that's exactly what The Box has been telling you to do to "lose weight". It really makes no sense at all when you think about it.

WHY YOU GAIN IT ALL BACK...AND THEN SOME

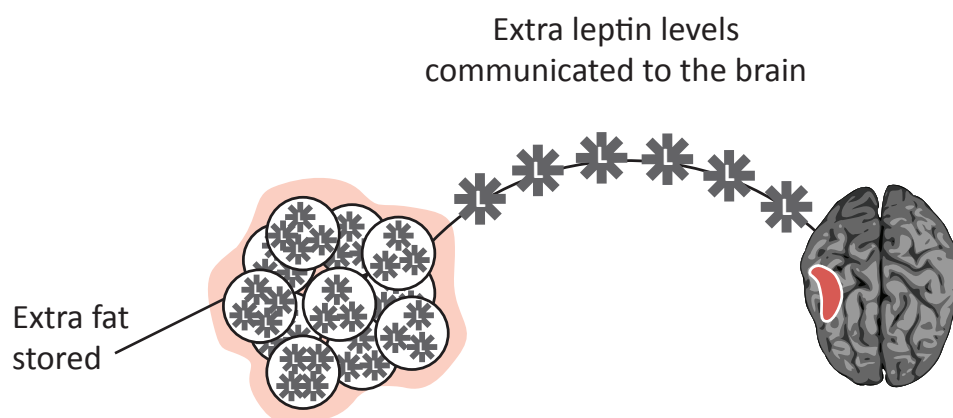
When the famine breaks and Link gets his mitts on some venison and wild berries, you better believe that those calories are going straight to his fat stores. As his stores are replenished, his leptin will rise and his brain will get a phone call from his fat cells saying that everything is cool. Link's metabolism and appetite will normalize. The famine will come again and he will be well prepared.

This is why 95% of dieters regain all of their lost weight. They simply can't outsmart leptin. The two main conditions that set off your starvation defense system are reduced fat stores and caloric restriction (cutting calories). As you go on and off of diets, time after time, again and again, your body starts to smell a diet coming from a hundred miles away. So when you eventually pack the fat back on, it stows away a little extra for added insurance. After every diet, you end up heavier than you were when you started. This is how diets make you fatter!

LEPTIN RESISTANCE: A FAILURE TO COMMUNICATE

Your survival defense system works both ways. It doesn't want you too skinny, nor does it want you too fat. Your subconscious mind is well aware of the fact that a portly version of you would have a hard time running from a saber tooth tiger. So it wants to keep you lean enough to fight-or-flee and fat enough to survive a famine. It prefers *just enough* fat.

Let's consider what happens when a guy like me actually puts on a few pounds from having a few too many servings of birthday cake, late night cervezas, and one-and-a-half almonds. If my fat cells and hypothalamus are communicating optimally, my brain will sense the extra leptin—from my extra fat stores—and once again do two very intelligent things: it will turn up my metabolism to bring my fat stores down to where my subconscious likes them to be, and it will turn down my appetite to keep me from packing on more fat.



EXTRA FAT STORED IN CELLS = BRAIN INCREASES METABOLISM & REDUCES APPETITE

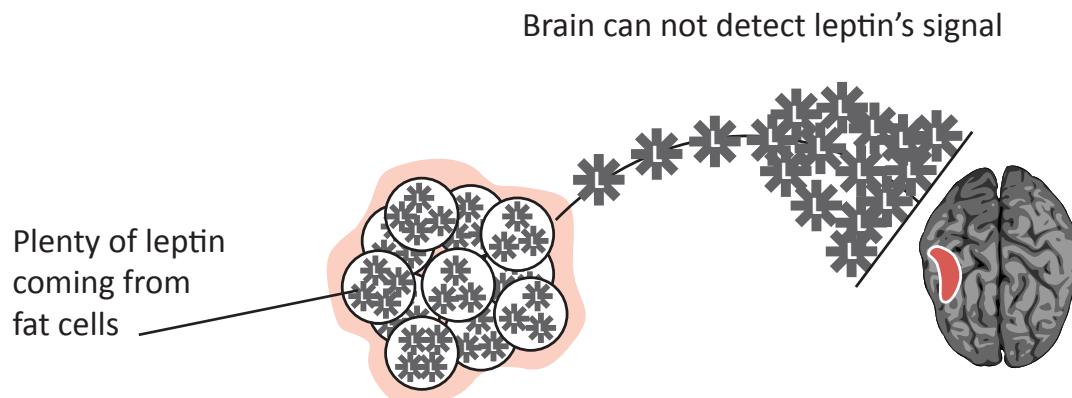
The human body is friggin' smart! This is why the Dark Side doesn't count calories. When leptin and the other hormones you'll be meeting soon are in balance, appetite and calories just tend to take care of themselves.

I know exactly what you're thinking. Wouldn't overweight and obese people make a ton of metabolism-increasing, appetite-reducing leptin due to such superfluous fat stores? And if so, why don't their bodies protect them from that same saber-tooth tiger?

Great questions! Yes, people with excess fat stores are pumping out plenty of leptin, which *should* relay a message to the hypothalamus that there is way more than enough fat on board. Metabolism *should* crank up to burn off the excess fat. Appetite *should* calm down as well. But they don't. Why? Because the hypothalamus has become **leptin resistant**. In other words, leptin is making the call, but the brain doesn't hear it. The darn ringer is off!

When the brain becomes leptin resistant, the subconscious mind is completely oblivious to the fact that there is way more than enough fat on hand to get through the famine. It thinks it's dealing with a rail-thin supermodel with extremely low fat stores and leptin levels, not the overweight guy or gal trying to sweat off the pounds in Zumba class. So the brain sends out the command to slow down the metabolism and increase hunger. No bueno!

How did things get this out of hand? Leptin resistance has been attributed to overeating (not so uncommon these days), frequent blood sugar surges (from our Standard American Diet), high triglycerides (ditto), excessive fructose consumption (the stuff is in everything!), and chronic stress (got some?).



BRAIN THINKS FAT STORES ARE LOW = METABOLISM SLOWS & APPETITE INCREASES

DOWN GO THE DOMINOES!

Here is where the hormonal interplay comes into the picture. When leptin levels are low (or the brain *thinks* they are low because of leptin resistance), the stress hormone **cortisol** goes

through the roof. This presents quite a problem since cortisol is a fat-storing and muscle-wasting hormone. We'll discuss the evils of excess cortisol in Chapter 6.

Reduced leptin levels also triggers an increase in a little-known appetite-regulating hormone in your stomach called **ghrelin**. When ghrelin is up, so too is your appetite and food intake. And to make you even more motivated to pay a visit to a vending machine near you, **Neuropeptide Y (NPY)**—a hunger signal produced by your brain—surges when leptin is down. NPY drives you to crave carbohydrates. And I'm not talking about broccoli and cauliflower; I'm talking about the sweet stuff that drives up your insulin levels. And as you'll soon learn, insulin stores fat!



LEPTIN LEVELS = CORTISOL (wastes muscle, stores fat) **& GHRELIN & NPY** (increase appetite)

Please keep in mind that your actual leptin levels don't have to be low for this hunger-inducing, fat-storing cascade to take place. If leptin and the hypothalamus are in a state of miscommunication (leptin resistance), leptin may be sky high, but the brain is deaf, dumb, and blind to it.

Now would be a good time to think back to the question posed by Taubes in the previous chapter, *"WHY do you overeat?"* I hope the last few paragraphs shined a little dark on that. Again, your body would rather you not starve to death. And that's exactly what it's thinking when you cut your calories in an attempt to lose weight.

You can't cheat the system. It's way smarter than you.

THE STARVATION DEFENSE SYSTEM: BY THE NUMBERS

1. Leptin declines due to reduced fat stores, or is perceived to be low due to leptin resistance.
2. Low leptin inhibits thyroid hormone conversion, thus slowing metabolism.
3. Low leptin increases cortisol, which stores fat and burns muscle.
4. Low leptin increases NPY, which makes you crave carbohydrates (the bad kind).
5. Low leptin increases ghrelin, which makes you hungry.
6. Your slow metabolism makes you want to sit on the couch all day.
7. Your appetite is raging. You lose control and eat everything in the fridge.
8. It's over! Weight loss program broken.
9. Your body feverishly stores fat to replenish its stores.
10. Your body stores extra fat just in case you ever feel like inducing another famine.
11. At some point you go on another calorie-restricted diet.
12. Back to Step One.

BLOOD SUGAR: PLAY ME A SONG

The hormonal symphony regulating the amount of sugar in your bloodstream is something to behold. The checks and balances within this system—when functioning precisely—protect you from potentially dangerous affairs of excess and deficiency.

Just enough blood sugar is what Mother Nature intended. T.S. Wiley writes in her book *Lights Out: Sleep, Sugar, and Survival*, “You could never chronically consume carbohydrates in nature.” Our friend Link lived in nature. I highly doubt he ever happened upon a bread

“The single most potent trigger of hormonal dysregulation is chronic carbohydrate consumption and subsequent blood sugar surges. It turns out that leptin and insulin are birds-of-a-feather. The same things that disrupt insulin also powerfully impact leptin.”

- Nora Gedgaudas in *Primal Body-Primal Mind*

bush, a breakfast cereal tree, or a mocha frappuccino river. His tribal governing body never ordered him to throw down seven to eleven servings of grains per day. In fact, he probably didn’t even know what a grain was since the advent of agriculture was only ten thousand years ago!

When Link ate carbs, they were real carbs like low-sugar fruits and berries in-season, as well as fiber-rich vegetables, and maybe a tuber here and there. When he ate fats, they were real fats from real animals that ate their real diets, or from small amounts of raw nuts and seeds. He did not have to freak out about carbs or fat grams the way that we do, since the ones available to him were of a wholesome nature. And he certainly wasn’t worried one bit about his insulin levels because blood sugar surges were few and far between.

Times have changed.

Much of the modern industrialized world is suffering from an insulin overdose secondary to an overabundance of refined carbohydrates like breads, pastas, breakfast bars, and everything else we stuff down our hatches in the name of convenience without so much as a second thought for actual nutritional value. And where there is a surplus of insulin, you will find a surfeit of chronic disease, obesity, and leptin resistance.

Before I make the grand mistake of blaming all things fat on refined carbohydrates alone, I should warn you that having tunnel vision when exploring any health challenge can be counterproductive. A holistic approach is critical to healing the body by uncovering the root cause. Although for now we will be focusing on the role played by excess not-so-good carbohydrates and their resultant blood sugar and insulin surges, I would first like to let you

in on some of the other less bandied about contributors to insulin—and therefore leptin—imbalances, most of which will be addressed in the chapters to come. They include:

DARK SIDER PROFILE

Bryan P. Walsh, ND

Author of *Fat is Not Your Fault*

Dr. Walsh combines a passion for nutritional biochemistry and science-based therapies, yet maintains a broad view of wellness, believing in the infinite capacity for the body to heal itself given the appropriate conditions and environment.

He manages a variety of conditions, but specializes in autoimmune thyroid conditions as well as fat loss for active men and women who are not losing weight using good diet and exercise programs.

Dr. Walsh is dedicated to helping his patients improve their health, but expects the same commitment from his patients. He accepts a limited number of new patients each month to ensure his patients receive quality care.

Website

www.drbyanpwalsh.com

UW Radio Appearances

Fat is NOT Your Fault

The Truth About Adrenal Fatigue



- Excessive alcohol consumption
- Polyunsaturated fats (primarily vegetable oils)
- Caffeine and other stimulants
- Psychological stress
- Sleep deprivation
- Food sensitivities
- Infections
- Toxins
- Insufficient exercise

As you see, carbs are just the tip of the insulin iceberg. To win the fat loss game, a bit of lateral thinking is in order. With that said, although I do believe that excess refined carbohydrate consumption is to blame in part for our obesity epidemic, I do want to make it clear that not all carbs are created equal. It's not about banishing them all, but rather choosing the right ones. I will help you with this shortly.

INSULIN: THE GOOD, THE BAD, THE UGLY

It was discovered way back in the 1950s that insulin is the hormone responsible for the accumulation of fat. There is no disputing this fact. A fat loss program with no regard for controlling insulin by way of the diet and lifestyle modifications advocated in this book is a failed program. Insulin is key.

Though cast as a villain by overzealous low-carb circles, insulin saves your life. If you beg to differ, try living without it and see what happens. Better yet, just go right ahead and ask a Type I diabetic what life without the ability to produce insulin is like. I rest my case.

So allow me to take you on a fantastic voyage through the narrow passages of your bloodstream, where we will explore the symphonic hormonal arrangement that thrives on *just enough*, yet

SYMPTOMS OF INSULIN RESISTANCE

- General fatigue, especially after meals
- Difficulty losing weight
- Always hungry
- Need for sweets after meals
- Cravings for sweets are not satisfied by eating them
- Frequent urination
- Waist circumference equal to or greater than hips
- Excessive thirst
- Irritability and anger when going too long between meals

tumbles into dissonance with too much or too little.

When you consume carbohydrate foods, whether they are whole grains or HoHo's, your digestive system breaks them down into the simple sugars glucose and fructose. (We will discuss fructose in Chapter 4.) Once absorbed, glucose

hits the bloodstream and blood sugar rises. What happens next is paramount not only for reaching your fat loss goals but for your health in general.

For our discussion, we will be focusing on insulin's ability to sweep sugar out of the bloodstream and store it away as **glycogen** or fat. Why is this function so critical? Because excess sugar in the blood—the technical term is blood glucose—is actually quite toxic. When glucose is too high, it can slowly wear down and damage cells throughout your body including your brain cells, eye cells, kidney cells, blood vessels, red blood cells, and more. This is why you've very likely heard stories of diabetics going blind, losing limbs to amputation, and suffering from kidney disease due to chronically high blood sugar levels. Conversely, when blood sugar falls too low, you might find yourself in a coma. Again, you want just enough.

Here's how it works:

Sensing a rise in blood sugar from your not-so-good carbohydrate meal, your pancreas—or what I like to call your **blood sugar detection service**—comes to the rescue by releasing insulin into your bloodstream. Your liver, muscle, and fat cells have receptors for insulin on their surfaces. Think of them as little keyholes with one extra-special key—insulin, of course.

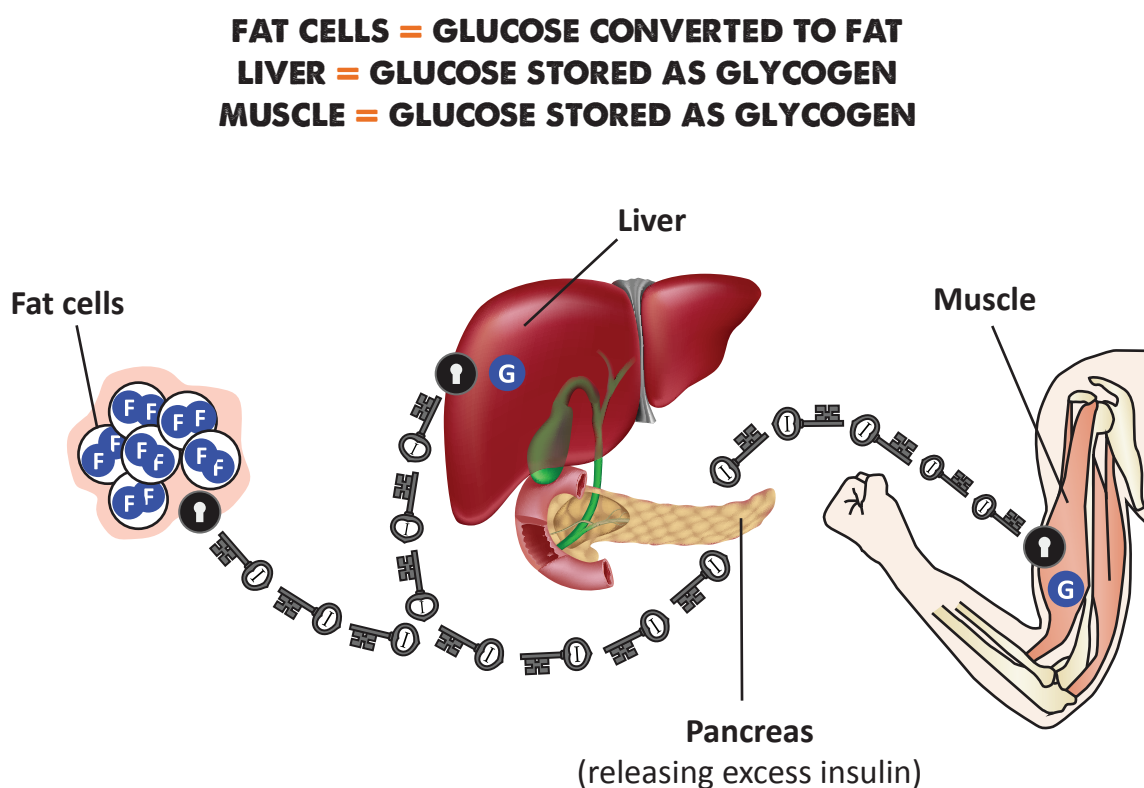
Insulin slides itself right into its customized keyholes and opens the doors, so to speak. With the doors ajar, insulin sweeps extra blood sugar into the liver and muscles for storage in the form of glycogen (stored carbohydrates). And with the help of an enzyme called **lipoprotein lipase (LPL)**, insulin sends glucose into the fat cells to be converted to and stored as fat. These insulin-mediated actions bring your blood sugar level back into normal range, thus protecting the rest of your cells from the damaging effects of excess blood sugar.

Time out! Just in case you missed it, I should highlight an important point you may have glossed over in the previous paragraph. As I mentioned earlier, insulin is responsible for the accumulation of body fat. **When insulin is up, so is the fat-storing enzyme LPL.** In other words, if your insulin levels are chronically elevated—if you're overweight, this is probably you—you

are stuck in perpetual fat-storing mode! We'll come back to this in the next section.

Though it is the primary fat storage hormone, most fat loss programs completely ignore insulin in favor of merely cutting calories. Ironically, the recommended low-calorie foods are often the same ones that cause insulin problems, blood sugar dysregulation, and more fat storage.

It could not be any more backwards!



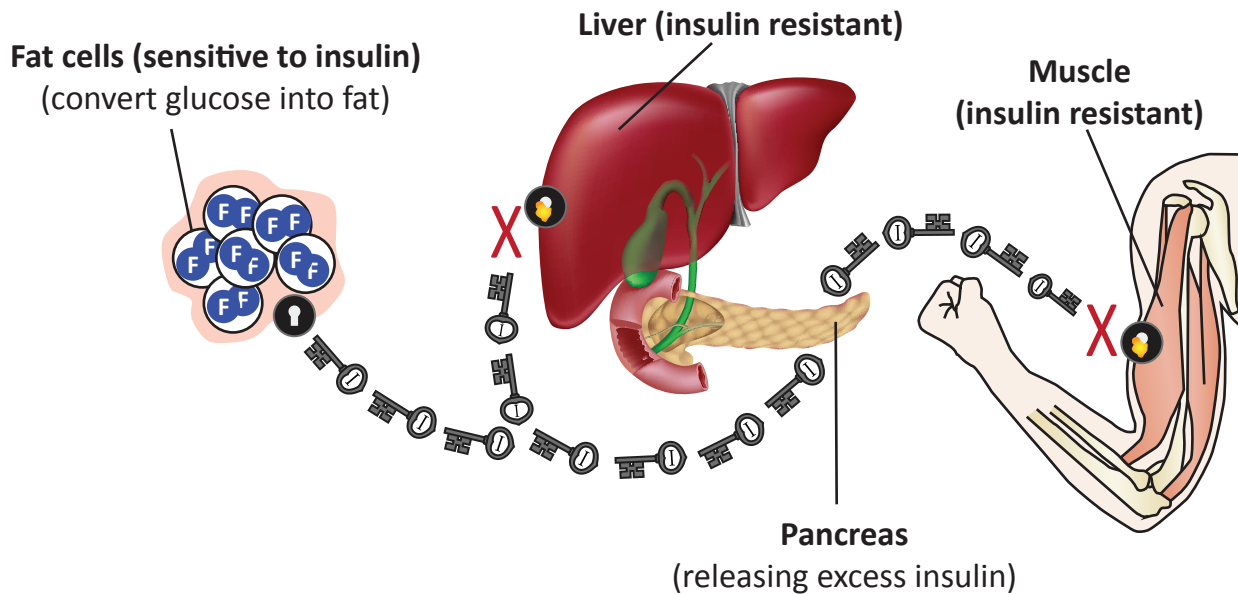
INSULIN RESISTANCE: GUM IN YOUR KEYHOLES

Knowing what you know about leptin resistance, you can probably guess how insulin resistance works. However, this time it's not your brain that becomes deaf, dumb, and blind to the hormonal call but rather your liver and muscle cells. By consuming an inappropriate diet as well as the contributing factors listed on page 40, your liver and muscles eventually put chewing gum in their keyholes. Denied access to its receptors, insulin can no longer effectively bind and carry out its job of clearing glucose from the blood. This is really bad news for the rest of your cells, as they slowly drown in a sea of destructive sugar.

Here's how insulin resistance works:

Since insulin can no longer effectively bind to its receptors, blood sugar remains elevated.

INSULIN RECEPTORS BECOME RESISTANT (GUM IN YOUR KEYHOLES)



Sensing this, your pancreas keeps pushing out more and more insulin keys. This sends your insulin levels sky high. So now you have high blood sugar *and* high insulin. Ouch!

Here's another important point you won't want to miss. Notice that I said that just your liver and muscle cells stick gum in their keyholes, thus becoming resistant to insulin. Well, your fat cells rarely chew gum, so they take a really long time to become insulin resistant. So, with your bloodstream looking like Insulin River, your fat cells go buck wild converting glucose into fat!

Pop quiz! What enzyme is used by your fat cells to convert glucose into fat?

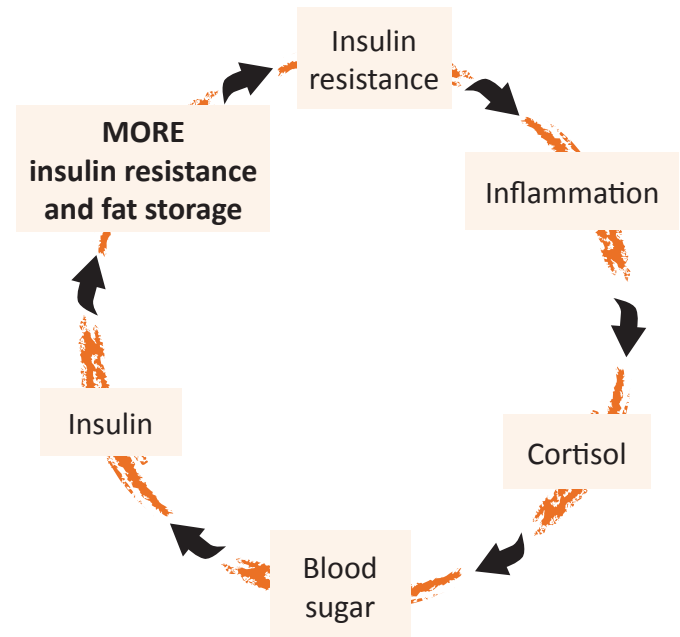
If your answer is LPL, give yourself a gold star. You've been paying attention. When insulin is high, fat-storing LPL is cranked up and ready to pack some fat. Meanwhile, the hormones and enzymes that actually burn fat are turned off! More specifically, insulin's fat-burning antagonist—the hormone **glucagon**—is sound asleep when insulin is elevated. At the same time, LPL's enzymatic fat-burning antagonist **hormone-sensitive lipase (HSL)** is also shut down in the presence of insulin. In other words, if you've got elevated insulin around the clock because of your refined carbohydrate diet, poor lifestyle, hidden stressors (we'll cover these in the second half of this book), and Hubba Bubba in your keyholes, you are NOT losing fat. Period.

↑ ↑ ↓ ↓
INSULIN & LPL (fat storing) & **GLUCAGON** (fat burning) & **HSL** (fat burning)

To make matters worse, elevated insulin gives rise to inflammation, which triggers the release of more cortisol. One of cortisol's main duties is to increase blood sugar. That's the last thing you want! With even more sugar being dumped into the bloodstream, a vicious cycle ensues.

And you get fatter.

Mix in the slowed metabolism and appetite-stimulating hormones triggered by leptin resistance, and you're up Blood Sugar Creek without a pancreas.



THE CONSEQUENCES OF EXCESS INSULIN

- Insulin impairs fatty acid metabolism, keeping you from burning fat.
- In men, insulin increases estrogen by way of upregulating the hormone **aromatase**, which converts testosterone to estradiol (estrogen). Men with elevated estrogen tend to hold fat on the chest, hips, and thighs.
- In women, insulin increases testosterone, which may lead to **Polycystic Ovarian Syndrome (PCOS)**, a condition that causes excess hair growth and infertility.
- Insulin impairs liver detoxification. As you will learn in Chapter 9, the liver is a key player in thyroid function as well as metabolizing and removing excess hormones from the body.
- Insulin stimulates **interleukin-6 (IL-6)**, an inflammatory substance known to damage the body in many ways. Inflammation is involved in most, if not all, disease processes.

FIGHT THE RESISTANCE

I think we've established how and why diets don't work. Caloric restriction will never defeat hormonal physiology dating back over 2 million years. Accept your failed diet attempts as your body's way of keeping you alive during times of famine. It was merely looking out for you and your survival.

It's not about the calories. It's about standing up to the resistance. Insulin and leptin resistance, that is. Balancing blood sugar and becoming more insulin sensitive through diet, lifestyle modification, and removing hidden stressors will turn OFF fat-storing LPL and turn ON fat-burning

HSL and glucagon. Eating more of the right foods will turn UP your thyroid and relight your metabolic fire so you can keep the pounds off for good. That's what this book is all about.

As we close this chapter, I'm sure you're looking for a list of foods to avoid. We'll get to that soon. Producing such a list this early will only confuse you and leave you wondering what's left to eat, since the very foods that can help you win the war with fat are same ones that you have been told to fear.

If Link would have followed today's dietary guidelines, he would still be frozen solid in that block of ice. None of us would have been around to find him.

Our survival defense systems would have surely crashed by now.

RECOMMENDED READING

Fat is Not Your Fault by Dr. Bryan Walsh

Good Calories, Bad Calories by Gary Taubes

Why We Get Fat by Gary Taubes

Primal Body - Primal Mind by Nora Gedgaudas

The Potbelly Syndrome by Russell Farris

Why Do I Still Have Thyroid Symptoms? by Datis Kharrazian, DC

Mastering Leptin by Byron Richards

RECOMMENDED PODCASTS

Fat is Not Your Fault with Dr. Bryan Walsh

Why Do I Still Have Thyroid Symptoms? with Dr. Datis Kharrazian

Boost Your Metabolism with Matt Stone

Primal Body - Primal Mind with Nora Gedgaudas

The Potbelly Syndrome with Russell Farris

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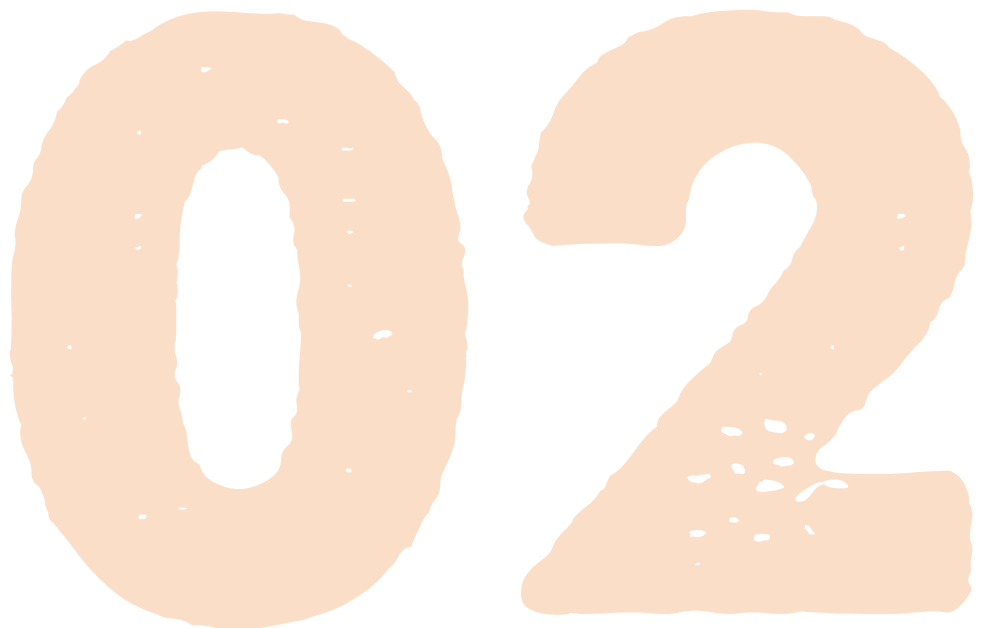
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03

DO WHAT HEALTHY PEOPLE DO Have No F.E.A.R.

“Saturated fat consumption is halved. Consumption of carbohydrates, cereals, processed potatoes, et cetera have gone up fantastically, and they say fat is making us fat. It’s just absurd.”

- Zoë Harcombe on *UW Radio*

DROPPIN' TRUTH BOMBS!



To be healthy and fit, you must DO what healthy, fit people DO.



There is no one-size-fits-all diet.



Fear of dietary fat and cholesterol has been a tremendous contributor to our obesity epidemic.



As heart disease has risen, saturated fat consumption has declined.



There is no conclusive scientific evidence proving that saturated fat causes heart disease.



It has been known for decades that dietary cholesterol has nothing to do with blood cholesterol nor heart disease.



The emerging field of epigenetics suggests that our diet and lifestyle choices today have an impact on the health of our grandchildren.

The Dark Side wonders how old school foods can cause brand new diseases.

When I need a break from reading health and wellness books, I study success and successful people. I read books like *Think and Grow Rich* by Napoleon Hill, *Mastery* by George Leonard, and *Unlimited Power* by Anthony Robbins. From these books I find a lone common denominator: to be successful, you must do what successful people do.

It is no different with health and fat loss. To achieve them, you must do what healthy, fit people do.

Here we have a dilemma since it has become incredibly difficult—if not impossible—to find a population healthy enough to serve as a model for exemplary health. Even the people we would consider to be healthy just by looks alone are typically not. I certainly wasn't. You know my story. I was what you would call an unhealthy fit person. I'm not the only one.

On every *Underground Wellness Radio* broadcast, my first question for each special guest is to tell us where he or she came from, to tell us about their journey. A very common story is one similar to mine. It is one of calories-in and calories-out, exercise addiction, and various health challenges that weren't so outwardly visible.

Mark Sisson, author of *The Primal Blueprint*, was an endurance athlete who ran upwards of 100 miles a week and even qualified for the 1980 U.S. Olympic Trials. At six-percent body fat, many would

consider him the epitome of health. However, internally he was a wreck with recurring bouts of fatigue, frequent upper-respiratory tract infections, and gastrointestinal problems. You can't judge a book by its cover. As fit as he was, Mark was running his way to chronic degenerative disease. He was fit, but he certainly was not healthy.

“Health has nothing to do with how many pounds you can bench press or how you look in a bikini. It is about being free from the signs and symptoms of disease.”

In my own personal and clinical experiences with bodybuilders as well as female figure models, depression, low libido, constipation, and amenorrhea (absence of menstruation) run rampant. This is not to say that they all have such health challenges. Rather, a perfect physique does not signify optimal health by any means. Health has nothing to do with how many pounds you can bench press or how you look in a bikini. It is about being free from the signs and symptoms of disease.

But, where on Earth can we find such people?

THE GREATEST NUTRITIONIST WHO EVER LIVED

Dr. Weston A. Price was a Cleveland-based dentist, whose concern about dental decay and physical degeneration led him on what is likely the most important journey in nutrition ever taken. In the 1930s, he set out with his wife to live with, investigate, and document the diets of those traditional native people who had remained isolated from industrialized society and refined foods, or what Price called *the foods of commerce*. These people were truly the picture of perfect physical and dental health, free of degenerative disease, obesity, depression, and all that plagues modern society.

Dr. Price visited fourteen groups including the Inuit Eskimos, Australian aborigines, tribal Africans, Maoris, and Pacific Islanders. All had remained on their traditional diets that had nourished them for hundreds—if not thousands—of generations.



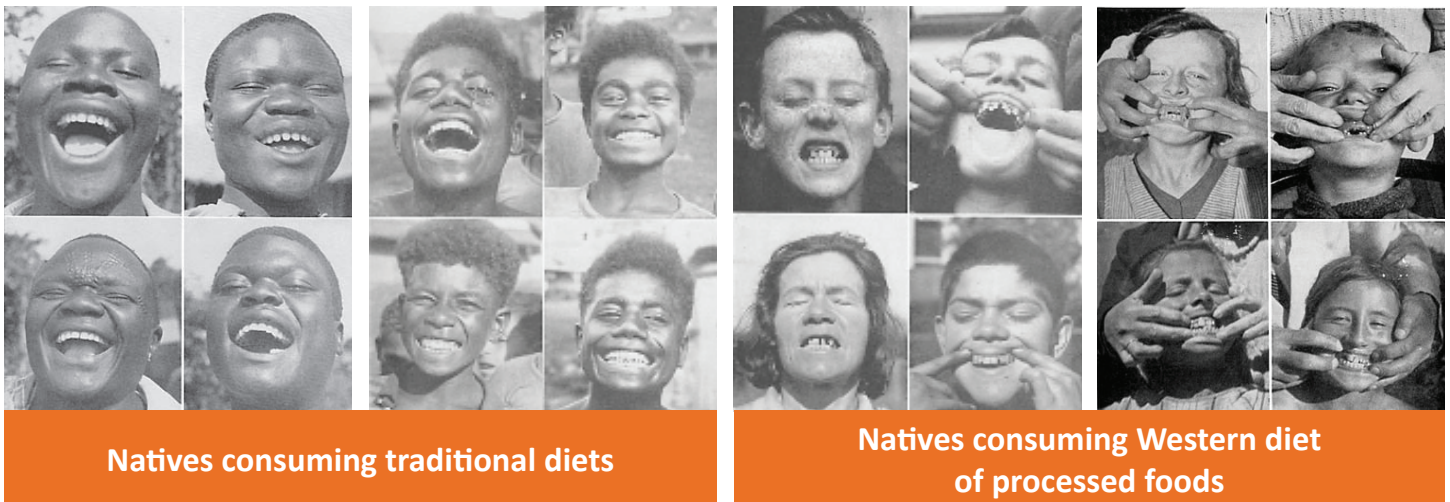
Weston A. Price

Price also studied those native people who had abandoned tradition for more refined foods like table salt, sugar, white flour, and pasteurized milk. By observing both the primitive and modernized groups, a comparison could be made to determine the health effects of moving away from nature's wholesome fare. Price published his findings, complete with incredible photographic documentation, in his book *Nutrition and Physical Degeneration*. It is a book that entirely altered my perspective on what real food and real health really are.

The photographs taken by Price demonstrated that health begets distinct physical features. As a dentist, he viewed the mouth as a window into the rest of the body. Traditional natives exhibited perfect dentition virtually absent of cavities, despite the accompanying absence of toothbrushes or dental floss.

Dr. Cate Shanahan, author of *Deep Nutrition: Why Your Genes Need Traditional Food*, describes these healthy natives as having “beautiful faces with beautiful cheekbones, eyes, noses, lips, and everything else - the total package, the physical representation of physiologic harmony.”

Modernized natives exhibited high rates of dental cavities as well as signs of degenerative diseases. Yet, what was most troubling of Price's findings was the fact that the offspring of parents who consumed refined foods were also impacted by the shift away from traditional foods. Price's photos show children born with narrow faces and jaws not wide enough to fit their crowded teeth, a very common dental problem today. Rates of tooth decay and cavities were also higher in modernized children.



Almost a century later, the ramifications of diet on the health of future generations is becoming a hot topic in the field of **epigenetics**. Shanahan writes, *“Scientists are becoming convinced that failure to attend to the proper care and feeding of our bodies doesn’t just affect us, it affects our genes—and that means it may affect our offspring...The way people live and their lifestyles no longer just affects them, but may have a knockoff effect for their children and grandchildren.”*

Price showed that this knockoff effect could take place within a single generation. We should all be eating with our grandchildren in mind.

DOES ONE SIZE FIT ALL?

I can say to an absolute certainty that none of the groups Price visited ever counted a single calorie. They didn’t fret over macronutrients ratios. And not one had a gym membership. They just ate real foods and remained connected to Mother Nature.

Interestingly, no group consumed the same diet. Some diets were high in animal foods. Others relied upon mostly plants and grains for sustenance with scant amounts of meats and seafood. However, all enjoyed abundant health, were virtually free of disease, and remained spry into old age. Food options simply came down to location, climate, and availability. Foods were grown locally and seasonally in rich soils. The animals they consumed nourished themselves on their intended diets. And the people lived healthily because of it.

To give you some idea of the wide-ranging diets Price encountered, the Inuit consumed an 80% fat diet consisting of marine life, elk, and caribou with almost no calories coming from carbohydrate. But they weren’t low-carb by choice. Carbs don’t grow on ice!

The Massai of Africa enjoyed a diet that was 60-70% fat. A cattle-keeping tribe, they primarily consumed meals consisting of beef, raw milk, and cow’s blood. Yum!

The Swiss villagers Price visited in the high Alpine valleys feasted on a diet rich in dairy and rye, seasonal greens, and occasionally meat.

Recently, the foodie blogosphere has become intrigued by the Kitavans (not studied by Price) of New Guinea. They eat a 70% carbohydrate and 20% fat diet consisting primarily of yams, greens, fish, and coconut.

The Swiss and Kitavans—as well as the healthy yet carb-munching people of Laos, Cambodia, China, Vietnam, and elsewhere—are why you’ll never (or should I say “never again”) catch me advocating a low-carb diet, since obviously it *is* possible to live healthily while consuming a high percentage of calories from carbohydrates—so long as you are eating the right ones.

DARK SIDER PROFILE

Cate Shanahan, M.D.

Author of the books
*Deep Nutrition: Why Our
Genes Need Traditional Food &
Food Rules*



Dr. Shanahan trained at Cornell University’s Molecular Biology program where she learned how nutrients direct physiological growth. She continues to study nutrition and alternative medicine since residency training in Tucson, AZ.

Her lectures have revolutionized how fellow medical professionals think about nutrition and health.

Website

www.drcate.com

UW Radio Appearances

[Deep Nutrition](#)

[MORE Deep Nutrition](#)

[The Truth About Cholesterol Lowering Drugs](#)

[Can Diet Stack the Odds Against Autism?](#)

Blogging on the health of the Kitavans, *UW Radio* guest Matt Stone writes, “these islanders reach old age completely free of heart disease, most cancers, type 2 diabetes, obesity, and other various forms of Western Disease.”

So do the Massai.

And the Inuit.

And the Swiss Villagers.

And just about every other traditional society that has steered clear of processed foods and lived by *The Code of the Underground*.

This is also why I refuse to promote specific macronutrient ratios, grams of this or grams of that. Clearly, there is no one-size-fits-all diet. While we hoot and holler about calories, we ought to be doing as healthy people do.

We should Just Eat Real Food.

IS GOD STUPID?

I’m sure you’re wondering how the Massai and Inuit were able to eat such massive quantities of fats and animal foods without their hearts exploding. Well, this may be hard for some to

believe, but saturated fat has nothing to do with heart disease, nor does dietary cholesterol. You've been duped.

Before I get to the scientific evidence, let's ponder some common sense. First off, if saturated fat was such a killer, societies like the Massai would have vanished from the planet long ago. But in the 1960s, George Mann, a prominent researcher from Vanderbilt University, found that the full fat milk-drinking, red meat-eating Massai tribesmen had some of the lowest blood cholesterol levels ever measured.

Here's what Mann has to say about all of this saturated fat-phobic tomfoolery:

"The diet-heart hypothesis has been repeatedly shown to be wrong, and yet, for complicated reasons of price, profit, and prejudice, the hypothesis continues to be exploited by scientists, fund-raising enterprises, food companies, and even government agencies. The public is being deceived by the greatest scam of the century."

Eating fats and animals is what got us here. Sometimes we forget that—for many of us—our ancestors lived in freezing conditions many months out of the year. With no fruits and veggies springing forth from the frozen earth, animals were where it was at! This is how life was for literally millions of years before us. Then around 60 years ago, some guy—we'll talk about him in a bit—and his selective research flipped our diets upside down.

Remember, the Dark Side wonders how an old school food or nutrient can cause a brand new disease. Heart disease is a relatively new phenomenon. Saturated fat and cholesterol are not.

My most popular YouTube video is called **Is God Stupid?** I figure most people click on it because they think I'm bashing religion. But what it's really about is how God, Mother Nature, or the aliens—whomever you believe in—could put us on this Earth to live such amazing lives and at the same time try to kill us.

Did God put saturated fat in the milk to kill us? Did He put yolks in the eggs to kill us? How about the skin on the chicken? Did He purposely put the fat in the tastiest part of the bird to kill you and me? Were the Massai and everyone else born before the mid-twentieth century made exempt from this wrath?

Oh, wait! The modern French seem to have managed to dodge the saturated fat bullet, too. They eat a diet rich in saturated fat and have one of the lowest heart disease rates in the entire world. But that's just a paradox. We should just ignore them, right?

I have a really hard time believing that the all-knowing God, the Man himself, could do such a thing. (Or the aliens.)

GOD ISN'T STUPID. STUPID SCIENTISTS ARE STUPID!

I cannot begin to tell you how many times I have consulted with prospective clients who felt better and got leaner by eating more fats and animal foods. However, they eventually abandoned their diets due to constant admonishment from uninformed friends, co-workers, and family members for trying to “give themselves a heart attack”. If they only knew where their fears of fat came from!

Let me tell you a story.

Just a hundred years ago, coronary heart disease (CHD) was not part of the curriculum at most medical schools. This was likely because back in those days very few people were dying from it. Some like to attribute such low CHD rates to the absence of diagnostic technology. There is some truth to that. But at the same time, I think humans are very capable of knowing when it feels like an elephant is sitting on their chest regardless of what year it may be.

In the 1920s, CHD rates began to climb. But it was the heart attack of President Dwight D. Eisenhower in 1955 that thrust what has swiftly become the leading cause of death into the national spotlight. You can imagine the media frenzy and mass hysteria that ensued. Almost overnight, heart disease had become Public Enemy Number One.

No crisis goes without fault. Doctors, scientists, media, and just about everyone with an opinion speculated as to what was to blame for the President’s health scare. Science soon won out, as it was the research of University of Minnesota physiologist Ancel Keys that forever instilled the fear of fat within us.

Keys’ theory, known as **The Lipid Hypothesis**, contended that there was a clear link between saturated fat consumption, cholesterol, and heart disease. He postulated that the consumption of saturated fat increased blood cholesterol, which clogged arteries, thus choking the heart off from its supply of blood and oxygen.

Enamored with his own theory, Keys authenticated his hypothesis with his Six Countries Study. The six countries presented in his research demonstrated the clear link he was looking for. But... he had actually collected data from *twenty-two* countries!

Taubes writes in *Good Calories, Bad Calories*, “When all twenty-two were included in the analysis, the apparent link between fat and heart disease vanished. Keys had noted associations between heart disease death rates and fat intake...but they were just that.”

Associations do not imply causation. According to Tom Naughton, producer of *Fat Head: The Movie*, Keys' data also showed associations between the following:

- Heart disease and sugar consumption
- Heart disease and owning a TV
- Heart disease and owning a car

Not only did Keys cherry pick his own research, he also overlooked the previous 2.2 million years of human history, a period when saturated fat did not cause heart disease. Keys even ignored the dietary trends of his own era. During the same period when CHD was on the rise, the consumption of butter, lard, whole milk, and overall animal fat consumption were in fact *declining*. This decline was due to the advent of vegetable oils, which were promoted as heart-healthy (whoops!). Sugar consumption had also risen precipitously. And trans fats had been introduced to replace animal fats. Everyone knows trans fats are bad.

So let me get this straight. Heart disease goes up. Saturated fat consumption is headed downward. Vegetable oil, trans fats, and sugar consumption reach unprecedented levels. But saturated fat, the old school nutrient that has been around literally forever, takes the blame for a modern health crisis!

Amazing.

What's even more astounding is the fact that Keys' research landed him on the cover of Time magazine as the man who cracked the heart disease code.

Saturated fat consumption has nothing to do with heart disease. And the link between blood cholesterol and CHD is highly debatable with 50% of all heart attack victims having "normal" cholesterol scores (below 200). Even President Eisenhower had a cholesterol level of only 165 when he suffered his famous heart attack.

According to Taubes, Eisenhower had become so obsessed with his diet and cholesterol level that he shunned butter, lard, and cream, replacing them with corn oil. The president tortured himself with skim milk, Sanka, and fruit for breakfast. But his cholesterol managed to climb higher and higher. On his final day in office, the president's cholesterol was 259. His doctor told him it was 209. He lied. And so did Keys.

In 1997, Keys himself was quoted as saying *"There's no connection whatsoever between cholesterol in food and cholesterol in blood. And we have known that all along."*

In fact, in the 25-year follow-up article on Keys' Seven Countries study (the predecessor of the flawed Six Countries Study), which was published in the *European Journal of Epidemiology*, the word "fat" does not appear one time!

CHOLESTEROL: DID YOU KNOW?

- Every cell in your body requires cholesterol for membrane fluidity and proper function.
- Cholesterol makes up one-quarter of your brain and is critical for optimal mental function and memory.
- Cholesterol is the precursor to bile acids, which help with the digestion of fat-soluble vitamins.
- Cholesterol is the precursor to your steroid hormones, including testosterone and estrogen.
- The ratio of LDL cholesterol to HDL cholesterol is a much better marker for heart disease than total cholesterol.
- There are several different types of LDL (“bad”) cholesterol. Large, buoyant LDL does not damage the arteries. Small, dense LDL does. Excess refined carbohydrates increase the latter.
- Low HDL (“good”) cholesterol is a clear sign of excess refined carbohydrates in the diet.

A detailed, thorough discussion of cholesterol goes beyond the scope of this writing. Please see the *Recommended Reading & Podcasts* sections at the end of this chapter.

YOU HAVE NOTHING TO F.E.A.R.

Has fear been making you fat, tired, and sick?

Napoleon Hill called fear *False Evidence Appearing Real*. As real as the link between saturated fat and heart disease may appear, it is backed by selective, false evidence and an almost comical disregard for human history. What is very real is the heart disease/obesity epidemic that our fear-driven dietary recommendations were *supposed* to solve but only made worse. So now what? Should you go out for a glass of cow’s blood like a Massai tribesman? Hunt for caribou and elk like the Inuit? Munch on insects and grubs like the Australian Aborigines? Not really, but you can if you want! Even in the 21st century, we can still eat like our ancestors. The question is HOW.

I’ll show you.

LET'S DO THIS!

If you have lived in fear of saturated fat and cholesterol, order some labwork from your doc before making the suggested changes to your diet. Give yourself at least 6 weeks between before-and-after tests. Be sure the labs check for c-reactive protein, homocysteine, oxidized LDL, cholesterol particle size, triglycerides, LDL, and HDL. The ratio of LDL to HDL is a superior indicator of heart disease risk. To learn more about the optimal ranges for these markers, please listen to [this radio show](#) with cholesterol researcher Chris Masterjohn! Grab a pen and paper for note-taking.

RECOMMENDED READING

Good Calories, Bad Calories by Gary Taubes

The Great Cholesterol Con by Anthony Colpo

Deep Nutrition by Dr. Catherine Shanahan

Nutrition and Physical Degeneration by Weston A. Price

The Obesity Epidemic by Zoë Harcombe

RECOMMENDED PODCASTS

The Real Cholesterol Story with Chris Masterjohn

The Obesity Epidemic with Zoë Harcombe

Debunking Health & Diet Myths with David Getoff

\$29 Billion Reasons to Lie About Cholesterol with Justin Smith

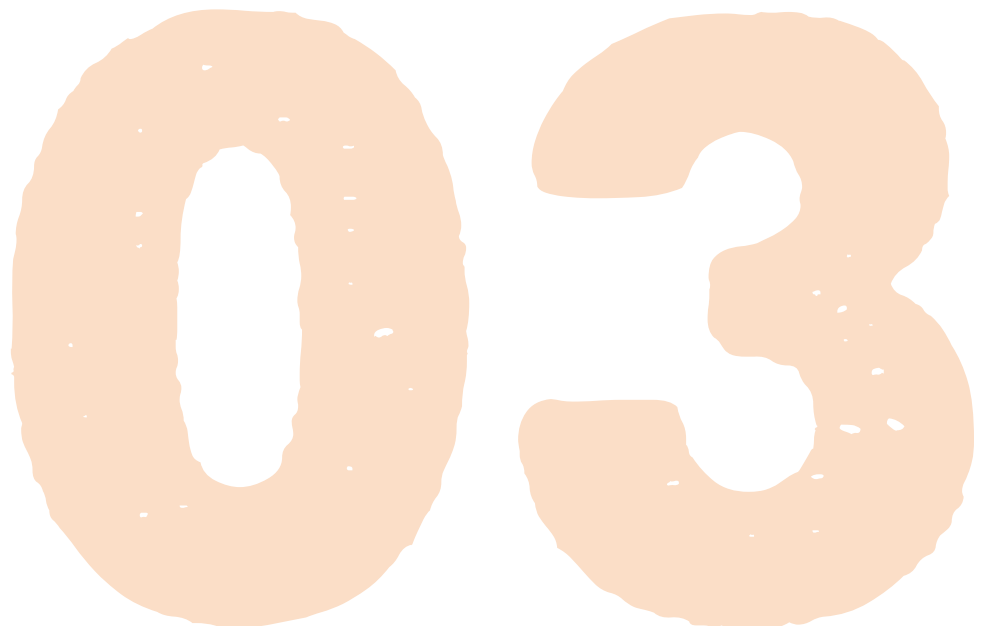
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04

JUST EAT REAL FOOD **Eat Like Your Ancestors!**

“The birthright of all living things is health. This law is true for soil, plant, animal, and man: the health of these four is one connected chain. Any weakness or defect in the health of any earlier link in the chain is carried on to the next and succeeding links, until it reaches the last, namely man.”

- Sir Albert Howard

DROPPIN' TRUTH BOMBS!



Nature's intention is that we follow the Wheel of Life, in which healthy soil produces healthy plants and animals for humans to consume.



Real food from healthy soil provides the building blocks for life.



The unsuitable diets fed to the commercially-raised animals alter their nutritional value and fatty acid profile, thus promoting disease, inflammation, and obesity.



Americans spend a smaller percentage of their disposable income on food than any society in the history of the world.



The expense of organic food is not the fault of organic farmers or the markets that sell the foods, but of the government's farm bill.

The Dark Side rides the Wheel of Life.

Whenever anyone asks me for general diet and health advice, the first thing I tell them is this:
Just Eat Real Food.

In other words, eat like your ancestors.

Our ancestors of not so long ago were connected to Mother Nature and the Real Foods she provided. Yet in a span of less than a century, we have become more removed from her than any society that has ever walked the Earth. Convenience, cost, and calorie count have leapfrogged survival and nourishment as the chief motivating factors behind our mealtime decisions. Our collective health is but a somber reflection of an ignorance as to what Real Food really is. We are literally digging our own graves with our sporks.

Our bullet train to health and fat loss will never arrive at its scheduled destination without the proper fuel on board. That fuel is Real Food.

AS THE WHEEL TURNS

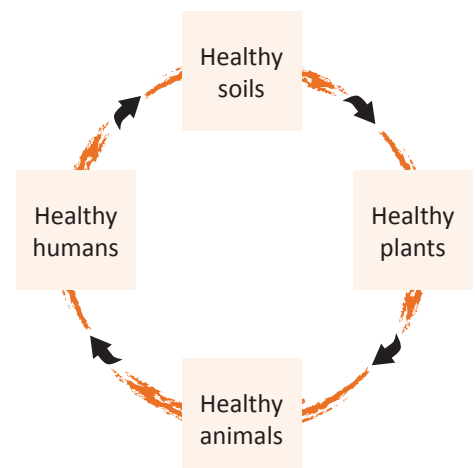
Over our lifetimes, each of us will eat about 7,000 meals and 60 tons of food. With all the time that passes between our first and last bites, how many of us actually ponder where our food comes from?

Food has its own “birds and the bees” story called *The Wheel of Life*, a concept I became familiar with through reading *Under the Veil of Deception*, Paul Chek’s fascinating book on organic farming.

The wheel represents the circle of life, or what Chek calls the **closed organic cycle**. Healthy soils produce healthy plants. Healthy animals eat the healthy plants. Then, we eat the healthy plants and healthy animals. It’s the food chain in action, the ascension of health from the earth up. With the culmination of life comes a return to the soil. The cycle begins again.

Life begins and ends with the soil. Yet we treat our topsoils like dirt with modern-day chemicals and short-sighted farming practices that have left our wheels warped and out of alignment. What we are left with is *The Wheel of Death*, revolving around sick people eating sick animals and sick plants emerging from sick soils.

It is beyond self-evident that our unprecedented health crisis lies in parallel with an adulterated food supply to which no society—or species for that matter—has ever been subjected.



DARK SIDER PROFILE

Paul Chek

Author of the books *How to Eat, Move, and Be Healthy* & *Under the Veil of Deception*



Paul is an internationally-renowned expert in the field of corrective and high-performance exercise kinesiology. For over 25 years, Paul's unique, holistic approach to treatment and education has changed the lives of countless people worldwide, many of his clients as well as his students and their clients. By treating the body as a whole system and finding the root cause of health challenges, he has been successful where traditional approaches have consistently failed.

Paul is the founder of the C.H.E.K (Corrective Holistic Exercise Kinesiology) Institute.

Website

www.chekinstitute.com

www.paulcheck.com

www.chekconnect.com

UW Radio Appearances

[Ask Paul Chek #1](#)

[Ask Paul Chek #2](#)

[Ask Paul Chek #3](#)

[Ask Paul Chek #4](#)

[Ask Paul Chek #5](#)

[Ask Paul Chek #6](#)

[Healing Parasite and Fungal Infections](#)

Clearly, a return to nature's rhythm is not in the immediate forecast. Yet we can weather the storm through education as a means for opting out of the status quo.

FROM SOIL TO THE CELL

Real Food from healthy soil provides us with the building blocks for life. Our bodies are made up of 50-75 trillion cells. These cells make up our tissues, bones, glands, organs, and eyeballs. And all of these different parts make up our systems, which are designed to run our bodies with remarkable precision. Just as we would need bricks to build a brick house, we need nutrients to build our cells and ultimately our bodies. To function optimally, our cells require:

- Proteins (amino acids)
- Fats (lipids)
- Carbohydrates (glucose)
- Vitamins
- Minerals
- Enzymes
- Water

Without these critical building blocks our cells run with less efficiency, thus creating a domino effect of systemic dysfunction, subclinical symptoms, and eventually chronic degenerative disease.

Evidently, the nutrients required for optimal cellular efficiency come from the foods we consume. But even the most cursory assessment of the Standard American Diet—and that of any other industrialized country for that matter—reveals the root of our health crisis. We are building our brick houses on unstable foundations while using unsound materials. Our food supply has been largely

**“You can’t get health
from a sick animal!”**

- Paul Chek

stripped barren of its life force through pasteurization, irradiation, nutrification, transportation, sterilization, and every other process it is subjected to before landing on our plates.

This isn't real.

KEEPING IT REAL (FOOD)

In his *9 Steps to Perfect Health* blog series, Chris Kresser—a.k.a. The Healthy Skeptic—defines Real Food as:

- Whole, unprocessed, and unrefined
- Pasture-raised and wild
- Local, seasonal, and organic

Couldn't have said it better myself.

The Wheel of Life affirms that you are as healthy as the plants and animals you consume. Or as Paul Chek would say, *“you can't get health from a sick animal (or plant).”*

Supermarket shelves are lined with sick food. A walk up and down the aisles begets a rather imposing experience with even the most abominable packaged foods pitching overt health claims. Then we must contend with what seems like an ever-growing list of food subcategories: organic, conventional, grass-fed, hormone-free, natural, humane, commercial, free-range, omega-3 enriched, and antibiotic-free. You wanted a carton of eggs and all you got was anxiety!

REALLY SIMPLE RULES FOR CHOOSING REAL FOODS

- If it wasn't here 10,000 years ago, don't eat it.
- If it's in the media, it's probably bad for you.
- If you can't pronounce the ingredients, don't eat it.
- If your great-grandmother didn't eat it, you probably shouldn't either.
- If it comes in a box or bag, don't eat it.
- If your dog won't eat it, you shouldn't either.
- If it doesn't rot or spoil, don't eat it.
- If it's been sprayed with chemicals, don't eat it.

I try my best to keep things as simple as possible. So, to the left you will find a handful of the Real Food Rules I like to follow.

Of course, there are exceptions to these *Simple Rules*, but you get the point.

FOOL'S GOLD

They just don't make 'em like they used to.

In the last half-century, food has been revolutionized. First, it was

the *Green Revolution* that brought synthetic fertilizers and pesticides to our farms and soils. Then came the *Hormone Revolution* that injected our animals with growth promoters and antibiotics. And most recently our food supply had been altered forever by a human science experiment called **genetic engineering**, the impact of which is unknown at this time.

DARK SIDER PROFILE

Chris Kresser

Licensed acupuncturist and practitioner of integrative medicine.



Chris completed his undergraduate studies at UC Berkeley. After graduation, he contracted a mysterious tropical illness while traveling in Indonesia. Upon returning to the U.S., Chris was unable to find the medical care he needed and decided to take his health into his own hands. He then decided to study acupuncture and holistic medicine at the Acupuncture and Integrative Medicine College.

Chris now has a private practice in Berkeley, where he works with patients. He is also a prolific blogger and is well-known for staying adept of the latest research.

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UW Radio Appearances

[*The Healthy Skeptic*](#)

[*The Healthy Baby Code*](#)

[*Ask Chris Kresser!*](#)

To the average shopper, everything is business as usual. The meat looks like the same meat. The eggs still look like same eggs. However, what is less apparent to the naked eye is the dramatic change in the nutrient composition of our fool's gold food supply.

Understanding how these changes affect your physiology is key to taking control of your health and losing fat forever.

INFLAMMATION NATION

If you think back to Chapter 2, you may recall that inflammation makes you fat. Of even greater concern is the fact that it has a hand in just about every disease and condition under the sun. One of the primary reasons why inflammatory disease incidence has escalated so considerably is the modern diet.

Contrary to conventional wisdom, it is not the animals themselves that are causing our obesity and disease epidemics, but rather the methods by which our animals are raised. Red meat won't kill you. However, red meat from cows injected with hormones, treated with antibiotics, and fed genetically modified corn grown in depleted soils just might!

To understand how the bargain-priced meat, poultry, fish, and eggs we unwittingly purchase and consume daily are mere

impostors when compared to the overall nutrition offered by their more authentic counterparts, we must first examine the **essential fats**.

With our attention fixed on caloric intake and cholesterol, we managed to overlook the most important change to our food supply, the ratio of **omega-6** (n-6) to **omega-3** (n-3) fats. These fats are called “essential” because they cannot be manufactured by the body. They must come from food.

IS REAL FOOD TOO EXPENSIVE?

I frequently find posts on my **Facebook** page grumbling over the expense of Real Food. Some call me “elitist” for my promotion of organic produce, free-range poultry, and grass-fed meats. In my opinion, the expense of Real Food depends on how much you value your health. In 1950, Americans spent one-fifth of their disposable income on food. Compare that figure with the one-tenth we spend today and you will notice a strong shift in our priorities. We spend less of our disposable income on food (read: health) than any other society in the history of the world. You get what you pay for.

I’ve met people with \$50,000 cars who claim they cannot afford healthy food. At the same time, I’ve met destitute college roommates who gave up their cable TV, designer jeans, and shoe obsessions just so they could pool their money together and buy Real Food from local farmers.

One of the biggest—and least noted—reasons why organic foods are more expensive than their conventional counterparts is because the federal government subsidizes farmers who use chemicals on their crops. Organic farmers receive no such monetary assistance. Therefore, organic food must cost more.

If you are fed up with the cost of organic produce, please take the matter up with the government and its farm bill. It is not the fault of the farmers or the stores that sell the food.

Medical bills are expensive, too. You can pay a little extra now or pay a lot later. Your call.

Omega-6 fats are found in the seeds of plants, while omega-3 fats are found in their leaves. Both are also found in the animals we eat. Fish tend to have the highest levels of omega-3 fats. Beef, poultry, and eggs are solid sources as well.

For optimal health, the ratio of omega-6 to omega-3 fats—called the **n-6 ratio**—is of prime importance. The former are inflammatory and facilitate the clotting of blood. The latter are anti-inflammatory and help blood flow. An excess of omega-6 fats will put the body into an inflammatory state, increasing the risk of heart disease, cancers, obesity, and a multitude of other conditions.

In the days of hunter-gatherers—when food was real—the n-6 ratio was near 1:1. This delicate balance was likely the most critical element in their freedom from disease. Regrettably, as the

animals we consume have had their own diets switched from green grasses and insects to genetically modified corn and soy, the average n-6 ratio is now estimated to be anywhere from 10:1 to 20:1!

We have become an Inflammation Nation not only because of our Standard American Diet but because of our diet's diet!

These aren't the same animals.

LET'S GO SHOPPING!

Now that you understand why the n-6 ratio is so important to your overall health and fat loss goals, it's time to go shopping. Before we go, I must again remind you that you cannot get health from a sick animal or plant. Always keep that in the front of your mind while strolling down the supermarket aisles.

REAL MEAT

Healthy cows eat green grass and drink plenty of fresh water. They move from paddock to paddock, munching on fresh pasture, leaving behind patties of poop to fertilize the soil so that the grass will grow again. It's as simple as that.

With four rumen—think of them as stomachs—teeming with beneficial bacteria, cows can transform their herbivorous diet into meat and milk. By eating and drinking as nature intended, the meat they produce is abundant with omega-3 fats, vitamins A and E, and CLA.

CLA, or conjugated linoleic acid, is a fat that helps you lose fat and build muscle. Yes, fat can help you lose fat! Science is also showing that CLA is a potent cancer fighter. Keep that in mind the next time someone tells you red meat causes cancer!

In terms of the all-important n-6 ratio, in a study conducted by Duckett et al., grass-fed beef was shown to have a ratio of 1.65. **That's pretty darn close to 1:1.** I'll take it!

Sick cows eat grains. They don't have the luxury of grazing on green grasses. Instead they live in crowded **CAFOs**

WOULD YOU RATHER?



OR



(Concentrated Animal Feeding Operations) ankle-deep in their own feces. Since these cattle are fed a diet they were never designed to consume, they are prone to illness. To fight infections, they are given antibiotics. And since the corporations running these CAFOs are in a hurry to get their beef to a drive-thru window near you, the cattle are given hormones to hasten their growth. The result is that as soon as you bite into your six-dollar burger, that cow's antibiotics and hormones end up becoming your antibiotics and hormones. Not good.

Comparing the nutritional value of grain-fed beef to grass-fed is like night and day. Much of the difference stems from the pH of the cow's four rumens, or digestive compartments. The first compartment is a fermentation tank. In grass-fed cattle, this particular rumen has a pH of about 7 (neutral) and is abundant with healthy bacteria, or **flora**. When fed grains, the pH falls to 4, which is very acidic and a breeding ground for pathogenic bacteria like E. coli O157. Such a drastic change in pH and bacterial balance alters the health of the animal along with the nutritional value of its milk and meat.

Compared to grain-fed cattle, the flora within the rumen of grass-fed cows help it produce up to 400 times more CLA, an abundance of omega-3 fats, less inflammatory omega-6 fats, and 2 to 3 times more vitamins A and E. Lots of bricks to build your brick house!

Feeding cattle an unnatural diet robs you (and the cow) from anti-cancer and fat-burning CLA as well as anti-inflammatory and heart-healthy omega-3s while giving you a dose of antibiotics and estrogen-mimicking hormones that support tumor growth and fat storage.

When cows eat what they are designed to consume, it benefits their health and yours. When the wheel is broken, your health is not far behind.

REAL POULTRY

Real chickens are omnivores. Their diet may include worms, insects, fresh grass, grasshoppers, crickets, oyster shells, and corn. On a real farm, they are three steps behind the cattle, picking through their patties, looking for a high-protein larval snack and spreading out the manure for improved soil fertilization.

While eating and exercising, these happy chickens work on their tans and boost their vitamin D levels under the sun's rays. At dusk, they return to their coops protected from predators and looking forward to the coming day. Life is good.

**WOULD YOU
RATHER?**



OR



CRACKING THE BEEF LABEL CODE

Going shopping for beef can be incredibly confusing if you don't know what to look for. Here's a cheat sheet!

If your local supermarkets do not carry high-quality beef products, take it to internet and check out U.S. Wellness Meats, Eat Wild, and Beyond Organic. They all get the *UW Seal of Approval*.

Best - 100% Grass-Fed. These cows have been raised on grass and pasture from birth to slaughter.

Cool - Grass Finished. Fed high-quality grass for the 100 days before slaughter.

Tricky - Grass-Fed. In 2005, the USDA changed the grass-fed standards to mean that the cow must eat grass for 80% of its life. The other 20% can be anything. Antibiotics and hormones are allowed.

Don't Be Fooled - Organic. All this means is that the cows were fed organic grains and NOT grass. The quality of the feed is better, but the nutritional composition is equivalent to commercial beef.

Better than Nothing - Antibiotic/Hormone-Free. Grain-fed cows tend to have more fat, which is exactly where they store residues from antibiotics and hormones. If none of the above are available, this will do. Just be sure to trim off the toxic fat.

I'll Pass - Regular Commercial Beef. I won't go near it myself. I know too much about where it comes from. If this is the best you can do, go with the leaner cuts in order to avoid the toxins. Good luck.

Note: Properly-raised bison, lamb, venison, and buffalo are also great for you.

CRACKING THE POULTRY LABEL CODE

Best - Free-Range from a local farmer. Get to know your farmers. Spend some time with them and see for yourself how the chickens are raised.

Cool But Kinda Vague - USDA Free-range. The USDA requires that chickens certified as free-range have access to the outdoors. However, there is no guarantee that the chicken will have access to anything but dirt or gravel.

Not Bad - Free Roaming. Chickens have access to the outdoors. They do not live in huge metal barns under crowded conditions like factory chickens.

Decent - Organic. Chickens were not fed their ideal diet, but what they were fed (typically corn) was organic.

Trickery - Vegetarian-Fed. All this means is that the chicken was fed corn (non-organic). This doesn't make it healthy, though. Chickens are not vegetarians!

Better than Nothing - Antibiotic/Hormone-Free. You could use a little less antibiotics and hormones in your life.

I'll Pass - Regular Broiler Chickens. Grossness!

Note: Although I focused on chickens, the same goes for turkeys.

Held captive in large metal bins, factory chickens never get to see the light of day. Under crowded conditions, **infections and antibiotics run rampant**. Unable to consume their intended diet, these chickens are fed poultry parts and feathers (isn't that cannibalism?), cats and dogs, beef fat, and feed laced with carcinogenic arsenic. I won't go into all of the graphic details. If you care to know more about where your chicken comes from, I highly recommend you rent the movie *Food Inc.* It kind of disgusts me.

At the time of this writing, the FDA admitted that their own research shows that the cancer-causing arsenic fed to factory chickens ends up in the white meat for you to consume. Prior to this revelation it was believed that the chemical was excreted in the chicken's feces. Sixty years later, we learn otherwise.

On their natural diets, pastured, farm-raised chickens contain far more vitamins, minerals, and omega-3 fats than their intentionally poisoned counterparts. They also don't eat arsenic, so you won't either.

REAL PORK

Healthy pigs will eat just about anything. Omnivorous by nature, they are meant to live outdoors on pasture, where they chow down on corn, grass, leafy greens, acorns, nuts, and fruit. The world's most popular meat, pork is much higher in omega-3 fats and vitamin E when the pig is properly fed. On the farm, they are the hardest workers, more than happy to root and rummage about, or as farmer Joe Salatin would say, "*expressing the pigness of the pig.*"

Sick pigs live on factory farms, unable to dig and root on concrete or slatted floors. They are weaned from their mothers only ten days after birth—as opposed to 13 weeks—since they gain weight much faster on antibiotic-laden feed.

Due to their premature weaning, the pigs yearn to suck and chew. So they take to biting each other's tails, which can lead to infection and of course *more* antibiotics. To combat this behavior, the USDA recommends "tail docking", or the snipping off of the pig's tail with pliers and no anesthesia. According to *UW Radio* guest Nina Planck, author of *Real Food*, "*factory pigs are deficient in vitamin E and selenium, antioxidants found in nature.*" That's not all they're deficient in. How about a little respect?

WOULD YOU RATHER?



OR



When choosing pork, look for pastured or certified humane. At a bare minimum, choose antibiotic-free.

REAL FISH

Healthy fish are wild. They do simple things like swim in large bodies of water, where they consume smaller fish or algae. It's really not that complicated. The system that Mother Nature designed produces wild fish loaded with omega-3 fats, which build your brain and **assist with fat metabolism**. But these are not the fish that most of us are eating.

Many of us eat farmed fish, which are held captive in pens and fed fish meal and growth-promoting antibiotics. These fish feedlots are a hazard to the environment, as they produce antibiotic and pesticide runoff. The crowded conditions also create tons of fish feces that cannot be cleared by ocean currents. It's one big mess!

Planck writes, *"In 2004, Science published research showing that farmed salmon contains "significantly" more toxins, including PCBs and dioxin, than wild fish."*

To give you some idea of how unhealthy these fish are, the farmed salmon fillets you purchase at your local supermarket have to be dyed pink to make them look appealing. Farmed salmon are deficient in the antioxidant astaxanthin, which gives wild salmon their natural pink color. The added color is called Salmofoam.

Would you like paint with your salmon?

REAL EGGS

Healthy eggs are laid by hens that live outdoors on pasture, where they can consume their natural diet.

A fun and eye-opening experiment you can do at home is to take two eggs—a commercially raised egg and a pastured, free-range egg—and compare the two. Crack the commercially raised egg and pour its contents onto a plate. Then, on a separate plate do the same with the pastured egg. Notice the difference.

**WOULD YOU
RATHER?**



OR



What you will find is that the shell of the pastured egg is much thicker than the commercial egg. You will also notice that the yolk of the pastured egg is a deep orange color, while the commercial egg's yolk is a much lighter shade of orange. The deeper color is due to the carotenoid content of fresh green grass. Lastly, the white of the pastured egg barely spreads out, whereas the commercial white runs away from the yolk. It's a really eye-opening experience. It's not hard to figure out which egg is healthier.

"The problem today is that the egg is only as good as the bird, which is only as good as its environment and the food it ate, which is only as good as the soil it was raised on."

- Paul Chek in *How to Eat, Move, and Be Healthy*

DARK SIDER PROFILE

Nina Planck

Author of the books *Real Food & Real Food for Mother and Baby*



Nina is a farmers' daughter, food writer, farmers market entrepreneur, local foodist, and advocate for traditional foods. She will liberate you to eat red meat, butter, raw milk, and lard.

After reading Nina's work, you will eat the foods of your ancestors with pleasure and with impunity. Men and women planning to be parents will find her prenatal advice life-changing.

Nina is a gifted speaker, a home cook, and a mother of three.

Website

www.ninaplanck.com

UW Radio Appearances

[Real Food for Mother and Baby](#)

A pastured egg will have an n-6 ratio between 1:1 and 4:1. A commercially raised egg will be as high as 16-30:1. The latter is highly inflammatory due to the fact that the hen that laid the egg was fed a diet it was not designed to consume. Furthermore, the hen's body becomes ravaged by living indoors in battery cages with 24 hours of artificial light. The constant light tricks the hen's body into producing two eggs a day instead of one. Under crowded conditions, salmonella is common and can make its way into cracked shells. Plank writes, *"If the flock is known to be infected, eggs go to the 'breakers' market rather than being sold whole. Breakers are pasteurized and made into liquid egg products for restaurants."*

That's just gross.

When laid by healthy hens, eggs are nothing to fear. Yes, the yolk contains cholesterol. But as you learned in the last chapter, cholesterol in food has nothing to do with the cholesterol in your blood.

Dark Siders have been known to go through at least a carton of free-range or pastured eggs a week. We love our eggs and bacon!

When shopping for eggs, look for pastured sources. You may have to seek out a local farmer

to get your hands on them, though. Your next best option is free-range organic eggs. Don't be fooled by the "vegetarian-fed" label. Chickens are NOT herbivores!

REAL DAIRY

Real milk is whole and raw, unpasteurized and never homogenized. It comes from cows fed green grass and pasture. And it is loaded with healthy bacteria that boosts the immune system as well as enzymes that assist with digestion.

Real milk is hard to find, unless you're lucky enough to live in one of the three states where it is currently legal to sell in stores. Fears of raw, unpasteurized milk from healthy cows are unfounded. In fact, J.R. Crewe, MD, one of the founders of the Mayo Clinic, once published an article entitled *The Milk Cure*, describing raw milk as a treatment for various diseases. Then again, with our modern government-pharmaceutical complex, that may explain why it's illegal in most states.

Raw milk's beneficial bacteria protect the milk—and whomever consumes it—from disease-causing pathogens. Common store-bought milks are pasteurized and homogenized. Both processes contribute to the denaturing and destruction of healthful vitamins, enzymes, and bacteria. Pasteurized milk is essentially a dead food that in reality doesn't do a body much good.

Interestingly, people who are lactose intolerant—myself included—can consume raw milk with no gastrointestinal problems. This is due to the presence of enzymes and bacteria within the milk that aid its digestion. Once pasteurized, these friendly helpers are eliminated.

If you decide to try raw milk, be sure to get it from a respected, reputable source. Don't take any chances. I only buy mine from Organic Pastures, a farm that takes its milk seriously. The owner Mark McAfee is more passionate about milk than anyone I've ever met.

Be on the lookout for raw butters and cheeses as well. If you cannot find raw dairy products, the next best option is organic. However, organic dairy cows are not exclusively fed grass. Their milks are typically pasteurized and homogenized. They are a few steps above commercial milk, but certainly not ideal. Personally, I won't go near commercial dairy products. The

**WOULD YOU
RATHER?**



OR



DARK SIDER PROFILE

Mark McAfee

Founder of Organic Pastures Dairy in Fresno, CA.



Mark is internationally recognized as an expert in raw milk production and has spoken in over fifteen states and three countries on the subject.

He invented the first dietary supplements made from fresh raw colostrum and secured their certification from the FDA and DHS.

Mark also created and published the first international raw milk safety standards.

Website

www.organicpastures.com

UW Radio Appearances

[The Real Scoop on Raw Milk](#)

cows that produce them are often injected with genetically engineered **recombinant bovine growth hormone (rBGH)** to increase milk production. Cows given rBGH have a more frequent incidence of mastitis—inflammation of the udders—which must be treated with antibiotics. Remember, those antibiotics become your antibiotics.

Recombinant bovine growth hormone also increases the cow's production of **insulin-like growth factor-1 (IGF-1)**, a hormone that causes cells to proliferate and has been linked to several cancers. Interestingly, rBGH is illegal in the UK and Canada. But in the U.S. it is considered perfectly safe for human consumption. Go figure.

The commercial dairy industry has successfully lobbied against rBGH-free labeling. The best way to avoid hormones and antibiotics is to go organic. And if you can get your hands on some high-quality raw dairy products, go get 'em!

To learn more about how you can procure raw milk, please visit www.realmilk.com.

REAL PRODUCE

"Pesticides are poisons. They are manufactured to kill insects, rodents, fungi, and weeds. But they can also kill people. Organophosphates—one of the most common types of pesticides—were developed in Nazi Germany to be used as a chemical weapon. It was later recognized that the same sort of nerve gases formulated to attack enemy soldiers and civilians could be used against agricultural pests." - Eric Schlosser in Maria Rodale's *Organic Manifesto*

Yeah, you read that right.

Real fruits and vegetables have nothing to do with nerve gases and Nazi Germany. They are organic, in-season, and preferably local with no chemical residues. They come from healthy soils brimming with earthworms, fungi, bacteria, and other organic matter.

Conventional fruits and vegetables are sprayed with toxic pesticides, grown with synthetic fertilizers, and given chemical growth enhancers to produce higher yields and bigger fruits. This manner of farming destroys the soil and contributes to flooding, chemical water run-off, and excess carbon in our air.

Regardless of whether or not you believe in climate change or care to debate over whether organic produce is more nutritious than conventional, I think we can all agree that organic farming is much better for our environment. Personally, I prefer my food to be poison-free.

Support your local farmers by shopping for produce at farmers markets or by joining a CSA (community supported agriculture). If you're feeling up to it, check out my [Grow Your Own](#) YouTube series and become a real organic farmer!

If going organic falls outside of your budget, get hip to the Dirty Dozen and the Clean Fifteen. Every year, the Environmental Working Group (EWG) puts out a list of the dozen fruits and vegetables that we should always buy organic as well as the fifteen items that we can get away with buying conventional. Download it for FREE at www.ewg.org.

REAL FATS & OILS

Real fats and oils remain stable under high heat and do not trigger a cascade of oxidation and inflammation within your body. By now, you know that “heart healthy” vegetable oils are not what we thought they were. Since one of the primary sources of inflammatory omega-6 fats are seeds, our skyrocketing vegetable oil consumption—oils derived from corn, soy, cottonseed, etc.—has been a tremendous contributor to our disease and obesity crisis.

Fats are **generally** categorized into three groups: monounsaturated, polyunsaturated, and saturated. The more unsaturated an oil is, the more prone it is to oxidation, or rancidity. The vegetable oils we consume are typically **polyunsaturated fats**, or **PUFAs**. Due to their molecular structure, these fats are very easily damaged.

There are three things that cause unsaturated oils to oxidize: heat, light, and exposure to oxygen. Remember that the next time you fry your chicken in that vegetable oil you keep on the kitchen counter in a clear plastic bottle.

WOULD YOU RATHER?



OR



According to *UW Radio* guest Bruce Fife, author of *The Coconut Oil Miracle*, “all conventionally processed and refined oils are rancid (oxidized) to some extent by the time they reach the store. Most of the time, you can’t even tell if the oil you bought is rancid or not since the smell and taste may not change.”

Cooking with these rancid oils just makes a bad situation worse by creating toxic trans fats, which cause all kinds of cellular dysfunctions including many cancers and, yes, heart disease!

DARK SIDER PROFILE

Bruce Fife

Author of the books *The Coconut Oil Miracle*, *The Detox Book*, & *The Coconut Lover’s Cookbook*.



Bruce is a naturopathic doctor and the head of The Coconut Research Center, a not-for-profit organization dedicated to educating the public and medical community about the many benefits of coconut and palm products.

He is an internationally recognized expert on the health and nutritional aspects of coconut and related products.

Website

www.coconutresearchcenter.org

UW Radio Appearances

[The Coconut Oil Miracle](#)

[The Palm Oil Miracle](#)

Oxidized oils generate a tremendous amount of free radicals in the body. These **free radicals** can damage your DNA, cellular organelles, enzymes, and cell membranes. They can also damage your arteries, creating a cascade of events that eventually lead to atherosclerosis, or hardening of the arteries. Recall from Chapter 2 that during the period of time that heart disease and obesity have escalated, saturated fat consumption has gone down while vegetable oil (read: PUFA) consumption has more than tripled. Makes you wonder, huh?

According to researcher Ray Peat, PUFAs suppress thyroid signaling. In other words, they contribute to the slowing of your metabolism! PUFAs also alter your cell membranes, the outer surface of the cells. Your receptors for insulin—and many other hormones—reside on these membranes. If the receptors are damaged by PUFAs, insulin cannot effectively bind onto its receptors. More chewing gum in your keyholes! Now, you’re even more insulin resistant! I told you it wasn’t all about the carbs. Bad fats can make you insulin resistant, too.

Saturated fats, on the other hand, are chemically stable, making them less vulnerable to oxidation and all of the health dangers that go with it. They even remain stable under high heat, which is why Dark Siders prefer saturated fats and oils for cooking.

My personal favorite is coconut oil. If you watch my videos, you’re familiar with its versatility. Not only do I cook with it, I use it as a lotion. I even mouthwash with it. You gotta try it!

THE BEST FATS TO COOK WITH

- Coconut Oil
- Palm Oil
- Lard - yeah, lard!
- Bacon fat
- Duck fat
- Butter
- Ghee
- Cold Pressed Extra Virgin Olive Oil (low/medium heat only)

Published research shows that the medium chain fatty acids (MCFAs) from coconut oil can kill bacteria, viruses, fungi, and parasites. According to Sally Fallon and Mary Enig, Ph.D. in their book *Eat Fat, Lose Fat*, MCFAs are also said to increase metabolism by way of stimulating the thyroid. Love that stuff!

REAL NUTS & SEEDS

Real nuts and seeds are soaked and sprouted before eaten. This is due to the fact that they contain enzyme inhibitors that can be very hard on the **digestive tract**. To get the most bang for your buck, soak your nuts and seeds in salt water overnight, then dry them in a warm oven set

no higher than 150° Fahrenheit for 12 hours. A dehydrator may be used as well. This process neutralizes the enzyme inhibitors.

To be honest, I don't know many people—other than the hardcore foodies—who actually take the time to do this. Food is complicated enough as it is. If you have digestive challenges, I highly recommend that you soak and dry your nuts and seeds. If not, just be sure to eat them in moderation. I have a small handful a day. Buy them raw when you can. Since nuts are primarily unsaturated fats, they oxidize, or go rancid, when roasted.

TO GRAIN OR NOT TO GRAIN?

Blasphemy Alert: I think the world would be *much* better off without grains.

My friend and blogger Kevin Gianni recently hosted a series of audio interviews called The Great Health Debate featuring today's top health and wellness experts—including yours truly—representing all sides of the nutrition spectrum. If there was one thing that most of Kevin's guests agreed on it was the overconsumption of grains.

Whether whole or refined, most grains can be highly damaging to the body. In fact, many anthropologists believe that one of the worst events ever to occur in human history was the agricultural revolution of 10,000 years ago. This is the point at which our ancestors chose a more stable life of planting seeds and growing their own food.

With this dietary shift toward grains came health challenges seldom seen in hunter-gatherers, including dental cavities, bone malformation, increased rates of infant mortality, infectious disease, shorter stature, and a reduction in lifespan.

Like nuts and seeds, grains contain enzyme inhibitors and other antinutrients that protect them from predators (that means you!). In his book *The Paleo Solution*, two-time *UW Radio* guest Robb Wolf writes:

“In the wild, the cereal grain is distributed by the wind, and when conditions are right, the germ (embryo) begins the process of growth using the endosperm for energy. It may come as a surprise, but plants are not benign, altruistic organisms just waiting to send their next generation of young into our mouths in the form of sushi rice or French bread. Grains, like all critters on this planet, face the challenge of surviving long enough to reproduce. This is particularly problematic for grains in that the most nutrient-dense portion happens to be in the reproductive system.”

The **phytates** in grains bind tightly onto minerals like calcium, magnesium, copper, and zinc, keeping you from absorbing them. They also leach minerals from your reserves. Their **lectins** poke holes in your intestinal lining. And the grains that contain **gluten**—which accounts for almost all of them—are a health hazard to those with sensitivities to gluten, which accounts for seven out of ten people. We will discuss **gluten sensitivity** and **celiac disease** in Chapter 8.

I will not work with a client if he or she is unwilling to remove grains from their diet for at least thirty days. While initially resistant, clients marvel at how amazing they feel after getting through those first couple days of withdrawal. Gluten is highly addictive, working on the same brain centers as cocaine and morphine. Upon reintroducing grains to their diet, old symptoms and fatigue often return. Works just about every time!

If complete removal of grains is not in the cards for you, go ahead and keep the gluten-free ones around. Gluten-free grains include rice, millet¹, gluten-free oats, and corn. Although not actually grains, buckwheat and very small amounts of quinoa are allowed. Quinoa contains saponins, which like to punch holes in your gut. Thoroughly washing quinoa will remove most of the saponins.

If you are one of the lucky few for whom grains and gluten are not a problem, take the time to soak your grains overnight to neutralize the phytic acid and enzyme inhibitors. Soaking will *not* remove lectins or gluten.

If you’re wondering how grains—specifically wheat—can be so damaging to your health when it was once called “the staff of life” during Biblical times, you should know that we are not eating the same wheat. Over the past 50 years, wheat has been altered considerably by way of hybridization in an effort to increase yield, increase resistance to disease and drought, and end world hunger. While these are all very honorable causes, these man-made changes have also increased the crop’s gluten content, thus making it far more harmful than any wheat that Moses ever consumed. For more information, check out [this blog](#) or listen to this compelling [UW Radio broadcast](#) with Dr. William Davis, author of *Wheat Belly*.

¹ Be careful with millet, as it is known to have some anti-thyroid properties.

“The human species and its forerunners survived, thrived, and evolved eating fish, meat, organs, vegetables, and fruit, for at least 1 million, and probably 2.5 million years...this means that humans have been eating meats and other animal parts 207 times longer than we have been eating grains. In other words, grain consumption has taken place for less than one half of 1 percent of our evolutionary history.”

- James Braly, M.D. in *Dangerous Grains*

SPILLING THE BEANS

I’m not a fan of beans either. Beans—you may call them legumes—are free of gluten. Although high in starch, they are a great source of fiber and protein. However, that also contain quite a bit of phytic acid (phytates) and saponins (injure the gut lining).

According to Chris Kresser in his [Healthy Baby Code](#) e-course, removing the phytates from legumes requires extensive preparation, including 12 hours of soaking, 3-4 days of sprouting, and then a period of fermentation. Soaking overnight will only reduce phytates by 8- to 20-percent. All of this sounds like a lot of work! I’d rather just skip them myself. But if you insist on consuming beans, I recommend you learn how to properly prepare them. Your body—especially your gut—will thank you.

THE FOODS OF COMMERCE

In Weston Price’s day, the foods of commerce were limited to white sugar, white flour, table salt, and pasteurized milk. Less than a century later, we have what seems like an endless supply of counterfeit foods never intended for human consumption. I wonder what Price would have found if he compared those same healthy primitives to their more modern counterparts.

Today’s food of commerce are what I call *non-foods*. When you’re just eating real foods, avoiding non-foods is pretty easy. Just don’t eat processed foods!

Here is an alphabetized list of just some of the items and ingredients that you either want to steer clear of or save for a “20% day”. (You’ll learn all about cheat days in Chapter 10.)

ALCOHOL

Alcohol is a fact of life for most of us. I’ll admit to having a beer or two (or three) on weekends. It makes me dance better!

At the same time, we have to be very careful with our alcohol intake, as it can be a major deal breaker when it comes to fat loss and overall health. Most alcoholic beverages are high in sugar, throwing our blood sugar and insulin out of balance. Excessive drinking also impairs the liver and contributes to leaky gut syndrome (more on this in chapter 8).

I despise the word “moderation”. But I feel inclined to use it here. A drink every now and then won’t hurt you. You gotta live, right? Just know when to say when.

ASPARTAME

Also known as NutraSweet and Equal, this artificial sweetener is the source of 80% of the complaints made to the FDA regarding food additives. The story of its approval reads like a bestselling suspense novel with rigged research, conflicts of interest, and Donald Rumsfeld. (I’m not kidding.)

Aspartame is 50 percent phenylalanine, 40 percent aspartic acid, and 10 percent methanol (wood alcohol). Phenylalanine and aspartic acid are found in natural foods. **However, when consumed as free-form amino acids—certainly not how they occur in nature—they enter the brain where they may cause excessive firing of the neurons as well as potential cell death.** That can’t be good. Dr. Russell Blaylock, renowned neurosurgeon, calls these neurotoxic substances **excitotoxins**.

Aspartame’s remaining ingredient, methanol (wood alcohol), is an outright toxin. The Environmental Protection Agency defines the safe consumption of methanol to be no more than 7.8 milligrams per day. A single can of diet soda contains 16 milligrams of methanol alone! How many people do you know that drink just one diet soda a day? Most diet soda drinkers find themselves addicted to these products. When they try to get off of them, they simply can’t, even if the soda contains no caffeine. That’s enough to tell you that something’s not right.

Animal studies show aspartame to be toxic to the nervous system. Common symptoms reported in humans include headaches, migraines, depression, seizures, diarrhea, rash, memory loss, and abdominal cramping. What’s more, two separate industry-funded studies showed that the consumption of diet soda *does not* assist with weight loss. Ouch!

For more information on aspartame, click [**HERE**](#) to listen to my podcast with Cori Brackett, director of the documentaries *Sweet Misery* and *Sweet Remedy*.

CAFFEINE

I feel the same way about caffeine as I do alcohol. One thing that I learned early in my health-coaching career was that you don’t mess with clients and their coffee. Way too much resistance! Yet, caffeine can stall your long-term fat loss progress since it elicits a cortisol release, which

increases blood sugar, which worsens insulin resistance. If you're on a mission to lose fat, the last thing you need is more blood sugar and insulin issues.

In an ideal world, I would suggest that you avoid caffeine altogether. But realistically that's just not happening. Consider WHY you need caffeine in the first place. Why do you need an artificial boost of energy and focus?

All I ask from my clients is that they have their last cup of coffee or caffeinated tea before noon. When caffeine is consumed later in the day, it may affect quality of sleep. And sleep deprivation makes you fat and more insulin resistant!

DARK SIDER PROFILE

Jeffrey Smith

Author of *Seeds of Deception: Exposing the Government Lies about the Safety of the Genetically Engineered Foods You're Eating*



Jeffrey is the leading spokesperson on the health dangers of GMOs.

He documents how the world's most powerful agricultural biotech companies bluff and mislead critics, and put the health of society at risk.

A riveting keynote speaker and popular guest on TV shows worldwide, he has lectured in more than 30 countries.

Website

www.seedsofdeception.com

www.responsibletechnology.org

UW Radio Appearances

[Genetically Modified Foods](#)

[Say NO to GMO Salmon!](#)

[GMO Foods and Your Digestion](#)

GENETICALLY MODIFIED FOODS

Also known as GMOs, these are foods in which the genes of one species are forced into the DNA of another. The five primary GM crops are soy, corn, canola, cottonseed, and sugar beets, most of which are common ingredients in processed foods.

For example, the DNA of GM corn is spliced with the genes of a bacteria called *Bacillus thuringiensis*. With this gene, the corn produces its own pesticide, making it impossible to wash off since it is actually **inside** the corn!

In 2009, the American Academy of Environmental Medicine (AAEM) called for a moratorium on GM foods, asking for long-term independent studies and labeling. The AAEM's position paper cited animal studies demonstrating infertility, immune problems, accelerated aging, impaired insulin regulation, and changes in major organs and the gastrointestinal system.

GM foods require no labeling. However,

organic food cannot be genetically modified by law. Common vegetable oils are typically made with GM soy.

For more information, click [HERE](#) to listen to my podcast with GMO expert Jeffrey M. Smith, author of *Seeds of Deception*.

Download the Non-GMO Shopping Guide iPhone app [HERE](#)!

HIGH FRUCTOSE CORN SYRUP

We've all seen those silly Sweet Surprise commercials—funded by the corn industry, by the way—intended to convince us that high fructose corn syrup is no different from sugar. While these commercials are often ridiculed, they are actually pretty accurate since refined sugar and HFCS are both bad for you!

Research shows that excess dietary fructose contributes to uric acid production, high blood pressure, fatty liver, heart disease, insulin and leptin resistance, and an upregulation of fat storing enzymes.

I won't go into all of the complicated metabolic pathways here. For that stuff, you can watch Dr. Robert Lustig's *90-minute Sugar: The Bitter Truth* lecture [HERE](#). Or you can catch my abbreviated 11-minute version [HERE](#). Dr. Lustig has also been a guest on my radio show. Listen to it [HERE](#). Proud to be his "bro"! :)

MONOSODIUM GLUTAMATE

Monosodium Glutamate (MSG) is a common flavor enhancer used in processed foods. Like aspartame, it is an excitotoxin, which overstimulates brain cells until they burn out and die. This additive, which goes by many different names, has been shown to generate free radical production all over the body, leading to chronic degenerative diseases.

Hidden forms of MSG include calcium caseinate, sodium caseinate, autolyzed yeast extract, hydrolyzed gelatin, and more. Visit www.truthinlabeling.com for a complete list.

For more information, read *Excitoxins: The Taste that Kills* by Russell Blaylock, M.D. I also recommend you watch the documentary *Sweet Misery: Our Poisoned World*.

NASTY PROTEIN POWDERS

Speaking of MSG, there's nothing that bugs me more than highly adulterated protein powders advertised as healthy meal replacements. Ugh! Most of these powders and RTD (ready-to-drink) shakes have ingredient lists that will have your tongue doing gymnastics if you have ever been brave enough to take a crack at reading them. I've seen some with over 50 ingredients, including various toxic artificial sweeteners, soy protein isolate (see below), and hidden forms of MSG. Ingredients are listed in order of quantity. I often see calcium caseinate and sodium

caseinate listed as the first or second ingredient. Both contain MSG!

Don't get me wrong. Not all protein powders are necessarily bad. I use them myself after workouts and as a meal replacement when I'm pressed for time. The shorter the ingredients list the better. The ones I use have no more than five ingredients. My favorite is Vital Whey by Well Wisdom as it comes from grass-fed cows.

Be on the lookout for the UW line of grass-fed protein coming real soon!

SOY

Despite all of the marketing hype, soy is by no means a health food. In its unfermented form—the type that we eat—soy is high in phytates and trypsin inhibitors. As you learned in the section on grains, phytates bind tightly to important minerals, keeping you from assimilating them. Trypsin inhibitors impede your ability to break down and digest protein, which kind of defeats the purpose of attempting to meet your protein needs through soy.

Soy is also considered goitrogenic, meaning that it slows down thyroid function. Of course, a poor functioning thyroid will reduce your metabolism. Ninety-percent of the soy available in the United States is genetically modified. Avoid all soy products with the exception of fermented items like organic miso, tempeh, natto, and high-quality wheat-free tamari sauces. Fermentation eliminates the antinutrients.

For more information, click [HERE](#) to listen to my podcast with Kaayla T. Daniel, author of *The Whole Soy Story*.

SPLENDA

Splenda—also known as sucralose—is a chlorinated artificial sugar derivative. It is 600 times sweeter than sugar with no calories, making it one of today's most popular sweeteners.

Discovered in a London chemistry lab in 1975 while formulating new insecticides (I'm serious), Splenda is the furthest thing from the natural sugar substitute it is marketed as. Because of its molecular structure, it is classified as a chlorocarbon or organochlorine.

According to Dr. Joseph Mercola in his book *Sweet Deception*, “Organochlorines as a group are mainly used as pesticides, such as DDT, dieldrin, aldrin, lindane, chlordane, and heptachlor.”

Since organochlorines are fat-soluble, they can be stored in your fat cells. Toxicity affects the brain, heart, and lung.

There are no long-term human studies on Splenda besides the one that is going on right now in our local coffee shops, lunchrooms, and dining rooms. In my opinion, twenty years from now, we will look back and ask ourselves what the heck we were thinking.

RECOMMENDED READING

Real Food by Nina Planck

The Coconut Oil Miracle by Bruce Fife

How to Eat, Move, and Be Healthy by Paul Chek

Nutrition and Physical Degeneration by Weston A. Price, DDS

Seeds of Deception by Jeffrey Smith

Sweet Deception by Dr. Joseph Mercola

The Whole Soy Story by Dr. Kaayla T. Daniel

Excitotoxins: The Taste that Kills by Dr. Russell Blaylock

Wheat Belly: Lose the Wheat, Lose the Weight, and Find your Path Back to Health by William Davis

RECOMMENDED PODCASTS

Real Food for Mother and Baby with Nina Plank

Is Your Cow on Grass? with John Wood

Joel Salatin with Joel Salatin

Just Eat Real Food with Jordan Rubin

Wheat Belly with Dr. William Davis

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05

LISTEN TO YOUR BODY The 30-Day Real Food Challenge

The key to finding the right diet for you—and only you—is to listen to your body language. Your body will tell you when you're right and it will tell you when you're wrong.

JERF30: THE 30-DAY REAL FOOD CHALLENGE!

Now that you know the difference between Real Foods and non-foods, you're probably wondering if I'll be putting you on some kind of meal plan.

Absolutely not!

Another problem with fat loss programs is they make the grand assumption that everyone is the same. Seldom do they ever acknowledge that what works for you may not work for the next person. The key to finding the right diet for you—and only you—is to listen to your body language. Your body will tell you when you're right and it will tell you when you're wrong.

After using multiple eating plans with my clients over the years, I have come to realize that these diets were not only counterproductive but were also WAY too complicated. Just the stress of following some of these super-strict regimens can be enough to make you fat! If you can't enjoy food, eating becomes such a chore. Who wants that?

I like to say that the best diet you can stick to is the one that you can stick to. So I won't ask you to adopt some overwhelming "rapid fat loss" scheme that you know you're going to break after a week. Seriously, you can only eat cabbage soup for so long. All I ask is that you take the *30-Day Just Eat Real Food Challenge*. I like to call it **JERF30**.

JERF30 is as simple as it sounds. All you do is eat the Real Foods that you were intended to eat while avoiding the processed junk. You will also steer clear of questionable items such as grains, beans/legumes, and pasteurized, homogenized dairy products.

If you're freaking out right now because you're not sure what you're going to do without your cereal, sandwiches, and low-fat yogurt, you can be pretty certain that you have an intolerance to grains and dairy. We typically crave what we are intolerant to. Believe me, this is going to be the best thing you've ever done!

If it makes you feel better, you're not losing these foods for the rest of your life. It's only for 30 days. On Day 31, I want you to eat all the grains your heart desires. Load up on dairy! I want you to. Most clients I work with feel like they got hit by a bus when they add these foods back. Some feel so good without grains, legumes, and dairy, that they don't even want to re-introduce them. If it's not broken, why fix it?

The purpose of JERF30 is to help you find out what it means to feel good again. Most people have forgotten what feeling energetic, alert, and satisfied is like. They've been run down for so long from consuming processed, dead foods that the only time they truly feel alive is after a cup of coffee! I can't allow you to live that way. Not anymore.

You can totally DO this. Think of it this way, your ancestors ate like this for millions of years. I'm only asking for 30 days. And the best part of it all is that I don't expect perfection out of you. That's where a lot of people go wrong. They get into that "all-or-nothing" mentality and as soon as they slip just once, they give up. I expect you to have a cheat meal here and there. I want you to! Thirty days of following a super-strict diet would make me go a little crazy!

The only thing I ask is that you be very diligent about the consumption of gluten-containing grains. Stay away from them! Just having a little gluten here and there can really set you back. Keep your eyes peeled and lips locked!

Other than that, follow the **JERF30 90:10 Rule**. I know, you may have heard me talk about the *80:20 Rule* on YouTube and the radio show. You're not ready for that yet. For the next 30 days, I ask that you eat the right foods—Real Foods—ninety-percent of the time. The remaining ten-percent, I give you permission to dabble in a gluten-free treat or a small $\frac{1}{3}$ -cup serving of beans or rice every now and then. Just stay off the gluten. Please!

Remember, what we're trying to do here is give you a frame of reference for what it's like to feel good. Once your 30 days are over, you can maybe relax a bit and follow the *80:20 Rule*. I'll leave it up to you.

Ninety-percent good. Ten-percent not-so-good.

That's plenty of wiggle room!

You got this.

JERF30: WHAT TO EXPECT

In a few days, you're going to feel absolutely fantastic, better than you have in years. But I have to warn you: you may not feel so hot at first. Most people who start JERFing end up feeling worse before they get better. This is perfectly normal. In fact, if you don't feel bad for a few days, I'd start wondering what you were doing wrong. Here's what you can expect.

Withdrawals: Gluten, dairy, and processed sugars can be highly addictive, working on the same brain centers as morphine and heroin. You may experience a case of the “blahs” as you go through a brief 2- or 3-day withdrawal period. Sugar cravings may set in as well. A quick tip for dealing with these cravings is to take 500-1,000 mg of L-glutamine when you wake up and in between meals. You can take it in either powder or capsule form. My clients always thank me for telling them about this little helper. Once the withdrawals pass, you may discontinue usage or you can keep taking it. L-glutamine is great for digestive and immune health as well. I'll leave it up to you.

Constipation: Every so often I'll have a client get plugged up for a few days when starting JERF30. Typically, he or she is not consuming sufficient fiber from vegetables and fruits. Other times, they are in such a habit of avoiding fats that they end up with a diet that is high in protein and low in fat. This can also stall digestion. Eat the fat! It's good for you.

Improved Health: This isn't rocket science. Again, you're just eating Real Foods. After two or three days, the withdrawals and “blahs” will dissipate and you'll feel fantastic. Your blood sugar will start falling back into balance. You will sleep with more depth and awaken with more energy. You won't get hit with that annoying afternoon crash. Your digestion will become more regular. Your brain fog will lift. On and on. It's amazing what Real Foods can do.

Fat Loss: The best thing about JERF30 is that you can eat as much Real Food as you want. We're sending a screaming loud message to your metabolism that the famine is over! This will make you more leptin sensitive (as opposed to leptin resistant), fire up your metabolism, and reduce your appetite and cravings for non-foods. You just watch!

In the next section, you will find a comprehensive list of real foods to choose from as well as the system I use to help my clients make sense of what their bodies are telling them. It will take a little trial and error. But I guarantee that after just one week, your body will teach you more about your perfect diet than any diet book ever could.

THE JERF30 FOOD LIST



Proteins and Fats

Carbohydrates

	DO IT!	PASS IT UP!
Proteins and Fats	PRIMARY PROTEINS/FATS Bass, beef, bison, buffalo, chicken, clams, crayfish, duck, eggs with yolks, elk, emu, game hens, goose, grouse, halibut, lamb, lobster, mackerel, mahi mahi, mussels, mutton, organ meats, oysters, pork, rabbit, red snapper, salmon, sardines, scallop, tuna, trout, turkey, veal, venison, wild game	Lunch meats, hot dogs, any other processed meat, shark, swordfish, orange roughy (these fish are high in mercury), most protein powders (see page 81)
	FATS & OILS Avocado, avocado oil (cold pressed), bacon fat, chicken fat, coconut butter, coconut milk, coconut oil, duck fat, flax oil (cold pressed), ghee, lard, olives, olive oil (cold pressed), palm oil, tallow, sesame oil (cold pressed)	Canola oil, cottonseed oil, Crisco, hydrogenated oils, imitation butters (if it's not butter, then what the heck is it?), shortening, soybean oil, vegetable oil
	NUTS & SEEDS Almonds, almond butter, brazil nuts, cashews, cashew butter, chestnuts, flax seeds, hazelnuts, macadamia nuts, peanuts, pecans, pine nuts, pistachios, pumpkin seeds, sesame seeds, sunflower seeds, walnuts Note: nuts should be preferably raw.	Roasted, salted, or sugar-coated nuts and seeds Note: If you have allergic reactions to nuts, please continue to avoid them.
	DAIRY (Avoid until after the 8th day) raw butter, raw cheeses, raw cultured dairy products (kefir, yogurt), raw milk	All other organic or commercial dairy products, including butter
Carbohydrates	VEGGIES Low/Medium-Starchy Vegetables (including but not limited to): Artichoke, asparagus, beet greens, broccoli, brussels sprouts, cabbage, carrots, cauliflower, cilantro, collards, cucumber, dandelion, eggplant, endive, green onions, kale, kohlrabi, lettuce, mushrooms, mustard greens, onions, parsley, peppers, radish, rutabaga, sea vegetables, spinach, swish chard, tomatillos, tomato, turnip greens, turnips, yellow squash, watercress, zucchini Starchy Vegetables* (including but not limited to): Beet, parsnip, pumpkin, sweet potatoes, winter squash, yams * Consume starchy vegetables in small amounts. They are best eaten directly after exercise.	
	FRUITS Limit fruit to 2-3 servings per day (Including but not limited to): Apricot, bananas, berries of all types*, cantaloupe, casaba melon, cherries, coconut*, figs, grapefruit, grapes, guava, green apples*, honeydew melon, kiwi, kumquat, lemon, lime, mango, melon, nectarine, orange, papaya, passion fruit, peaches, pears*, persimmon, pineapple, plums, pomegranate, raisin, red apples * Indicates fruits that are lower in sugar and preferable for those seeking fat loss	Canned fruits
	SUGARS, FLOUR PRODUCTS, GRAINS, & BEANS Avoid them all as best as possible. If you are having a tough time adjusting to this, small $\frac{1}{3}$ cup servings of cooked beans, rice, buckwheat, quinoa, millet, corn, and gluten-free oats are acceptable. Coconut and almond flours are also acceptable. Note: Stevia, xylitol, and unheated, unfiltered honey are acceptable in moderation.	
	BEVERAGES Consume about half your body weight in ounces of filtered water daily, preferably between meals. For variety, have coconut water, herbal tea, and/or fresh vegetable or fruit juice.	

FREQUENTLY ASKED QUESTIONS

Q. If I take all of the grains and legumes out of my diet, where will I get my fiber?

How will I poop?

A. This is a very common question. If we absolutely need the fiber from grains and legumes to poop, cave people must have been one constipated bunch! They didn't know what a grain was! Kidding aside, dietitians have pounded it into our skulls that grains are the preferred source of fiber. That's hogwash (and a great way to sell more grains). Fruits and vegetables have plenty of fiber. They also pack a nutritional punch that grains and legumes only wish they could deliver. If you're loading up on veggies and throwing down a couple fruits every day, you'll be pooping like a champ!

Q. Ugh! How am I going to keep from getting bored on this diet?

A. My friend David Getoff once said, *"boring is the cook."* There are at least 100 different foods on your list. If you're having a hard time keeping things interesting with that many foods to choose from, I don't know what to tell you. Actually, I do: You're making excuses.

Robb Wolf got so tired of hearing about this "boredom" issue that he went ahead and put together what he calls *The Food Matrix*. He lists 27 proteins, 24 vegetables, 5 fats, and 25 herbs and spices. If you take one item from each group, you can put together 81,000 different meals! You can literally never eat the same meal twice for 221 years! How's that for variety? Download Robb's Food Matrix [HERE](#)!

Q. Besides bacon and eggs, what can I have for breakfast?

A. Anything you want! There's no such thing as a breakfast food or a dinner food. Food is food. You don't *have to* stick to common breakfast items. Did you know that bacon used to be a dinner food? It didn't do very well, so the pork industry launched a big marketing campaign to convince us that we should have it in the morning instead of at night. It's true! I assure you that you'll eventually grow tired of the same breakfast every single day. Get adventurous and have dinner for breakfast. Yeah, it's a bit out of The Box. But isn't that our goal here?

Q. If I take out all of my grains, I feel like I'm losing a lot of calories. Will I be able to get enough calories when I'm JERFing?

A. Great question. Caloric intake won't be a problem as long as you replace the calories from grains with more fats. Remember, fats are good for you, unless they are the polyunsaturated vegetable oils we talked about earlier in chapter 4. Compared to carbs, fat has over twice as many calories. Use extra virgin olive as a salad dressing. Cook your foods in coconut oil, ghee, or raw butter. Also, keep in mind that fat keeps you full. And since you'll be eating more wholesome foods, you'll be getting more nutrients per calorie of food consumed. With the additional fat in your diet, you'll be able to absorb the fat-soluble vitamins much more efficiently. More bang for your buck!

BODY LANGUAGE 101

If I had to guess, I would say at least 50-percent of the working population gets a pretty mean energy crash about an hour after lunch. I would also guess that very few of them actually realize that what they had for lunch was the culprit. They have no idea. They just accept it as something they have no control over. And the cure is yet another cup of coffee.

These people are feeling their body language, but they're not listening to it or learning from it. Food is supposed to make you feel good. After each meal, you should be fulfilled on three levels:

1. **Satisfaction:** Meals keep you full for at least 4 hours, leaving you free of cravings.
2. **Energy:** Meals refuel your tank so you can keep going strong until the next meal. Energy remains elevated for several hours with no sudden crashes.
3. **Mental Clarity:** Your mind is crystal clear with no fogginess, impairment of memory, or inability to put words together.

After about one week of tracking your body language and truly considering what it is telling you, I promise you will have a new sense of confidence and control when it comes to making mealtime decisions. Personally, every time I sit down for a meal I know exactly how it is going to make me feel, how long it will satisfy me, and whether it will provoke any negative body language. For example, if I have a high carb meal like sushi, I know for a fact that I'll be nodding off within the hour. If I drink too much raw milk, I get a bit of mucus in the back of my throat. When I have certain whey protein powders, I get brain foggy and can't think nor speak clearly. I also know that when I have a meal with lots of protein and fat with just a little bit of vegetables and fruit, I feel amazing.

But that's me. Let's find out what *your* body is saying.

On the next pages, you will find two *Body Language Log* forms. One is a sample for you to get an idea of how to fill it out. The other is for you to print out. I suggest you print out 7 copies. Really, all you have to do is write down what you eat at each meal and PAY ATTENTION.

Get familiar with the form. Then, flip to the next page and I'll show you how to use it.

BODY LANGUAGE LOG

Date: _____

BREAKFAST	
What did you eat?	Ratio?
_____	 50% CHO 50% P/F
_____	 25% CHO 75% P/F
_____	 75% CHO 25% P/F
Translation: _____	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

SNACK	
What did you eat?	Ratio?
_____	 50% CHO 50% P/F
_____	 25% CHO 75% P/F
_____	 75% CHO 25% P/F
Translation: _____	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

LUNCH	
What did you eat?	Ratio?
_____	 50% CHO 50% P/F
_____	 25% CHO 75% P/F
_____	 75% CHO 25% P/F
Translation: _____	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

SNACK	
What did you eat?	Ratio?
_____	 50% CHO 50% P/F
_____	 25% CHO 75% P/F
_____	 75% CHO 25% P/F
Translation: _____	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

DINNER	
What did you eat?	Ratio?
_____	 50% CHO 50% P/F
_____	 25% CHO 75% P/F
_____	 75% CHO 25% P/F
Translation: _____	

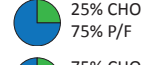
	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

Did you drink half your bodyweight in ounces of water today? Y / N

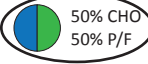
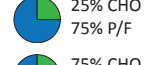
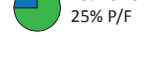
Body Language Log adapted from William Wolcott's Diet Check Record sheets.
Wolcott is the author of *The Metabolic Typing Diet*.

SAMPLE BODY LANGUAGE LOG

Date: 9/8/2011

BREAKFAST	
What did you eat?	Ratio?
3 egg vegetable omelet	 50% CHO 50% P/F
with sweet potatoes	 25% CHO 75% P/F
	 75% CHO 25% P/F
Translation: Gut is heavy, maybe one less egg next time	

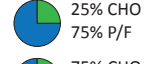
	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☒ Feel full and content ☒ No sweet cravings ☒ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☒ Energy is even, not excessively high/low ☐ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☒ Gut feels heavy (xs F/P)

SNACK	
What did you eat?	Ratio?
Apple slices with	 50% CHO 50% P/F
nut butter	 25% CHO 75% P/F
	 75% CHO 25% P/F
Translation: Perfect snack!	

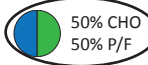
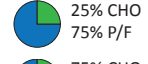
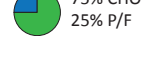
	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☒ Feel full and content ☒ No sweet cravings ☒ Not hungry at all ☒ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☒ Feel recharged ☒ Energy is even, not excessively high/low ☒ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☒ Feel uplifted ☒ Mind is clear with no fog ☒ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

LUNCH	
What did you eat?	Ratio?
Big salad with a few chicken	 50% CHO 50% P/F
strips and olive oil	 25% CHO 75% P/F
	 75% CHO 25% P/F
Translation: Definitely not enough chicken. Less veggies and more chicken next time.	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☒ Already hungry (insufficient cals, xs CHO) ☒ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☒ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☒ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

SNACK	
What did you eat?	Ratio?
2 pieces turkey jerky	 50% CHO 50% P/F
with a pear	 25% CHO 75% P/F
	 75% CHO 25% P/F
Translation: Hit the spot!	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☒ Feel full and content ☒ No sweet cravings ☒ Not hungry at all ☒ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☐ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☒ Feel recharged ☒ Energy is even, not excessively high/low ☒ No feelings of crashing	☐ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☒ Feel uplifted ☒ Mind is clear with no fog ☒ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☐ Gut feels heavy (xs F/P)

DINNER	
What did you eat?	Ratio?
2 wild salmon fillets	 50% CHO 50% P/F
with mixed vegetables	 25% CHO 75% P/F
	 75% CHO 25% P/F
Translation: Post workout meal. Try a starchy carb next time.	

	POSITIVE REACTIONS	NEGATIVE REACTIONS
Satisfaction	☐ Feel full and content ☐ No sweet cravings ☐ Not hungry at all ☐ No need for a snack	☐ Physically full, BUT still hungry (xs F/P) ☒ Desire for something sweet (xs F/P) ☐ Already hungry (insufficient cals, xs CHO) ☐ Need to snack (insufficient cals, xs CHO)
Energy	☐ Feel recharged ☐ Energy is even, not excessively high/low ☐ No feelings of crashing	☒ Energy has not improved at all (xs F/P) ☐ Feel wired, but tired underneath (xs CHO) ☐ Crashed and burned. Need a nap. (xs CHO)
Mood	☐ Feel uplifted ☐ Mind is clear with no fog ☐ Can easily put words and thoughts together	☐ Feel anxious and/or irritable (xs CHO) ☐ Brain is foggy (xs CHO) ☒ Gut feels heavy (xs F/P)

Did you drink half your bodyweight in ounces of water today? ☒ Y ☐ N

Body Language Log adapted from William Wolcott's Diet Check Record sheets.
Wolcott is the author of *The Metabolic Typing Diet*.

LOG YOUR MEALS

I know, keeping a food log can be tedious. But the way we're doing it is a lot different from what you may have done in the past. Go ahead and write in what you eat at each meal. Then check the picture that best illustrates your macronutrient ratios. In other words, what percentage of carbohydrates to protein/fat did your meal consist of?

Use the examples below to get an idea of what your ratios are. Try not to take the examples literally. Your meals don't have to be exactly those percentages. We just didn't have enough room to draw every possible ratio. So, you may have a meal that is 60-percent carbs and 40-percent protein/fat or vice-versa. Also, don't feel as though you have to be totally perfect with determining your ratios. Just ballpark them.

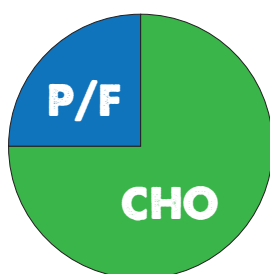
I suggest you start JERFing with meals that are 50-percent carbohydrates and 50-percent protein/fat. So, half your plate consists of carbohydrates while the other is protein/fat. You may find that this ratio is not ideal for you. It is only your starting point. You will make the proper adjustments by listening to your body language.



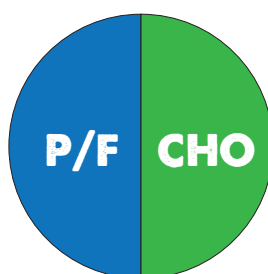
50% CHO, 50% P/F

CHO/PF RATIO

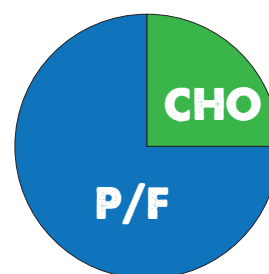
(CHO = carbohydrates, P = protein, F = fat)



RATIO
75% CHO
25% P/F



RATIO
50% CHO
50% P/F
(Good starting point
for the JERF30)



RATIO
25% CHO
75% P/F

CHECK YOUR REACTIONS

One or two hours after your meal, check the boxes that best describe how you feel. Mark as many boxes as you'd like. Reactions can be positive and negative at the same meal. For example, you may feel completely satisfied but also have difficulty concentrating.

On the tracking form, you'll notice that each negative reaction indicates what your body may be saying to you. Feeling full but still hungry is a sign that you had too much fat and protein with your meal. Having an inability to think quickly or clearly is an indication of excess carbohydrates. Typically, you will find that all of your negative reactions indicate an excess of the same macronutrient(s). If not, they will certainly favor one over the other, such as four excess carb reactions and only one indicating too much protein/fat. Majority rules.

MAKE THE ADJUSTMENTS

Taking your body language into consideration, use that information to adjust your meals. In the *Translation* section, write down what you think your body is saying. Is it saying that your meal and its proportions are perfect? Is it screaming out that something needs to change? What will you do next time to improve your reactions?

For example, if a 50:50 ratio of 3 eggs (protein/fat) with sauteed veggies and a banana (both are carbohydrates) leaves you feeling hyper, anxious, and irritable (all signs of excess carbohydrates), then tomorrow add a strip of bacon to the meal and skip the banana. See if your reactions improve by shifting your ratio—in this case, adding more protein/fat and removing carbohydrates. It's all about trial and error. You'll get it all figured out.

IMPORTANT: Your reactions will likely seem erratic and difficult to make sense of for the first few days. This is common and a sign that your body may be detoxing or withdrawing from grains, dairy, and sugar. Keep your nose to the grindstone! On Day 4 or 5, you'll feel much better and your body language will be much easier to read.

Sometimes, clients have such imbalanced hormonal, digestive, immune, and detoxification systems, that their diet does not make them feel much better no matter what we do. For example, due to toxicity, a compromised liver will have you feeling sluggish and foggy regardless of what you eat. The meal may leave you satisfied and free of cravings, but your brain is still cloudy. Diet alone likely won't fix this. You'll need to go deeper.

And that's exactly where we're going.

Get ready to bust out of your Box.

06

REDUCE STRESS Chill Out A Bit

“Your body is programmed to protect you from the threats and uncertainties of a prehistoric world, where daily survival threats came down to three things—starvation, freezing, and being eaten.”

- Jon Gabriel in *The Gabriel Method*

DROPPIN' TRUTH BOMBS!



Chronic unrelenting stress inhibits fat loss by way of elevating the production of the hormone cortisol.



Excess cortisol robs the body of metabolic muscle tissue.



Cortisol and testosterone are antagonistic hormones. When the former goes up, the latter comes down.



There is no quick fix. Resolving matters of excess cortisol requires identifying, removing, and/or minimizing stressors of all types.

Warning: *Reading this chapter may result in undue stress. Known side effects include hypothyroidism, belly fat, muscle loss, increased appetite, and a little less friskiness in the bedroom. The reader may at times find him or herself in deep reflection as to the circumstances of his or her life. Please be advised.*

Life makes you fat.

Contemporary living is an unnatural act. Many of us are overworked and completely unrested—and it shows. Our hunter-gatherer ancestors worked an average of 17 hours a week. When they weren't attending to matters of survival, they were hanging out, looking after the little ones, attending to matters of spirituality, and gossiping about the caveman with the leopard skin loincloth that barely covered his you-know-what. In other words, they were chillin'.

Tim Ferris, bestselling author of *The 4-Hour Workweek*, would probably snicker at the 13 hours of ancestral overtime. But if you're one of the millions of people who spend 50-60 hours at the office each week and still manage to take work home with them, there's no way you're not a bit envious of our more primitive forebears.

In these modern times, it would appear as though stress has rooted itself deeply within the core of human culture. Its ubiquity has left no one unscathed as it robs us of our time, sense of community, and piece of mind. Rather than frolic, relax, and actually communicate as intended, we willfully participate in the human rat race of debt, drama, and self-deprecation. In my opinion, any race should have a finish line.

Like a shadow, stress has a proclivity for following us around, tugging at our pant legs with one arm while hurling yet another one of life's curveballs with the other. Its omnipresence is something to behold. It's there when we begin our days frantically scrambling about our homes already late for work; when the hourlong commute feels like torture because we've run out of *UW Radio* podcasts to listen to (I hear they make the time pass faster); when we find 57 new emails in our inboxes, most of them marked as "urgent" because the people who sent them are just as stressed out as the rest of us; when our paychecks won't cover the minimum monthly payments; when the in-laws are working our last nerves; and when the kids are screaming bloody murder.

I think you get the point.

Stress can affect our lives (and health) without ever being real. A lot of times it's a figment of our imaginations. We humans have a bad habit of making stuff up. We fabricate reasons for why our friends don't call us back; we make catastrophes out of things that have yet to happen and probably never will; we make our employers out to be wicked scoundrels who would like nothing more than to work us to death for little or no pay. Humans love making up stories. We're an interesting bunch, to say the least.

Not only can stress be imaginary, it can also be invisible. There are many hidden forms of stress that may be wreaking havoc inside of our bodies and outside of our perceptions. Hidden stressors may be:

- **Physical** - overtraining, structural imbalances, pain
- **Digestive** - bacterial/fungal overgrowth, parasites, food sensitivities, etc.
- **Chemical** - toxic cleaning products and personal care items, air pollution, pesticides
- **Nutritional** - poor food quality, inappropriate macronutrient ratios, skipping meals
- **Existential** - lacking a purpose in life, not living your passion

Even if you won the lottery, fired your boss, and shipped the in-laws to a land far, far away, unaddressed hidden stressors will eventually wear you down. But don't get all stressed out about it! For the past several years, it has been my primary job to help my clients root out and remove as many stressors—whether real or imagined, apparent or under the radar—from their lives and bodies as possible. I got you!

The next set of chapters will tackle the most common sources of hidden stress. But first, I will show you the biochemical basics explaining how chronic stress makes you crave fattening foods, slaps a layer of flab on your belly, robs you of hard-earned muscle mass, slows down your metabolism, and sends your testosterone headed south. You will also learn a handful of stress-reducing tips and techniques to help bring your disheveled life back into balance. A more balanced life begets more balanced fat-burning hormones.

It's time to get your life under control.

RUNNING FROM TIGERS

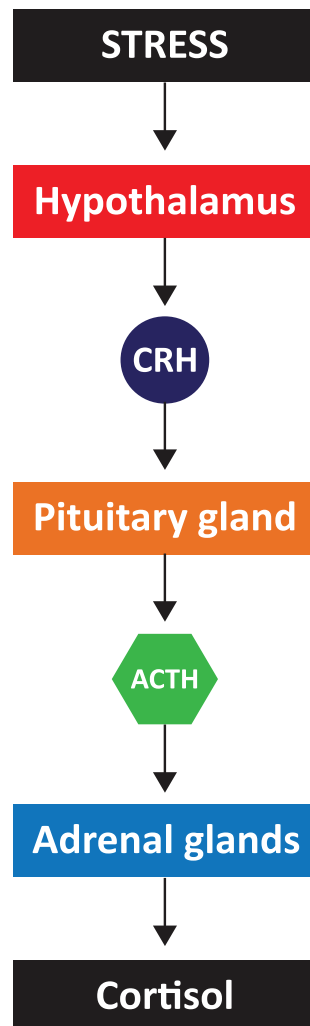
Hunter-gatherers seemed to have it pretty good, but it's all relative. Even though their hours of operation were short, their odds of stumbling upon a hungry tiger were much higher than ours will ever be. Surviving these occasional predatory run-ins was a matter of hormonal hardwiring. To understand how it worked and what it has to do with you and your fat loss goals, we must discuss the fight-or-flight system as it was designed and then examine how we facilitate its malfunction with our overscheduled days and—for some—unfulfilling lives.

When you happen upon a 600-pound cat, you're not left with many options. You can either run like your life depends on it—which it does—or you can engage in some hand-to-paw combat. Since you were smart enough to buy this book, I'll assume you would choose the first option. But to make a clean getaway, a few things need to happen.

First off, your brain interprets the predicament as an obvious hazard and instantly sends a message to your adrenal glands to pump out a hit of **adrenaline**. This gives you the jolt you need to get up and go. In other words, it tells the rest of your body, "Oh, bleep! We need to get

the bleep out of here!” If you’re having a hard time relating, just think of how you feel when someone sneaks up behind you and grabs you unexpectedly. Boo! That’s adrenaline.

So you’re off to the races, getting your 400-meter gold medal on while looking like a hunted zebra on Animal Planet. But you need fuel! This is where **cortisol** makes a cameo appearance in our primal adaptation of *The Fast and the Furious*. In this chase scene, cortisol plays the role of fuel injector, as it is responsible for regulating how your body draws upon its energy reserves. However, getting cortisol on set is no simple task. You have to go through a few of its people first: the hypothalamus, pituitary, and the adrenals. They call themselves the **HPA axis**.



The HPA axis works like this:

1. Sensing stress, the hypothalamus secretes CRH (corticotropin-releasing hormone) and sends it by text message to the nearby pituitary gland.
2. The pituitary then produces ACTH (adrenocorticotropin) and sends it all the way down to the adrenals via its unlimited long distance calling plan.
3. The adrenals take the pituitary’s call and immediately go to work by releasing cortisol into the bloodstream, where it can mobilize the fuel you need to respond to the stress—or in this case, run for your life.
4. Sensing sufficient cortisol in the bloodstream, the hypothalamus shuts down CRH production, bringing the chain of events to an end.

These events are what we physiology nerds call a **negative feedback loop**, in which the hypothalamus does its job and once that job is done (in this case, by increasing cortisol), the sequence is terminated. Another way to think about it is when you call a friend and he or she answers. You’ve gotten the response you were looking for (an answer), so there’s no need to keep dialing. A negative feedback loop works the exact same way.

Classified as a **glucocorticoid**, cortisol is produced by the adrenal cortex (corticoid) and is responsible for increasing blood sugar (gluco). One of the ways in which it causes sugar to rise is by telling your liver to convert glycogen back into glucose and then send it out into the bloodstream to be used as fuel. The other is to catabolize—or break down—muscle tissue and deliver the amino acids to the liver to be converted to glucose. If you paid close attention in Chapter 2, you should already be beginning to see how an excess of cortisol due to the chronic

stress of modern living can throw your blood sugar and insulin out of whack and also cause the loss of an inordinate amount of muscle tissue. If not, it's all good. Just keep reading.

In a nutshell, your escape from predation depends on adrenaline stepping on the gas and cortisol supplying the fuel. Once the coast is clear, you find a safe place to catch your breath. Your heart rate returns to normal. And you go right back about your day with a pretty awesome story to tell.

This is exactly what our stress detection systems were designed for, short bouts of stress that ended just as quickly as they began. However, once again, our survivalist hardwiring is working against us, brewing more of that fat-storing, insulin/leptin-resisting hormonal soup that diet and exercise will never fix by themselves.

NOWHERE TO RUN

Like all hormones, you want *just enough* cortisol. Too little will leave you feeling listless, fatigued, and unable to cope with even the mildest forms of stress. Too much will leave you fat, hungry, and immunocompromised. None of those sound like much fun to me.

As stressful as your life may be right now, it would be erroneous to say that your hormonal system is under the impression that you are being chased by Tony the Tiger all hours of the day. That would be taking things too far. In fact, according Jon Gabriel, author of *The Gabriel Method*, the occasional predatory pursuit will actually *help* you lose fat. When you really think about it, your body in all of its wisdom would want you to be as lean as possible if it knew you had to sprint from time to time to keep from being eaten. Makes a lot of sense to me!

THE GOOD SIDE OF CORTISOL

- Increases blood sugar during times of stress
- Regulates blood pressure
- Modulates the immune system
- Speeds recovery between workouts
- Reduces inflammation

The stress we deal with is of a more chronic nature. Modern stressors tend to bump into each other, not giving the body an opportunity to fully recover. For example, the anxiety of hitting the snooze button a few times too many bumps up against hitting every red light on the way to work, which bumps into the evil eye your boss gives you when you arrive 30 minutes late, which bumps into missing your first meeting, which

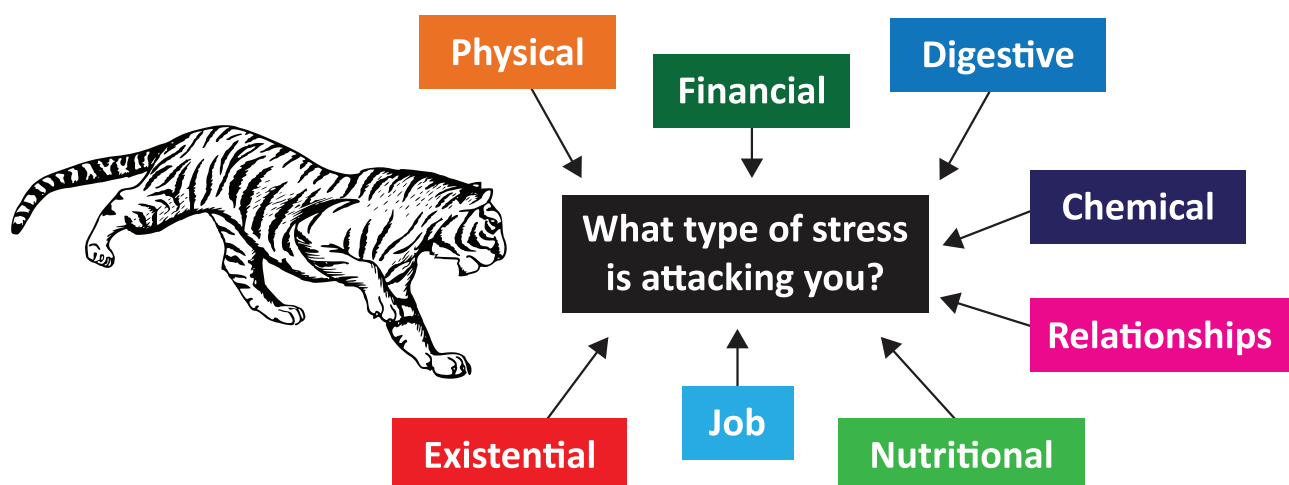
bumps into having to skip lunch, which bumps into being excruciatingly irritable and hungry in the afternoon, and so on. Each event results in a small release of cortisol. With your body in perpetual cortisol activation mode, your levels stay just above normal limits for long periods of time, or what is called **chronic subtle hypercortisolism**. Anything above normal is NOT just enough; it's too much. While this won't cause any harm overnight, it certainly will over time.

Gabriel writes, “...chronic stress can very easily mimic the chemical signals that are created when we are starving; chronic stress is alarming but not immediately life threatening. It’s not like a tiger chasing you, for example, so running away won’t necessarily make it better. It’s more like a famine or a cold winter: It’s always there and you just have to take it—grin and bear it.”

Even though the famine never comes, the pressures and strains of modernity are mimicking it on a physiological level. Instead of starving for food, you may be deprived of love, financial stability, community, and/or purpose in your life. Hidden stressors such as pain, nutritional deficiencies, and digestive maladies may also have a hand in stoking the smoldering flames of cortisol. According to Shawn Talbott, Ph.D., author of *The Cortisol Connection*, long-term low-grade cortisol exposure has been associated with the following conditions and more:

- Increased appetite and food cravings
- Increased body fat
- Decreased muscle mass
- Decreased bone density
- Mood swings (anger and irritability)
- Reduced libido (sex drive)
- Memory and learning impairment
- Impaired immune response

Since the focus of this writing is fat loss and ideal body composition, let’s consider how excess cortisol can become an insurmountable obstacle standing between you and your goals.



STRESS MAKES YOU HUNGRY

Not only does cortisol provide the fuel for action, it also plays a key role in refueling after encountering a stressor. With chronically elevated cortisol levels, your appetite stays cranked up, leaving you incessantly hungry. What's more, the foods you crave are the furthest thing from healthy. In his book *Why Zebras Don't Get Ulcers*, renowned biologist Robert M. Sapolsky, Ph.D. writes, *"What is really fascinating is that glucocorticoids (cortisol) don't just stimulate appetite—they stimulate it preferentially for foods that are starchy, sugary, or full of fat—and we reach for Oreos and not the celery sticks."* Here we have yet another reason WHY you overeat.

STRESS GIVES YOU BELLY FAT

According to research by Epel et al., there are four times more cortisol receptors in the deep layers of abdominal fat as compared to subcutaneous fat—or the fat directly beneath the skin. Consequently, chronically elevated cortisol coupled with an appetite for fattening foods leads to an accumulation of belly fat. Storing fat in the midsection may be a survival strategy by the body to keep the limbs lean enough to fight or flee in the event of an emergency. However, abdominal fat is also highly associated with heart disease and other chronic degenerative diseases.



“Unrelenting stress can be just as fattening as refined carbohydrates.”



STRESS MAKES YOU LEPTIN RESISTANT

Chronically elevated cortisol precipitates leptin resistance. This makes sense because anything that resembles a famine will prompt the body to store fat, which is not easy to do when leptin is functioning optimally. In animal studies, rats that have had their adrenal glands removed—thus eliminating their ability to produce cortisol—do not become resistant to leptin. However, by administering cortisol to them intravenously, leptin resistance can be induced in a dose-dependent fashion. In other words, the more cortisol administered, the more leptin resistant they become.

STRESS CAUSES MORE INSULIN RESISTANCE

When cortisol increases blood sugar, the pancreas kicks in and releases insulin to bring your blood sugar back down to normal. With the day's next stressful event, cortisol strikes again and the process repeats. The blood sugar and insulin surges don't stop! Insulin resistance worsens. And as you know very well by now, insulin turns ON your fat-storing hormones and turns OFF the fat-burning ones.

DARK SIDER PROFILE

Jon Gabriel

Author of *The Gabriel Method*

Jon has pursued extensive work in biochemistry, organic chemistry, and biology, and has performed research for the internationally renowned Dr. Jose Rabinowitz.



Originally in a prominent financial career, Jon left his successful but stressful job to spread his promising message around the world. His own success story has been featured on national radio and television.

Website

www.gabrielmethod.com

UW Radio Appearances

The Gabriel Method

STRESS INHIBITS THYROID HORMONE

The proper function of the thyroid is critical for anyone seeking optimal health as it plays a role in everything from energy, mood, memory, body temperature, hormonal balance, and of course, fat loss. Hypothyroidism, a condition in which the gland has become underproductive, is extremely common with symptoms including:

- Constipation and poor digestion
- Low body temperature with cold hands and feet
- Depression
- Fatigue
- Forgetfulness
- Bloating and water retention
- Loss of drive and ambition
- Achy muscles and joints
- Weight gain

A low-functioning thyroid may be caused by multiple factors, such as autoimmunity, fluoride, and gut bacterial imbalances. One of the most overlooked causes is elevated cortisol levels stemming from stress.

The thyroid secretes two primary hormones, thyroxine (T4) and tri-iodothyronine (T3). T4 is the inactive form of thyroid hormone, while T3 is its active counterpart. The conversion of the inactive T4 into active fat-burning T3 is paramount for having a healthy metabolism. Much of this conversion takes place in the liver and digestive tract, giving you great reason to take care of your detoxification and digestive systems (more on these systems in the coming chapters). When cortisol is elevated due to your overall stress load, this conversion is inhibited and your metabolic control center goes on the fritz. Left fatigued, depressed, and achy due to a slow thyroid, how active do you think you'll want to be?

STRESS RUINS YOUR SEX LIFE

Have you ever noticed that when you're under a lot of stress, your sex drive goes down the tubes? Well, that's because your body likes to steal from your sex hormones (i.e. testosterone) in order to make more stress hormones (i.e. cortisol). It's more concerned with your survival than your pillow talk.

UNDERGROUND TIPS FOR REDUCING STRESS

Make a to-do list. Every morning, put together a list of 5-7 things you will get done by the end of the day. Check them off as you complete them. Start with 2 fairly easy tasks to get the ball rolling. Then tackle the more important stuff. Finish up with something easy. If you don't have time to complete a task, don't sweat it. Just slide it over to the following day. On Friday afternoon, it's always rewarding to look back and see what you were able to accomplish during the week.

Free yourself from the evil grips of email! I refuse to be a slave to my inbox. And so should you! Do yourself a favor and set your email account to check for new messages every 2 or 3 hours. That way you won't be interrupted every 5 minutes by whatever irritating sound your computer makes when a new message comes in. I also suggest setting up an auto-responder letting senders know that you only check your email 2 or 3 times a day and that you will return their message within 24 hours (except weekends). This takes the pressure off of you to get right back to them. And lastly, make it a rule to never check work-related email on weekends. If it's important enough, they will call you.

Hang out with friends. I always find myself encouraging clients to go out and play. In my experience, social interaction has an energizing and healing effect upon the body. Those who isolate themselves from others tend to make the least progress in their quest for better health. Set aside a few times a week to spend some quality time with friends. Go for a walk. Play Scrabble (my personal fave). Pick up the phone and call someone. Schedule a Skype call with a pal who lives far away and talk face-to-face. In my opinion, if we were meant to spend an inordinate amount of time by ourselves, we would have been given our own planets.

Breathe. You can go months without food and days without water. But go just a few minutes without oxygen and you're a goner. When I was a personal trainer, I found that most people did not breathe properly. Their bellies seldom moved when taking a deep breath. Most of them breathed with their chests and shoulders, thus limiting the amount of energy-generating oxygen available to the tissues. Spend 5-10 minutes a day simply breathing. In fact, put it in your schedule. There are thousands of "breathing technique" videos on YouTube. Find one that works for you and use it daily. According to Yuri Elkaim, author of *Eating for Energy*, proper breathing prevents overeating, stimulates the immune system, alkalizes the body, and promotes longevity.

Work In. Working out takes energy away from the body. Very seldom do we consider how movement can help us recover from stress and put energy back in. The concept of working in is something I learned from Paul Chek in his book *How to Eat, Move, and Be Healthy*. Pick up his book and use his Zone Exercises 3-5 days a week. You can also try yoga, meditation, qi gong, and tai chi. These forms of exercise will leave you feeling refreshed, not drained. If you cannot make it to a class, a DVD will suffice.

Testosterone is a powerful fat-burning, muscle-building hormone. In addition to libido and sexual performance, it plays a significant role in your overall sense of well-being, quality of sleep, and mood. Cortisol and testosterone are antagonistic hormones. As cortisol goes up, testosterone comes down. This plays a significant role in your ability to lose fat.



As I mentioned in the Introduction, many of my overweight clients present with dwindling or nonexistent libidos. And that's stressful enough! Their salivary hormone tests typically come back with depleted testosterone levels. Diet and exercise alone will never fix a deficiency in this

vital fat-burning hormone. While low sex hormone levels will send the average person running to the endocrinologist inquiring about a magic cream, pill, or prescription potion, the question should be WHY the hormone is low in the first place. What is the root cause?

SURVIVING TO DEATH

There is no denying the connection between the seemingly unrelenting stress of modern living, our widespread appetite for all things sweet, and the accumulation of fat tissue. Yet again, our innate survivalist hardware is working against us in an attempt to protect us from hazardous predicaments that were once matters of life and death. To stop excess cortisol in its tracks, attention must be paid to both the overt *and* hidden sources of stress currently impacting your health and wellness. Although a complete eradication of each and every stressor from your life would be unfeasible and simply unrealistic, a few small steps in the right direction will beget a noticeable shift in not only how you feel but how your body burns fat as an energy source.

The little things go a long way. You would be surprised by how often my first appointment with a client has nothing to do with diet or exercise and everything to do with how to take control over their messy schedules and disorganized lives. This past year, I have become an unofficial Google Calendar Instructor wielding the sensible rationale that if my clients can't set aside the time to sit down to have a meal, the odds of him or her sticking with my program are slim to none. Something as simple as dedicating a specific time each day for breakfast and lunch can make a world of difference. Try it out! Works for me. No one gets between me and my noontime lunch hour. No one!

Feeling like you're starting to climb out of your Box? The next few chapters will shine a little dark on those hidden stressors that may be triggering cortisol overexposure from within. In my experience, these stressors require quite a bit of detective work to uncover and an equal amount of patience to remove. Ironically, our first suspect prefers to reveal itself as darkness falls.

A good night's sleep will never feel the same.

RECOMMENDED READING

Fat is Not Your Fault by Dr. Bryan Walsh

The Gabriel Method by Jon Gabriel

Why Do I Still Have Thyroid Symptoms? by Datis Kharrazian, DC

The Cortisol Connection by Shawn Talbott

Why Zebras Don't Get Ulcers by Robert M. Sapolski

Eating for Energy by Yuri Elkaim

RECOMMENDED PODCASTS

Is Stress Making You Fat? with Reed Davis

Andropause: Are You Becoming Less of a Man? with Reed Davis

Fat is Not Your Fault with Dr. Bryan Walsh

Why Do I Still Have Thyroid Symptoms? with Dr. Datis Kharrazian

The Gabriel Method with Jon Gabriel

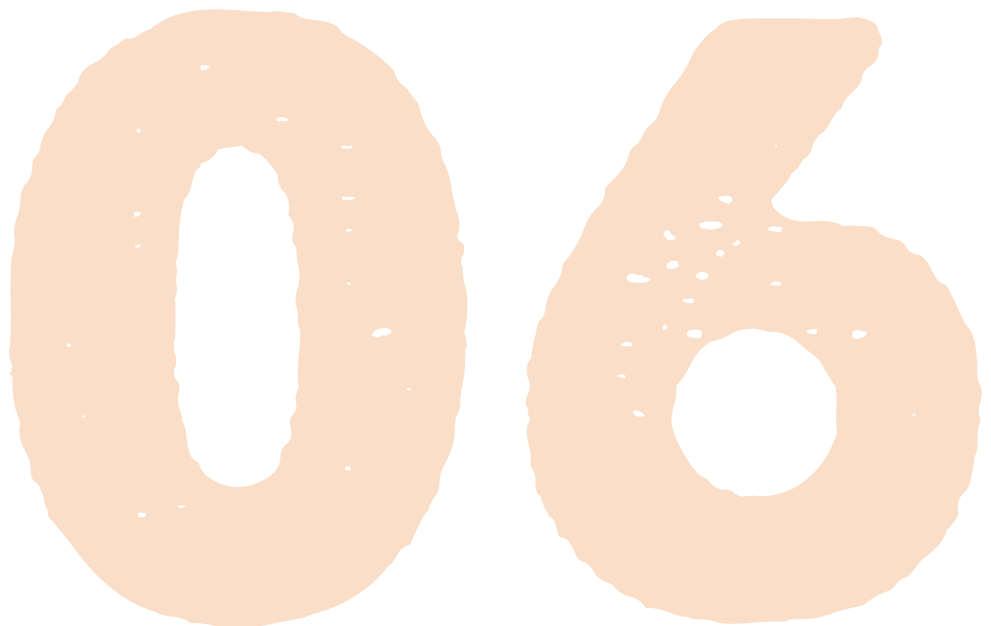
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07

GO TO BED! **Lights Out**

“As a nation, we are sick because we don’t sleep. We are fat and diabetic because we don’t sleep. We are dying from cancer and heart disease because we don’t sleep.”

- T.S. Wiley in *Lights Out*

DROPPIN' TRUTH BOMBS!



Lack of sleep is the most overlooked lifestyle factor contributing to obesity, heart disease, cancer, diabetes, and more.



In order to live off of your fat stores during the winter famine, your body is hardwired to store fat during the long days of spring and summer.



Sleep deprivation generates a hormonal cascade, leaving you insulin resistant, craving sweets, and in fat-storing mode.



Creating an ideal sleep environment with minimal light, distractions, and electromagnetic frequencies will facilitate improved sleep.

Go to bed.

I promise you won't miss a thing. Your Facebook friends and Twitter followers will still be there tomorrow. You don't have to watch *The Late Show* live. We've got DVRs and Hulu for that.

Just go to bed.

I know you're all grown up now and the idea of having a bedtime seems silly. But your incessant burning of the midnight oil is literally making you ravenously hungry, insulin resistant, and fat! Lack of sleep is playing a HUGE role in your battle with the bulge. In my humble opinion, it is the most overlooked aspect of not just obesity, but also heart disease, cancer, diabetes, depression, anxiety, autoimmunity, and more.

A good night's sleep never hurt anybody. A poor night's sleep certainly does. And we've got a major shut-eye deficiency going on these days, which is pretty darn ironic in our exhausted 5-Hour Energy nation where just about everyone can use a nap.

In her extremely well researched book *Lights Out: Sleep, Sugar, and Survival*, T.S. Wiley writes, *"There are at least ten different hormones, as well as many more neurotransmitters in the brain, that go sideways when you don't sleep enough."* As you know, fat regulation has everything to do with hormones. And imbalanced neurotransmitters trigger cravings for yummy sweets that trigger hormones that trigger fat storage that triggers inactivity and more yummy sweets. This nasty sequence will never stop as long as you're staying up late doing whatever it is that you do. You can't cheat the system.

According to Wiley—phenomenal *UW Radio* guest, by the way—, *"in nature, we would sleep 4,370 hours (per year) out of a possible 8,760, or half of our lives. Now, we are lucky to get a measly 2,555. If nature keeps score, and we bet she does, that means we only get to live about half as long. We may have doubled that figure with surgery and antibiotics, but think how long we could live if we slept, too."* So much for "sleeping when you're dead". The truth is that you'll be dead because you don't sleep! And you'll likely die from an obesity-related disease for the very same reason.

Don't mess with Mother Nature. She'll kill ya!

TIME TRAVELING

Let's jump into our time machines—mine is a DeLorean like Marty McFly's—and head back to the days and nights of our Paleolithic ancestors. Don't forget to check your flux capacitor! Be sure to set your destination date for mid-July. Time traveling during the winter months can be a drag. That's why the fares are so cheap. Your objective here is not to mingle with the locals. Your body hair shortage won't blend in so well. Just hang out from afar and observe.

You'll notice that the summer days are long and the nights are short, just like they are back home. The wild berries and veggies are ripe for the picking and the trees are fruiting, providing ample carbohydrates and plenty of water to stay hydrated in the brutally hot sun. With the winter snow long gone, hunting is much easier. Woolly mammoth and wild berries for dinner! Come and get it!

When spring and summer passed, the winter months brought shorter days and much longer nights. The trees stopped fruiting and the soil was covered in deep snow. With temperatures at 20° below, the great outdoors didn't seem so great. It was time to take to the cave and hibernate. The famine was here.

This is how we lived for literally millions of years. The annual feast was followed by the winter famine, light by darkness, and heat waves by snowmen. From an anthropological and physiological perspective, you can say that we humans are meant to be seasonal eaters.

Seasonal breeders.

Seasonal sleepers.

However, in today's world the famine never comes and the sun never sets. Mother Nature no longer owns her seasons nor her nights. We do. And she's a little miffed about it!

Hell hath no fury like a woman scorned.

AFRAID OF THE DARK

Caveman didn't have Facebook, David Letterman, or Cinemax After Dark. When the sun went down, he literally had nothing to do. If he was smart enough to rub two sticks together, he could have lit a campfire after sundown, but he sure as heck wasn't up playing charades with his drinking buddies until 2 in the morning. He went to bed!

Let me give you some perspective here. When there's a power outage in your neighborhood at 9pm, you don't know what to do with yourself. It's pitch black, so you fumble around holding onto the walls and trying not to stub your big toe. Hoping that it will help you see better, you open up your eyes as wide as you can (you know it never works, but you do it anyway). No Internet to surf. No TV to watch. Nothing. (I know! You can do a lot of this stuff on your cell phone these days. Just play along, will you!)

You wait it out for about 20 minutes, worried sick over whether the food in your freezer is going to thaw. Eventually, you give up. You head to your bedroom—your cave—and call it a night.

How inconvenient!

Oh, cry me a river.

Caveman dealt with this same kind of darkness on a nightly basis. He didn't lose sleep over it, though. In fact, he went to sleep. In winter, he knocked out early. In the summer, he stayed up late. And he didn't sleep because he was bored. He slept in order to survive.

What does sleep have to do with your survival? Well, more than I can even begin to explain here. This e-book is long enough already! But I'll give you the nutshell version and leave a few resources at the end of the chapter.

DARK SIDER PROFILE

T.S. Wiley

Author of *Light's Out: Sleep, Sugar, & Survival*



In Wiley's opinion, sleep is the best medicine. She has published peer-reviewed scientific papers on molecular oncology and endocrinology, as well as lecturing globally and teaching physicians Environmental Endocrinology in planetarium settings around the world.

Website

www.thewileyprotocol.com

UW Radio Appearances

[*Lights Out*](#)

[*Ask T.S. Wiley*](#)

FAMINE AND FAT TISSUE

Nature is smart enough to know that humans left to their own devices will wipe themselves off of the planet in no time. The village idiot, who gets too wrapped up in all the summer fun while forgetting to prepare for the famine around the corner, is a goner.

During the warmer months, our caveman fattened himself up for the freeze. That way he could live off of his fat stores when nature's refrigerator was empty. No fat. No survival. No summer fun next year.

The most fascinating part of all this is that caveman probably didn't *try* to pack on the pounds. I'm sure he didn't know a darn thing about energy metabolism. Instead, the light made him do it, as his body was entirely in synch with the sun, moon, and stars.

Hormonal patterns matched the seasons.

The long sleepy nights of winter allowed for plenty of **melatonin** production. Melatonin is your primary snooze hormone. It also strengthens the immune system, packs a mean antioxidant punch, and suppresses your sex hormones like estrogen and testosterone, making you less frisky and reproductive. (In the next section you will learn why sex hormone suppression during winter was a pretty smart move.)

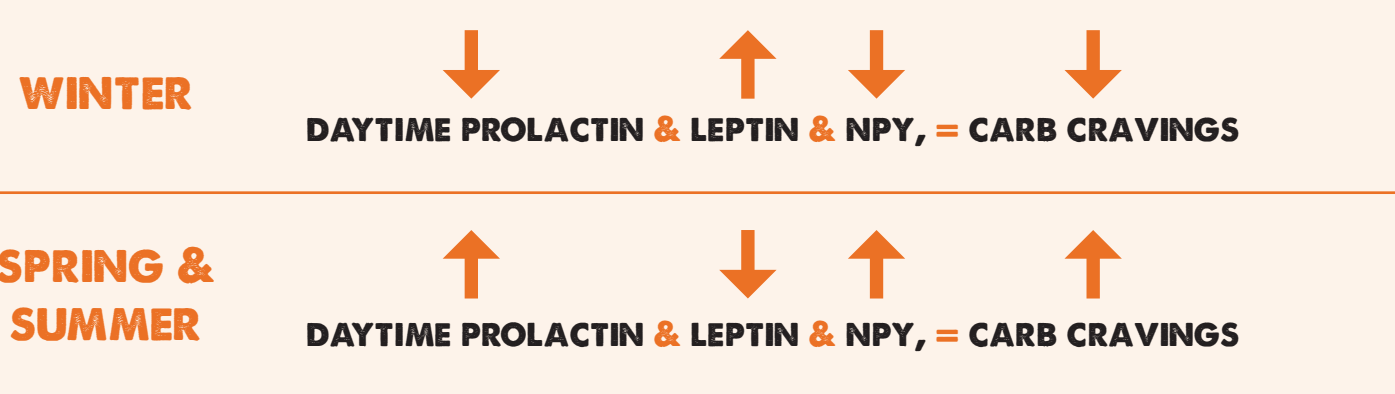
As you know, hormones are like dominoes. Melatonin tumbles over and bumps into **prolactin**, another immune system booster. Prolactin is actually what makes new mothers produce breast milk. Guys make it, too. But since men lack mammary glands, they don't have to worry about

any accidental lactation episodes.

When caveman woke up with the winter sun, his prolactin and melatonin were back down to low levels and his energizing cortisol was at its peak. He hopped out of bed (err, ground) nice and bubbly, ready to bear another freezing day. Behind the scenes and unbeknownst to him, his prolactin was doing him a huge favor, as it signaled **leptin** (remember that one?) to make a beeline to the brain and press the OFF switch on his **Neuropeptide Y (NPY)**. As you recall from Chapter 2, NPY is responsible for carbohydrate cravings. This make a lot sense when you think about it because if our hypothetical caveman’s NPY were left turned on during a famine with no sweets (fruit) within a 1,000-mile radius, life would pretty much suck.

When spring finally rolled around (it felt like it would never come), his fat stores were all burned up, leaving his leptin down, appetite up, and his body as skinny as a rail. The fruit was ripe for harvest and the hibernating animals were rubbing their eyes after a season-long nap.

Feasting time! Barbecue and smoothies at the river!



FATTENING UP FOR THE FREEZE

The shorter nights of the warmer months meant less melatonin. Sex hormones were raging and mating season was on. (This makes sense because women who conceived during summer gave birth the following spring when there was plenty of food to go around.) With melatonin rising later at night, so too did prolactin. But the short nights didn’t give prolactin a chance to come back down before sunrise, so it spilled over into the day. This “prolactin spillover” suppressed leptin, which told his brain that there was no fat on board, which left NPY turned ON, which fired up his sweet tooth, which drove him to eat more carbs, which made him pack on some fat. Fortunately, it was the time of year when he could just head on over to the next tree or bushel and throw down a handful of berries. This timely sugar fix was no random convenience. It wasn’t some accident that caveman only craved sweets when a carb bush was fruiting next door. It was Mother Nature at her finest.

Summer carb binges induced insulin resistance and fat storage. But you wouldn't catch anyone grunting about his or her fasting blood sugar scores or lion skin jeans that were getting too tight. Carb debauchery, insulin resistance, and love handles were all part of a complicated survival strategy, without which none of us would be here. The excess goodies even made cholesterol rise. Did caveman run to the doctor's office and get a bottle of statin drugs? Heck no! Elevated cholesterol was advantageous, as it lowered the freezing temperature of his cells. And elevated blood glucose—what happens when you're insulin resistant—acted like antifreeze in the bloodstream. Freezing to death during winter is a bad way to go.

Again, this feast-famine metabolism was in no way serendipitous. It was built into our caveman's physiology. It is still built into ours.

A LIGHTBULB MOMENT

A lot has changed over the last 100,000 years. We focus so much on our food that we fail to see the light. Lightbulb, that is. It has only been 80-something years since we first brought the sun indoors with us and turned nighttime into day. With the flip of the switch, we can manipulate the seasons. Long days. Short nights. Year round.

Endless Summer isn't just a movie about surfers. It's how we live our lives.

Damn you, Edison!

The light bulb is yet another answer to the question of WHY you overeat. Your late winter nights playing Scrabble are spilling prolactin into your daytimes, suppressing your leptin, leaving NPY in overdrive, and you standing in line at the donut shop. What's more, sleep deprivation increases ghrelin (the hunger-stimulating hormone in your stomach), so you can't seem to stop eating.

According to Robb Wolf in his book *The Paleo Solution*, “just one night of missed or inadequate sleep is sufficient to make you as insulin resistant as a diabetic”. Ouch! On top of that, the Centers for Disease Control recently classified your all-nighters as carcinogens—that means they cause cancer. Lack of sleep will make you fat, diabetic, and dead.

I'm serious.

And if you ever get around to reading *Lights Out*, you'll find out how it contributes to depression, anxiety, heart disease, and high blood pressure. When you don't follow Mother Nature, she does her best to stop your heart, give you a tumor, or make you loony enough to throw yourself in front of a wildebeest. I told you she gets miffed.

PITCH BLACK

So what do you do now? Go to bed, for goodness sakes! Haven't you been paying attention? Your body will continue to prepare itself for a famine that never comes if you don't let the sun go down. Dim the lights, shut down your laptop, and turn off the TV an hour before bedtime. Flickering light—even when you can't tell it's flickering—will turn down your melatonin while turning up your cortisol, leaving you wide awake.

No, I'm not recommending that you go ten toes up at 5pm (sundown) in the winter. Just know that the more hours of sleep you get before midnight in winter, the better off you will be. Nine or 10pm would be awesome. You'll wake up the next day at 6 or 7am full of energy with your hormones balanced and appetite in check. When summer returns, you've got the green light to stay up a little later and eat a little extra carbohydrates—fruits and veggies, of course.

The key to maximizing melatonin production is sleeping in a pitch black room. One night, my girlfriend and I hung a sheet and blanket over my bedroom window. Living in Downtown San Diego, there was a street lamp right outside, pouring light into my room. The room is blacked out to the point at which we cannot even see our hands in front of our faces. Our good night kisses are done in Braille. Since then, we've slept like babies.

Sorry, but you won't get the same effect by wearing one of those silly sleep masks. Light doesn't just pass through your eyes. It creeps through your skin, too. Beneath your skin, cells called **cryptochromes** pick up blue spectrum light. Your body interprets this light as sunshine and suppresses melatonin. Just a little bit of light will throw your hormones out of whack. According to Wiley, a University of Chicago study found that merely shining a light from a fiber-optic tube behind the knee of a subject who was completely covered stopped melatonin production!

Get yourself some heavy drapes or blackout curtains. You can find a bunch online. Be sure to cover any random sources of light, like your alarm clock and computer modem. You'll be surprised how bright these insignificant light sources can be when you're trying to go pitch-black. You might also want to move your bed away from any wall sockets or appliances. Research shows that electromagnetic frequencies (EMFs) can suppress melatonin as well.

Before you resort to natural sleep aids like supplemental melatonin or valerian root, check out these **33 Sleep Aid Secrets** from Dr. Mercola. He may ask for your email address, but the article is invaluable. Read it now and you can unsubscribe from his mailing list later if you wish.

Be realistic. If you've been going to bed at 2am for as long as you can remember, start winding down at midnight and be asleep by 1am this week. Next week, wind down at 11pm and be asleep by midnight. Keep it going until you get yourself in the habit of knocking out at a decent hour. No one expects you to completely flip your sleeping habits overnight. Just make a concerted effort to improve them.

THE GUT-INSOMNIA CONNECTION

If you just can't sleep or stay asleep regardless of what you do, consult with a Functional Medicine doctor, naturopath, or other qualified practitioner. In my experience, many of my clients have upside down nighttime hormonal profiles with low melatonin and high cortisol. Most say they get a "second wind" of energy in the evenings. A lot of times, this stems from an infection—typically digestive in nature. Parasitic infections tend to have an opposite day-night cycle as compared to ours. They're up when you're down. Internal stressors of this nature crank up your cortisol and leave you wide-eyed in the dark.

It is a little-known fact that the sleep hormone melatonin is made from serotonin, which you likely know to be your happy neurotransmitter. Ninety-five percent of the serotonin in your body is made in the gut. When the digestive system goes off the rails—there are about a billion ways this can happen—you may lose your ability to absorb the amino acid tryptophan, which makes serotonin, which in turn makes melatonin. If you're tryptophan-deficient, you're very likely also depressed (low serotonin) and sleepless (low melatonin). Where there's trouble, you can almost bet your gut is somehow involved.

POOR DIGESTION = TRYPTOPHAN NOT ABSORBED = SEROTONIN & MELATONIN

(from food) (elevates mood) (puts you to sleep)

JUST DO IT!

I know it sounds like a big pain in the rear end, but give sleep a try for a month. See and feel what happens. If you don't look or feel better, I'll not only give you a full refund, but I'll also give you permission to call me a certifiable quack.

Now if it's past 9pm, it's time to shut down your computer and wind down for the night. Dim the lights. Have a little quiet time. And go to bed!

RECOMMENDED READING

Lights Out: Sleep, Sugar, & Survival by T.S. Wiley

How to Eat, Move, & Be Healthy by Paul Chek

RECOMMENDED PODCASTS

Lights Out with T.S. Wiley

Ask T.S. Wiley!

RECOMMENDED VIDEOS

The Sleep Diet: Lose Fat with a Good Night's Sleep!

Is Lack of Sleep Making You Fat?

THE SCIENCE

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08

HEAL YOUR GUT Everybody Poops!

“Americans spend \$1,300,069 a day on laxatives. Can you imagine? What a sad state of affairs. All that money just so you can poop. I poop because I enjoy it. It’s sad that people have to spend money to do that.”

- Paul Chek

DROPPIN' TRUTH BOMBS!



One-third to one-half of American adults have some form of digestive illness.



An imbalance of gut bacteria will inhibit thyroid hormone conversion, thus slowing the metabolism.



Sugar cravings are often caused by an overgrowth of fungus in the intestines.



Your gut can become leaky and lead to food sensitivities, which will imbalance your hormones and initiate fat storage.



Seven out of ten people are gluten-sensitive, a condition which damages the gut lining.



Parasitic infections are incredibly common. They are also highly stressful to the body, causing more hormonal imbalance and fat storage.

It's okay to talk about poop.

Unfortunately, we have been conditioned to believe that poop is “bad” and that we should keep our bathroom habits behind locked doors. So we hold our gas to avoid any embarrassing moments. We refuse to go number two at work. We suffer through years—maybe decades—of constipation or diarrhea and never consult with anyone about it. And even when we do, our doctors are sometimes clueless as to what is going on.

The pervasiveness of poor digestive health is beyond astounding. According to Liz Lipski, author of *Digestive Wellness: Strengthen the Immune System and Prevent Disease Through Healthy Digestion*, one-third to one-half of all (American) adults have digestive illness. That's more than sixty-two million people. But *still* no one wants to talk about it.

The price we pay for ignoring and disparaging our digestive health does not end with our wallets. It is said that life begins and ends in the colon. In fact, 90% of all disease begins there. It is not a matter to be taken lightly.

DARK SIDER PROFILE

Dr. Liz Lipski

Author of Digestive Wellness

Dr. Lipski holds a doctorate and is board certified in Clinical Nutrition and Holistic Nutrition. Dr. Lipski has been working in the field of holistic and complementary medicine for over 25 years.

She is nationally known for her expertise in the fields of nutrition, integrative health, and digestive and auto-immune conditions.

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www.innovativehealing.com

UW Radio Appearances

[Digestive Wellness](#)



YOU ARE NOT WHAT YOU EAT!

I often come across clients with superb diets but very poor digestion. Some have bowel movements once a week. Others have had gastrointestinal (GI) complaints dating back as far as childhood. While I commend them for their outstanding food choices, I also must remind them that they can have the greatest diet in the history of the world, but if the digestive system is out of order, the benefits will be limited and so will their results. Failure to identify and eliminate the root cause(s) of GI challenges will be a major roadblock in achieving your fat loss goals. I assure you that you will never be healthy—and thus never lose fat for good— if these matters remain unresolved.

There are dozens of ways in which the GI system can go wrong. This chapter will cover the ones I encounter most often. You will learn how a dysfunctional digestive system slows down your metabolism, imbalances

your hormones, worsens insulin resistance, depresses the immune system, and keeps you from getting a good night's sleep. While there is no single simple solution for resolving gut dysfunction, I will do my best to point you in the right direction as to how to fix it.

YOU HAVE GUT DYSFUNCTION IF YOU EXPERIENCE...

- Acid reflux or heartburn
- Gas and bloating
- Frequent diarrhea
- Foul-smelling stools
- Indigestion
- Constipation
- Food sensitivities
- Food in the stool

THE GUT-THYROID CONNECTION

There are more than ten times more bacteria in your digestive tract than there are cells in your body. These bacteria collectively weigh between three and five pounds. That's about the size of your liver! The two primary groups of bacteria—also called flora—are **lactobacilli** and **bifidobacteria**. The former are found primarily in the small intestine, where the majority of your nutrient absorption takes place. The latter are found in the colon, your poop packaging plant. Both types of flora live symbiotically within us. They help us and we help them.

Despite recent media propaganda, not all bacteria are harmful. In our guts we have what are called beneficial flora—the good—and not-so-beneficial flora—the bad. Both are absolutely vital for optimal health. The key is keeping them in balance. The vast majority of us have imbalanced gut flora, or what is called **dysbiosis**, with excessive bad bacteria and not enough of the good. These bad bacteria, when left unchecked, produce poisonous chemicals called endotoxins that harm the cells around them, leading to problems like pain and inflammation, **leaky gut syndrome**, food sensitivities, toxicity, and fat storage.

In terms of what causes this imbalance, the worst offender is antibiotic usage. According to Lipski, our gut flora is passed down from our ancestors and is pretty much set by the age of two. Unfortunately, when a small child is given antibiotics just once for seven days, they can permanently alter their gut flora and immune system. Just once! Considering that we are prescribed antibiotics when we so much as stub our toes, you can see why our guts are in such disarray. Add to that the vast amounts of antibiotics we consume through commercial beef, poultry, and dairy products and we have a recipe for digestive disaster.

Imbalanced gut bacteria plays a significant role in fat loss. You may recall from the previous chapter that the inactive thyroid hormone T4 must be converted to its active form T3 in order to stoke your metabolism and keep the fat burning. Approximately 20% of this conversion

requires balanced gut bacteria. This means that dysbiosis will reduce your ability to burn fat. Imbalanced gut flora can stamp out up to 20% of your metabolism!

Your first step toward restoring bacterial balance is to remove the suspected causes listed below. Although they are no panacea, you also may want to supplement with a high-quality probiotic for a period of 60-90 days. If you're not a fan of supplementation, be sure to consume plenty of fermented foods such as sauerkraut, kimchee, and raw kefir, all of which are loaded with beneficial bacteria. Without conducting a thorough assessment and investigation of your current health challenges, I cannot be certain that these recommendations will be helpful to you. For that reason, I recommend you contact a qualified practitioner for more personalized solutions.

CAUSES OF DYSBIOSIS

- Chronic stress
- Prolonged NSAID usage
- Poor diet
- Oral contraceptives
- Chemical exposures
- Antibiotics
- Excess sugar consumption
- Prolonged steroid usage

FUNGAL OVERGROWTH: FEEDING THE BEAST

One of the keys to fat loss is minimizing those refined processed carbohydrate foods that precipitate surges in blood sugar and insulin. But what if your sugar cravings are so out of control that you just can't help yourself? What if those thoughts of robbing a candy store aren't actually yours, but something you're feeding inside of you? I know, it kind of sounds like a scene from the movie *Alien*. But it's very real.

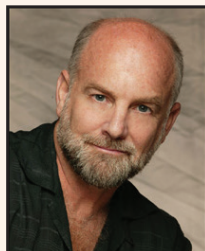
A common gut disorder affecting one-third of the world's population is **candidiasis**, or fungal overgrowth. All of us have candida. Like bacteria, candida lives symbiotically within us, helping us with the production of Vitamin K and certain B vitamins. It is primarily kept in check by the balance of good to not-so-good flora within the intestinal tract. However, as you just learned, most of us have imbalanced flora, thus our widespread problem with candidiasis. Common triggers include antibiotics, birth control pills, steroid medications, and excessive sugar consumption.

The use of antibiotics is like an express ticket to fungal overgrowth. Antibiotics are rather indiscriminate with no regard for differentiating between good and bad flora. They just destroy them all. Since candida is not a bacteria, it just hangs out while its overseers get wiped out. I like to say that the flora are the parents and candida are the kids. When the flora go out of

DARK SIDER PROFILE

Reed Davis, FDN

Founder of *Functional Diagnostic Nutrition*



Reed Davis is a Clinical Nutritionist and Founder of the San Diego Natural Health & Fitness Center. He is highly trained and skilled in Steroidal Hormone Testing and Natural Hormone Balancing and has tested over 11,000 people for low bone density, hormone, digestive, detoxification, mucosal and diet related problems.

Reed loves teaching and developed a course in Functional Diagnostic Nutrition (FDN), a phrase he coined to describe the investigation for underlying causes and conditions related to many common health complaints.

Learn more about FDN at www.functionaldiagnosticonutrition.com

Website

www.bonesandhormones.com

UW Radio Appearances

[Is Stress Making You Fat?](#)

[It All Starts in the Gut!](#)

[Andropause: Becoming Less of a Man](#)

[The Root Causes of Digestive Dysfunction](#)

[A Functional Approach to ADHD](#)

[The Final Episode](#)

town due to antibiotic annihilation, candida throws a big party and trashes the place!

Once candida takes hold, it can be tough to rein in. Sometimes it can become so bad that the fungus plants roots in the gut lining. This causes leaky gut syndrome and can also lead to systemic candidiasis, which is what happens when the fungus slips into the bloodstream and infects the entire body. If you have external fungus in your nails or have other skin irritations like athlete's foot or jock itch, you likely have a systemic fungal infection.

FEED ME, SEYMOUR!

Candida loves sugar.

Whenever you consume sugar or foods that convert to sugar such as refined carbohydrates, candida robs glucose from your digestive tract and puts it through a process called **alcohol fermentation**, the byproducts of which are alcohol and **acetaldehyde**.

Due its structure, the resultant alcohol slips right through the gut lining and into the bloodstream, which carries it to your brain and leaves you feeling a bit tipsy. This is why people with yeast overgrowth tend to feel a little drunk after eating candida's favorite fuel, sugar. Interestingly, acetaldehyde is the very same chemical that makes you feel

hungover. This explains why sugar binges leave a lot of people feeling like they spent the night out drinking.

Balancing your blood sugar and insulin levels are at the core of fat loss. But if you're feeding a beast within, you better believe you'll find yourself scouring the kitchen cupboard for sweets before you know it! Many people attempt to resolve fungal overgrowth with special candida cleanses. You can find these at just about any health food store. However, they're just a quick

fix. The candida always comes back since the root cause has not been addressed.

My mentor Reed Davis says that trying to get rid of candida without addressing possible root causes like bacteria imbalance, parasites, and a compromised immune system is like asking mushrooms not to grow on cow dung in a dark room. Find the cause! To learn more about removing candida, I encourage you to read *The Fungus Link* by Doug Kauffman and follow his Antifungal Diet.

LEAKY GUT SYNDROME: WHO LET THE FLIES IN?

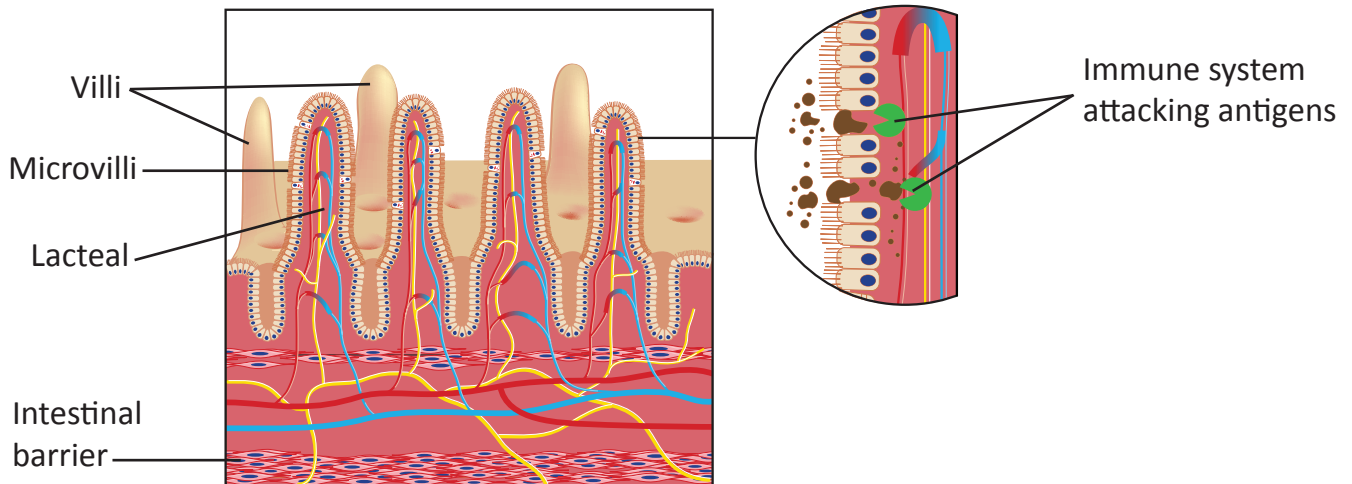
Your intestines are like a whole other world. If you had the opportunity to peek inside of yourself with a powerful microscope, you would certainly witness bacteria and candida doing their jobs in exchange for food. You also might find parasites and viruses setting up shop to do their dirty work. But how does the GI tract go about distinguishing between friend and foe? How does it let the good guys in and keep the bad guys out? That would be the job of your **intestinal barrier**. This barrier is incredibly complex as it is responsible for absorbing nutrients and also serves as your first line of immune defense.

Keeping things basic, the intestinal barrier primarily consists of the villi, microvilli, lacteals, and secretory IgA. Take a look at the picture on the next page, the villi are those fingerlike projections you see. They help you absorb the glucose, fructose, amino acids, and fatty acids that were once your steak, yams, and salad. The hairs coating the villi are the microvilli, which produce enzymes that further break down proteins and carbohydrates. These enzymes include lactase, which is responsible for breaking down milk sugar, as well as sucrase, which breaks down sucrose, or table sugar. Within the fingerlike villi are the lacteals. Once absorbed, fats don't go on the same ride as the amino acids and sugars. Amino acids and sugars go into the **hepatic portal system** and head to the liver for processing. Fats are transported via the lacteals to the **lymphatic system**. This is a very important point because nutrients are *not* absorbed directly into the bloodstream from the intestines. You definitely don't want that. I'll show you why in a moment.

To keep the bad guys out, the gut is highly selective. Coating the intestinal lining is a sticky layer of protective mucus called **secretory IgA**, or SigA. This layer also lines your airways, lungs, and reproductive tract. When I think of SigA, I picture it as that smug bouncer standing outside of the nightclub checking IDs and making sure my shoes are nice enough to let me inside. It keeps an eye out for any riffraff coming off the street like bacteria, candida, parasites, and viruses. It does this by producing **antibodies**, each with its own target to pounce on, either denying entry or escorting it out of the body.

A healthy intestinal barrier with sufficient SigA acts like the screens that cover your windows at home. When this barrier is compromised because SigA is asleep on the job, it is like a kid coming around and poking holes in your window screens on a hot day with no air conditioning. Next thing you know, you've got a house full of flies, gnats, and mosquitoes. Darn kids!

Leaky Gut Syndrome



When your gut is damaged due to inflammation, bacterial and/or fungal overgrowth, parasites, stress, medications, or food sensitivities, you're in the same predicament as you were with the holey window screens. This is called **intestinal hyperpermeability**, or leaky gut syndrome. When the intestinal barrier becomes leaky, undigested food particles and gut bugs alike waltz their way right into the bloodstream, the last place they are supposed to be. Your immune system then recognizes these **antigens**—fancy word for bad guys—as invaders and mounts a response to fight them off. In other words, it acts like you when you have a room full of flies. Your immune system grabs a magazine and starts whacking away!

COMMON SYMPTOMS OF LEAKY GUT SYNDROME

- Bloating
- Mood swings
- Fatigue
- Brain fog
- Diarrhea
- Anxiety
- Recurrent viral infections
- Poor memory

Of course, you can't spend your whole summer swatting at flies. If you're smart, you'll go to the hardware store and buy yourself some new window screens. And maybe give that crazy kid a spanking. We'll get back to this; the new screens, not the kid.

A leaking gut can be incredibly stressful to the body, causing

elevated cortisol level, low testosterone, and other fat-storing hormonal imbalances. Eventually, you develop a myriad of food sensitivities and even worse, autoimmunity.

FOOD SENSITIVITIES

Since they can be so difficult to identify, food sensitivities are one of the most hidden sources of internal stress and hormonal imbalance. Let's say you have eggs for breakfast every single

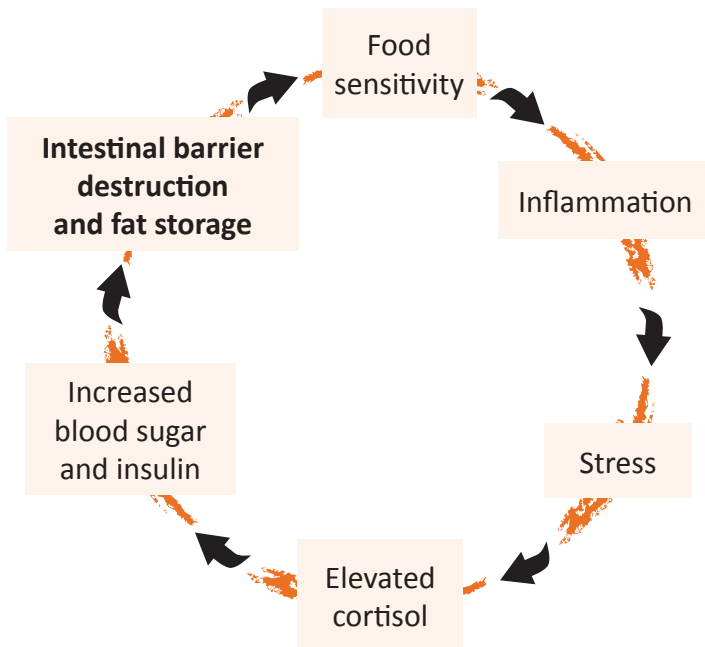
morning. If your gut is hyperpermeable, undigested egg molecules may be slipping directly into circulation (your bloodstream), making your immune system go haywire every single time you eat them! Not only are you feverishly running around the house like a mad person every morning, you're also stressing your body out with your breakfast burrito.

What's interesting about food sensitivities is that they are not like typical **food allergies**. The latter are overt and immediate. For example, someone who is allergic to peanuts may break out in hives or a rash just minutes after consuming them. Food sensitivities can be delayed, meaning you can eat a reactive food on Monday and not feel the effects until the middle of the

week. If the reactive foods are not identified and removed, the persistent inflammation further damages the intestinal barrier. Eventually, you end up sensitive to just about everything you put into your mouth! I've had clients with over 40 sensitivities!

When your intestinal window screen is torn apart, your immune system doesn't like it one bit. Every meal sets off a vicious cycle of inflammation, stress, elevated cortisol, increased blood sugar and insulin, fat storage, and more intestinal barrier destruction.

Here we go again!



IDENTIFYING FOOD SENSITIVITIES

The least expensive way to identify food sensitivities is to follow an **elimination/provocation diet**. The foods listed on the next page are common sensitive foods and must be removed from the diet for 4-6 weeks. I've seen great results with this strategy. At first, clients are irritated with having to remove some of their favorite foods, especially bacon and eggs. But once they realize that there are still plenty of foods to choose from, they get used to it pretty fast and feel so much better in just a matter of days. Symptoms of food sensitivities include brain fog, fatigue, restlessness, indigestion, depression, skin problems, bloating, and headaches.

After 4-6 weeks of elimination, begin to reintroduce foods one at a time. This is the provocation part of the diet, when we are looking to provoke a response from the immune system. For example, reintroduce cow's milk (preferably raw) and be sure to drink plenty of it for two days. See and feel what happens. If you notice any negative reactions, avoid it for at least 6 months before trying it again. If you feel fine, keep it in your diet and move on to the next "banned" item.

THE ELIMINATION/PROVOCATION DIET

Remove the following foods for 4-6 weeks:

- Wheat and gluten-containing food (barley, rye, oats, kamut)
- Soy
- Corn
- All dairy products (even raw dairy)
- Citrus fruits
- Nightshade vegetables (potatoes, tomatoes, eggplant, etc.)
- Pork
- Eggs
- Any other suspicious foods

Symptoms to look out for upon reintroduction:

- | | |
|---------------|------------------------|
| • Mood swings | • Joint pain |
| • Lethargy | • Runny Nose |
| • Bloating | • Diarrhea |
| • Fatigue | • Irritability |
| • Insomnia | • Need to clear throat |
| • Gas | • Brain fog |

HASHIMOTO'S THYROIDITIS: A WORD ABOUT AUTOIMMUNITY

While it goes beyond the scope of this writing, it would be negligent of me to go without mentioning the link between leaky gut and **autoimmunity**. Autoimmunity is what happens when your immune system attacks your own tissues, glands, and organs. You may have heard of some of the most common autoimmune disorders like lupus or multiple sclerosis.

We discussed your undigested egg molecule above and the effect it has on your immune system. But what if that egg peptide starts to look a lot like your thyroid, or your brain, or your joint cartilage? In a bad case of mistaken identity, your immune system gets trigger happy and starts shooting at friendlies. This is called **molecular mimicry**.

One of the most widespread autoimmune disorders is **Hashimoto's thyroiditis**, which can cause a reduction in metabolic rate as well as other classic hypothyroid symptoms like cold hands and feet, hair loss, constipation, depression, fatigue, and weight gain.

DARK SIDER PROFILE

Dr. Thomas O'Bryan

Dr. Thomas O'Bryan is an internationally recognized speaker and workshop leader specializing in Gluten Sensitivity and Celiac Disease.



He is the Sherlock Holmes for chronic disease and metabolic disorders.

He is a clinician par excellence in treating chronic disease and metabolic disorders from a Functional Medicine perspective.

Website

www.thedr.com

UW Radio Appearances

[Gluten Sensitivity & Celiac Disease](#)

[Detecting Gluten Sensitivity](#)

[Destruction from Within: LPS Toxicity](#)

[Detecting Autoimmunity Early](#)

[Treating Neurological Disorders](#)

[Response to The Gluten Lie](#)

In his book *Why Do I Still Have Thyroid Symptoms?*, Dr. Datis Kaharrazian writes, “The first step to repairing the GI tract is to remove the foods that are creating chronic immune responses with the elimination/provocation diet. This diet helps ferret out which foods are stoking the immune system, so that you know what to avoid until your gut integrity is restored...Also, because of the resemblance of the gluten molecule to thyroid tissue, I always have my patients with Hashimoto’s immediately remove gluten from their diets.”

Twenty-seven million Americans are suffering from some form of thyroid dysfunction, most going undiagnosed. Ninety-percent of all adult hypothyroidism is caused by autoimmune disease, mostly due to Hashimoto’s.

Hypothyroidism can be a major fat loss blocker. If you suspect this may be affecting you, contact a medical doctor or naturopath to have your TPO and TGB antibodies tested. You would also be well served to follow the elimination diet outlined on the previous page, being especially vigilant of gluten-containing grains.

PLUGGED UP?

We eat too much and poop too little. Sometimes we forget that the food we take in also has to come out. Most of us have a considerable backlog of meals hanging out in our colons. The foods you ate for breakfast today should leave your body after 12-18 hours. This is called **transit time**. What is troubling (and pretty darn gross, to be honest) is that the average American’s transit time is 72 hours! That means that today’s morning poop was breakfast from three days ago!

“Constipation and hormone reabsorption have been linked to certain cancers as well as weight gain.”

Ewwwww....

I find it incredible that we actually *pay* to go poop. Liz Lipski writes, “*Every year, Americans pay more than \$500 a year on laxatives and fiber supplements alone.*”

Pooping should be free!

Having upward of 15 meals jammed in you colon is enough to add a few pounds to your scale weight (remember, the Dark Side doesn’t use scales). But the stress of holding on to that much toxic grossness can also cause hormonal imbalances that will compromise your health and fat loss.

Your colon is where your poop is manufactured and held before it goes for a dive into the pool. It is here that the body reabsorbs anything that it might need from the feces, especially water. When water goes through the colon too fast and doesn’t allow for this reabsorption, you end up with diarrhea. But when the poop sits in the colon for too long, too much water is reabsorbed and the feces become dry. Dry feces don’t move so well. What’s more, hormones are also removed from the body through the bowels. When constipated, these hormones are also taken back up by the body. Not good.

WHAT IS GLUTEN SENSITIVITY?

Gluten sensitivity is an immune response to gluten, which is found in commonly consumed grains such as wheat, spelt, kamut, oats (unless designated gluten-free), rye, and barley. In other words, it’s pretty much the bottom of the food pyramid I was at one time enamored with, the very same foods we are advised to eat the most often.

My next e-book will be all about how this errant dietary recommendation has caused much pain and suffering by way of inflammation, intestinal destruction, neurological disorders, and autoimmunity.

For now, you must know that according to gluten expert Dr. Thomas O’Bryan, seven out of ten people have some degree of gluten sensitivity. The vast majority of them will never have any intestinal symptoms.

For more information, please listen to my podcasts with Dr. O’Bryan.

Constipation and hormone reabsorption have been linked to certain cancers as well as weight gain. The most studied hormone has been estrogen, which fuels tumor growth. Just as low estrogen levels can cause fat storage, so too can high estrogen from not only constipation but frequent use of plastic containers, toxic personal care products, and hormone-fed commercial meats. We will discuss these in the next chapter.

I have worked with many male clients whose estrogen levels have been off the charts. Most carry fat in the places where women typically hold onto it like the chest, hips, and thighs. Getting the bowels moving is essential to restoring balance within the digestive and hormonal systems.

To find out whether or not you're constipated, I suggest testing your transit time. It's easy. All you have to do is eat some cooked beets and see how long it takes you to have a crimson red bowel movement. If it takes more than 24 hours, you're constipated and should see a qualified practitioner to assist you in finding the root cause.

UNDERGROUND TIPS FOR HEALTHY DIGESTION

Chew your food! Your teeth are actually part of your digestive system. Chewing your food thoroughly before swallowing will significantly reduce its surface area and allow your stomach to break it down more easily. Chew until your food is liquid.

Avoid/minimize drinking water with meals. Your stomach produces hydrochloric acid (HCl) to assist with protein digestion. Drinking water with meals tends to dilute it, which can keep HCl from doing its job optimally. Sipping on water during a meal is okay. Just try not to chug it. Avoid water for 30 minutes before meals and 45 minutes after. If you chew your food thoroughly, you'll find that there is much less of a need to "wash it down".

Calm down. When stressed, your sympathetic nervous system turns on. This diverts blood away from your digestive system, slows digestion, and can cause constipation. When eating, do so in a relaxed environment. Turn off the news. Close the newspaper. Stop running around the house with your meal! Just sit down, chill out, and enjoy your meal.

Don't hold your poop! Your body is a fast learner. If you teach it to suppress the urge to go number two, it will quickly develop the habit and plug you right up. When you have to go, GO!

Get yourself a Poop Box. It slides right out! I won't even try to explain this one. Watch [this video](#)!

MOVE, BOWELS! MOVE!

Whenever I talk about constipation, colon irrigation—also known as colonics—always seems to come up. Colonics involve a practitioner sticking a tube up your butt and irrigating your intestines with saline water. If you're curious, check out this [YouTube](#) video. I'll do anything for my viewers!

I know many people who feel much better after receiving a colonic, so I can't discount their utility and effectiveness. At the same time, I advise that you not use them as a crutch. You are not constipated because you have a colonic deficiency! Again, pooping should be free. Colonics aren't cheap.

Other strategies for getting the bowels moving are vitamin C flushes, psyllium husk powder, and dietary modifications.

A vitamin C flush is a great way to shake loose that random bout of constipation that all of us experience from time to time. All you have to do is take 1,500 mg of vitamin C (in ascorbate form) every 15 minutes until you get watery diarrhea.

Psyllium husk powder is a fiber supplement that you can find at any health food store. A teaspoon or two in water first thing in the morning and before bed can be helpful. Yet at the same time, it can be irritating to the gut lining. Short-term usage—five to seven days—is okay.

Dietary modifications go a long way with constipation. Just by following the recommendations in this book, you will find yourself on the throne more often than ever. Pay special attention to consuming leafy green vegetables, which contain magnesium. Magnesium plays an important role in the intestinal contractions that keep your poop moving.

If the above recommendations do not help, you definitely want to go deeper and search for the root cause. In my office, I find parasitic infections to be the most frequent source of constipation as well as diarrhea. I know it sounds gross, but parasites are very common and very real.

GOT BUGS?

I saved the best for last!

The diseases most neglected by Western medicine are parasitic infections. Most doctors scoff at the notion that parasites are at the root of many health challenges, including those that are not digestive in nature. They typically have no idea how to properly test for or treat them.

This silent epidemic is by no means exclusive to Third World countries. In fact, a nationwide

survey conducted by the CDC back in 1976 revealed that one in every six people selected at random had one or more parasites. By the year 2025, it is projected that more than half of the world's population will be infected with one parasite or another. According to Ann Louise Gittleman, author of *Guess What Came to Dinner?*, Americans are host to more than 130 parasites. Parasite expert Louis Parrish, M.D. finds that at least 80% of his patients are infected. My experience has been the same.

Parasites lie at the root of most of my clients' health challenges. I cannot begin to tell you how many times I have consulted with prospective clients who have not been the same since getting sick in Thailand twenty years ago or their recent Spring Break trip to Cancun. They were literally harboring bugs inside of them.

Most bugs are contracted through food, water, animals, sexual practices, and day-care centers. These opportunistic organisms contribute to intestinal inflammation, dysbiosis, fungal overgrowth, leaky gut, and every other issue we have covered in this chapter. They are also a major source of stress and hormonal imbalance.

I always like to say that if someone poops in the pool, you just don't pour chlorine in the pool. You have to drop your net in there and pull the poop out first! Restoring proper gut function and hormone balance is the same way, as they are next to impossible without identifying and removing the infection through appropriate testing and therapeutic protocols. Infections raise cortisol. If the adrenal glands and intestinal barrier are being whipped by parasite-induced stress, they won't get much better until the infection is removed. It is then—and only then—that healing can begin.

COMMON SYMPTOMS OF PARASITIC INFECTIONS

- Abdominal pain
- Gas
- Abdominal cramping
- Irritable bowel syndrome
- Itching
- Weight gain
- Bloating
- Joint & muscle aches
- Chronic fatigue
- Bloody stools
- Unexplained weight loss
- Unexplained fever

GET TESTED!

If you suspect parasitic infection, you should certainly contact a Functional Medicine practitioner or naturopathic doctor to acquire a stool test. Be sure that the test asks for four or five separate stool samples. Medical doctors typically use tests that only involve a single stool

collection. Multiple samples are a must.

The test I use is the Stool Pathogens plus H. Pylori kit (test kit #401H) from BioHealth Diagnostics. Other comprehensive tests are offered by Metametrix and Doctor's Data. I know! I know! Getting up close and personal with your own poop doesn't sound like much fun. But finally uncovering the root of your health and fat loss challenges is well worth the trouble.

Just DO it!

WRAPPING UP

Believe me, I can keep going on and on about digestive health. My next book should be *The Dark Side of Digestion*. There are so many ways the gut can get off track. More people need to know about them. In my opinion, our nationwide health and obesity crises have much to do with the intestinal barrier and the microscopic organisms living within us.

I gave you what I consider to be the basics. But I left a few things out on purpose. For instance, did you know that everything—and I mean *everything*—that passes through your intestinal barrier has to report to the liver for filtering and processing?

So what happens when your gut is ravaged by the endotoxins produced by parasites, bacteria, and fungi? What happens when your liver and organs of detoxification get bombarded with not only gut toxins, but environmental nastiness like heavy metals, pesticides, personal care products, and chlorinated water?

You'll see.

RECOMMENDED READING

Digestive Wellness by Liz Lipski M.S., C.C.N.

Why Do I Still Have Thyroid Symptoms? by Datis Kharrazian, DC

Gut and Psychology Syndrome by Dr. Natasha McBride

Guess What Came to Dinner? by Ann Louse Gittleman

RECOMMENDED PODCASTS

It All Starts in the Gut! with Reed Davis

Pooping 2.0: The Root Cause of Digestive Dysfunction with Reed Davis

The GAPS Diet with Dr. Natasha Campbell-McBride

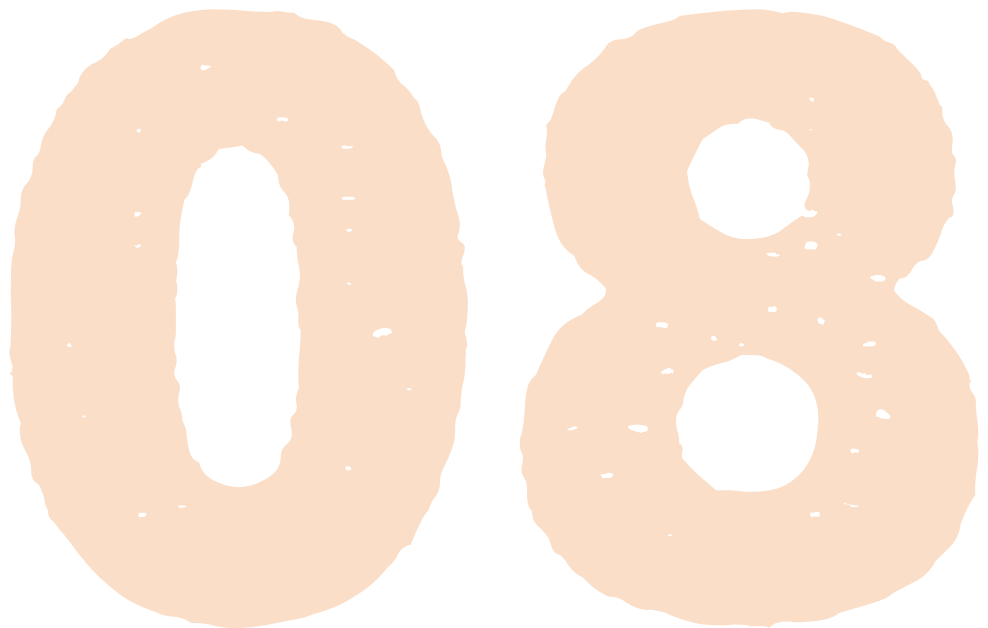
Digestive Wellness with Dr. Elizabeth Lipski

Detecting Gluten Sensitivity with Dr. Thomas O'Bryan

Fat is Not Your Fault with Dr. Bryan Walsh

Why Do I Still Have Thyroid Symptoms? with Dr. Datis Kharrazian

SIBO: Undiagnosed and Undertreated with Dr. Allison Siebecker



09

REDUCE YOUR TOXIC LOAD *Identify, Remove, & Replace*

“Over the past one hundred years, our species has been engaged in a vast and complicated chemistry experiment. Each and every one of us, along with our children, our parents, and our grandparents, has been a guinea pig in this experiment, which uses our bodies, our health, our wealth, and our goodwill to test the proposition that modern science can improve upon the foods and medicines of nature.”

- Randall Fitzgerald in The Hundred-Year Lie

DROPPIN' TRUTH BOMBS!



Common environmental chemicals disrupt the hormonal system and have been shown to contribute to obesity, diabetes, and other metabolic diseases.



The incidence of obesity has risen in parallel with our toxic chemical exposure.



A dysfunctional liver can increase estrogen, slow the metabolism, and hinder fat loss.



Eating organic foods for just five days can reduce bodily pesticides to undetectable levels.



Removing toxic products from your immediate environment and replacing them with more natural alternatives will assist with fat loss and the restoration of overall health.

Chemicals are making you fat.

The notion of “better living through chemistry” is blowing up in our faces while expanding our waistlines. Just as obesity has paralleled significant changes in what we eat, it has also had an equally synchronous relationship with our ever-growing exposure to toxic industrial chemicals. Many of these chemicals are classified as **endocrine disruptors**, meaning that they interfere with the normal function of the hormonal system. Considering that fat loss is *all about the hormones*, the chemicals we expose ourselves to on a daily basis should be held under the same scrutiny as what we put into our mouths.

I will admit that the first time I heard about this chemical-induced obesity model, I rolled my eyes and sent it straight to my cerebral quack file. However, science is proving through animal studies that exposure to common substances—including personal care items, household cleaners, and various compounds used in food processing—promotes the development of fat cells by way of disrupting the hormonal system. What is most disturbing about this research is that it is also showing that the effects of these chemicals—also called **obesogens**—may be passed on to developing fetuses from their pregnant mothers. This may put the unborn child at risk for a lifelong predisposition to diabetes, heart disease, and, of course, obesity. Not only do our food choices have a knockoff effect on our offspring, but our toxic exposures do as well.

According to Stephen Perrinne, author of *The New American Diet*, the effects of obesogens include:

- Fooling the body into over-responding to hormones
- Causing hormones to respond at inappropriate times
- Blocking the effects of hormones
- Stimulating/inhibiting the endocrine system, increasing or reducing the production of steroid hormones

Our environment is rife with toxins. Since living in a bubble is not a viable option for any of us, we must learn how to contend with and minimize our exposures to over ten thousand different compounds—solvents, emulsifiers, preservatives, and more—used in food processing; the chlorine, fluoride, and pharmaceutical drug residues in our water; estrogen-mimicking ingredients in our shampoos and soaps; mercury in our mouths; and dirty chemicals in our household cleaners.

In this chapter, I will show you how your detoxification system—mainly your liver—was *never* intended to bear such a chemical onslaught. As a result, your detoxification pathways have become congested, leaving you with a toxic body, foggy brain, slowed metabolism, and in hormonal disarray. You will learn how obesogens increase fat-storing estrogen, block fat-burning testosterone, and make you even *more* insulin resistant, thus thwarting your fat loss goals.

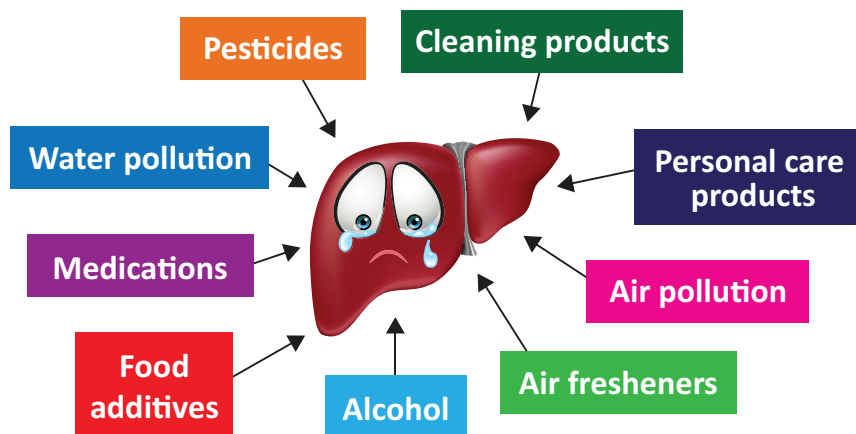
I will also help you reduce your toxic body burden by identifying, removing, and replacing those products that have been not only stalling your fat loss, but subtly poisoning you and your family at the same time.

LIVE(R) AND LET LIVE!

The word detoxification typically brings to mind exotic cleanses, foot baths, and zany protocols that leave you on the toilet for an entire weekend. But your body actually came with its own built-in detoxifier—your liver.

The liver is your body's largest organ, weighing approximately four pounds. Along with the skin, kidneys, lymph, and colon, its job description is aiding in the removal of harmful chemicals and toxins generated from normal bodily functions like respiration, metabolism, digestion, and physical activity.

Over the last century, the liver has taken on a long list of extra duties with no additional pay. Its workload has increased dramatically, as it is now responsible for neutralizing and eliminating medications, pesticides, herbicides, alcohol, air pollution, and any of the other 40,000 chemicals that have been brought into our lives since the 1940s. And as you learned in the previous chapter, when the gut is leaky, toxins from bacteria, fungi, and parasites can enter the bloodstream. All must head to the liver for filtration and elimination.



Ready for one last analogy?

If you have ever tried vacuuming your carpet when the container that holds the dust and dirt is full, you probably noticed that the vacuum didn't work so well. It may have even started spitting dirt back out onto the carpet. If you're as smart as you look, you probably solved this little problem by detaching

the container and emptying its content. Then, when you restarted the vacuum, it worked like new again. What does this have to do with your liver? Well, since your liver is likely being perpetually bombarded by all of our noxious modernities, it gets backed up with toxins and waste products that have no business ever entering your body. Unable to handle the burden, it can no longer meet its responsibilities. One of its most important roles is helping you burn fat!

THE LIVER-THYROID CONNECTION

Anything that cannot be eliminated from the body will eventually build up and cause trouble. You've already learned what constipation can do in regards to creating an excess of fat-storing estrogen in the body. Let's see how a poorly functioning liver can slow your metabolism through a similar process.

Liver detoxification takes place in two phases:

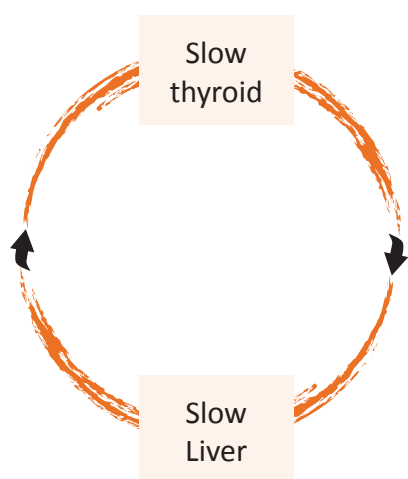
Phase I liver detoxification takes fat-soluble substances—which include hormones and many environmental chemicals—and prepares them for easier elimination by making them water-soluble. From there, **Phase II liver detoxification** is responsible for taking the water-soluble end products and excreting them through the sweat, urine, or feces. The proper function of this second phase is critical for establishing hormonal balance. If it is dysfunctional and cannot eject spent hormones from the body, the hormones are held captive and go right back into the bloodstream. This can have wide-ranging effects on thyroid function, metabolism, fat loss, cancer risk, and of course, overall health.

Understanding how hormone reabsorption impacts the thyroid is critical to busting through a fat loss plateau. According to Dr. Kharrazian in his book *Why Do I Still Have Thyroid Symptoms?*, elevated estrogen due to faulty phase two detoxification affects the thyroid by inhibiting the conversion of the inactive T4 hormone to the active T3. This will slow the thyroid considerably, stalling the metabolism and curbing fat loss by shutting down the receptors on your cells that respond to hormone-sensitive lipase (HSL), the enzyme responsible for burning fat. And to make matters worse, a sluggish thyroid slows down the liver. Now, we have a vicious cycle of slow liver causing slow thyroid causing slow liver. Round and round we go. Yikes!

↓ ↓

T4 CAN'T CONVERT TO T3 {BLOCKED BY ELEVATED ESTROGEN} = HSL & FAT BURNING

(inactive) (active)



And just so you know, the liver is where sixty-percent of thyroid hormone conversion takes place. If you're not taking care of it, it certainly won't take care of you. Keeping your liver in working order is a matter of curtailing the burden placed upon it in the first place. Yes, a detox program customized to fit you—which would be impossible for me to provide you with since I don't know you very well—would help out considerably as well.

But, what's the use of detoxing your body when you're just going to muck it all up again by exposing yourself to the same old toxic crap? That's like washing your four-wheel drive SUV and taking it right back out in the mud!

So allow me to walk you through a short list of chemical grossness that may be the missing link in your fat loss endeavors. Of course, I do not expect you to go out and replace all of these items today. Instead, my goal is to make you more aware of the toxic items that you may be exposing yourself to every day. You have options! You should know what they are.



BPA: BANNED IN CANADA. PERFECTLY HEALTHY IN THE USA!

You may recall a few years back when just about everyone was carrying around their water in those hard clear plastic bottles. Their popularity was due to their supposed safety. Turns out they weren't as safe as we thought.

Bisphenol A (BPA), used to make polycarbonate plastic, has gotten its share of headlines in the past few years. In 2010, Canada declared it a toxic substance. The European Union has banned its use in baby bottles. However, the United States government has failed to follow suit, which may be the reason why BPA is detectable in the blood of 93 percent of Americans.

It has been known since the 1930s that BPA is estrogenic, leaking estrogen-like hormones into our bodies. What is less well-known is its effects on leptin. According to researchers at Harvard University, BPA, which is also found in the lining of canned goods, can cause abnormal surges in leptin. These surges can contribute to weight gain by **contributing to leptin resistance**.

More recently, studies show that BPA can disrupt pancreatic functioning and cause insulin resistance. Furthermore, it has been found that regular exposure to BPA suppresses the release of **adiponectin**, a hormone responsible for increasing insulin sensitivity and reducing inflammation. **Inhibiting adiponectin sets you up for MORE insulin resistance.** And you know where that will get you!

Sources of BPA include:

- Plastics marked with the number 7. These include hard plastic containers, baby bottles, and stain-resistant food containers.
- Cash register receipts: Tell the cashier to trash it when you can.

- Plastic liners in canned goods: Some companies are using an alternative, but there is no certainty as to its safety. You never know!

When possible, use glass or stainless steel containers to store your food and beverages.

PESTICIDES: RUINING OUR SOILS & MAKING US FAT

If you haven't made the switch to organic, consider this. According to Perrine, the average American is exposed to 10 to 13 different pesticides through food, beverages, and drinking water everyday, and nine of the ten most common pesticides have been linked over and over again to weight gain.

Since most obesogens are fat-soluble, organochlorines are stored in your fat cells. The less you have in you, the easier you will burn fat. According to Canadian researchers, the dieters with the most organochlorines—obesogens found in pesticides—in their fat tissue experienced a greater-than-normal dip in metabolism as they lost weight, perhaps because the toxins interfere with the energy-burning process.

Recent studies have shown that by eating an organic diet for just 5 days, circulating pesticides are reduced to near-undetectable—if not completely undetectable—levels.

Only buy organic produce. As mentioned in Chapter 4, if organic is not in your budget, check out the most recent *Dirty Dozen* and *Clean Fifteen* lists produced yearly by the Environmental Working Group. According to the EWG, choosing the 12 organic items listed on *The Dirty Dozen* will reduce your pesticide exposure by eighty-percent.

I also recommend washing your produce thoroughly, whether it is organic or not. You can make your own produce wash by combining 1 tablespoon of lemon juice, 2 tablespoons of distilled white vinegar, and 1 cup of cold water in a spray bottle. Apply the spray on your fruits and veggies. Then rinse with water. Works like a charm!

SOY MAKES YOU FAT

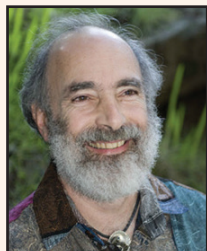
We covered soy in Chapter 4, but it is worth mentioning again. According to *UW Radio* guest Leah Zerbe, in her article **Does This Chemical Make You Look Fat? 'Obesogens' Lurk All Around Us**, soy is “a phytoestrogen meaning it has plant-based estrogen properties. Doses comparable to those eaten in the Western diet have been shown to promote fat-cell growth.” It has also been linked by multiple studies to decreased testosterone production. Increased estrogen and low testosterone are not quite what you want when losing fat.

Avoid soy at all costs, with the exception of fermented items like miso, natto, tempeh, and tamari. If cow's milk isn't your thing, try coconut milk, but avoid the kind that comes in BPA-lined cans.

DARK SIDER PROFILE

David Getoff

David is a Traditional Naturopath and Board-Certified Clinical Nutritionist.



He is also Vice-President of the Price-Pottenger Nutrition Foundation. A professional speaker, David has given numerous presentations, lectures, seminars and workshops for various organizations on many health-related topics. David works with patients from his home in El Cajon, CA.

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UW Radio Appearances

[Fact or Fiction? Debunking Health Myths](#)

[Protect Yourself from Swine Flu](#)

[What's in Your Water?](#)

[Healing ADHD and Behavior Problems](#)

[Ask David Getoff!](#)

CHLORINE

Chlorine is added to our water supply and is also found in household cleaning products such as bleach and disinfectant. It rids our water of bacteria, fungus, and other critters. That way, we don't have frequent outbreaks of waterborne illnesses. So, chlorine is actually a good thing—although using ozone would be a much safer method. You just want to be sure to take it out of the water before you drink it. Why? Because chlorine is a proven cancer-causing poison as well as a potent estrogen mimicker. Remember, estrogen fuels tumor growth. This may be why the U.S. Council of Environmental Quality reports that cancer risk for people who drink chlorinated water is 93% higher than those who don't.

But it's not just about the water you drink. The water you bathe and shower in is a much bigger problem. Research shows that the dangers of vaporized chlorine are 100 times greater through inhalation and bathing when compared to drinking it. In fact, a single 15-minute shower is the equivalent of drinking 8 glasses of chlorinated water. This is due to toxic gases, like chloroform and

trichloroethylene, released from the hot water. Even your shower is making you fat! What a shame.

WHAT TO DO

- Buy yourself a shower filter from your local health food store.
- Purchase a trusty water filtration system like the one made by **Doulton**.
- Be sure to use non-toxic chlorine-free cleaning products.

FLUORIDE

I can go on and on about this one, but I won't. I highly recommend you check out this **UW Radio podcast** with Dr. Paul Connett, author of *The Fluoride Deception*. Classic show!

Like chlorine, fluoride is added to the water supply in most areas of the United States. Proponents herald it as the remedy for tooth decay, yet these claims are absolutely ridiculous and scientifically unfounded. Though highly debatable, its use as a topical agent to reduce tooth decay *may* be valid. However, consuming fluoride is analogous to adding a squirt of sunscreen to your water and expecting to not get a sunburn.

Disturbingly, fluoride is a proven poison that has only been approved by the FDA as a pesticide and rodenticide. After reviewing the research, numerous countries have come to their senses and removed it from their drinking water. The United States government, on the other hand, seems to always be a few steps behind when it comes to protecting the public from toxins. Campaigns to fluoridate more counties continue to press on, despite the fact that the union of our very own Environmental Protection Agency has called for an end to fluoridation.

Fluoride literally eats away at glass and has been known to cause headaches, muscle weakness, stomach upsets, loss of bone mass, and reduction in IQ. In terms of fat loss, research shows that fluoride consumption slows the thyroid and thus the metabolism.

Be sure to check out that podcast!

WHAT TO DO

- Purchase a trusty water filtration system like the one made by Doulton, which removes fluoride as well as chlorine and other toxins.
- Use fluoride-free toothpaste. I recommend Xyli-White by NOW Foods.

PERSONAL CARE PRODUCTS

In his so-informative-it-will-kinda-scare-you book *The Hundred Year Lie*, author Randall Fitzgerald writes, “According to the Environmental Working Group (www.ewg.org), we use nine personal care products daily containing around 126 chemical ingredients. One-third of these ingredients have been identified as causing cancer or other serious health problems.”

Getting ready for work can be a toxic nightmare. We rub our pits with aluminum containing antiperspirants that are easily absorbed through the skin, possibly causing neurodegeneration. We wash our hair with products containing **propylene glycol**—a.k.a. antifreeze—and **parabens**, both of which are well-known hormone mimickers. And don’t even get me started on makeup!

A couple of years ago, I stumbled onto a website called *Skin Deep* put together by the EWG. This website (www.cosmeticsdatabase.com) ranks the safety and toxicity of thousands of personal care products on a scale of 1-10, with a 10 being highly toxic. I found out that products I had been using since I was a teenager were all nines and tens. Whoops! Since then, I have switched to safer, organic products that rank a four or below. I’m sure my liver is thanking me.

I encourage you to do the same.

Keep in mind that not all organic products are safe. Some rank just as high as their commercial counterparts. Check the database first before buying. My favorite brands are Aubrey Organics, J/A/S/O/N, and Alba Botanicals.

WHAT TO DO

- Gather all of your personal care products (makeup, too) and spend a lonely Friday night entering each one into the Skin Deep database. Become more aware of what you are applying to your skin—thus absorbing into your body—every single day. Replace all products that rank a 5 and above.
- Start experimenting with coconut oil as a skin moisturizer and mouthwash. Coconut oil rocks!

WHAT'S UNDER YOUR SINK?

The EPA rates indoor air quality among the top five threats to human health. I find it ironic that we clean our homes with toxic chemicals. While we wipe away so-called bad bacteria, we are inhaling gases and absorbing harmful chemicals through our skin. A wise man told me that if I thought the product would kill me if I drank it, don't use it. Words of wisdom.

Although you won't catch me drinking any of them, I only use non-toxic, eco-friendly cleaning products like Seventh Generation. I'll be honest, they don't work as well as the chemical products, but I don't mind giving it a little extra elbow grease. It's for my health, right?

WHAT TO DO

- Look for non-toxic, chlorine-free household cleaning products. If you continue to use the standard cleaners, store them in airtight containers since they tend to outgas.
- Make your own cleaning products. It's easy! Click [HERE](#) for a handful of natural cleaning recipes.

STICK IT TO NON-STICK COOKWARE!

Just about all of us have PFOA in our bloodstreams. Commonly known as Teflon—found in cookware, greaseproof food wrappers, waterproofers, and popcorn bags—, this chemical has been linked to obesity, cancers, and lung and kidney damage.

The most common source, of course, is non-stick cookware. In fact, if you were to boil water in a Teflon-coated saucepan, you would be able to taste the chemical in the water. So, it is surely leaching into your food.



An interesting fact I like to point out when discussing Teflon-coated, non-stick cookware is the fact that Teflon kills birds. Pet shops send bird buyers home with a sheet of paper advising that they keep their birds away from the kitchen while cooking with non-stick cookware. That's not good!

I love my stainless steel cookware. I use ample butter or coconut oil to keep my food from sticking. To order a set for a ridiculously awesome price, contact Guy the Cookware Guy at 760-505-7057 or visit www.stainlesscookware4u.com. Tell him I sent you. He'll hook you up!

WHAT TO DO

- Use stainless steel or cast iron cookware. If you choose the latter, be sure to have your ferritin (iron) levels checked annually.
- Discard any non-stick cookware that appears scratched or chipped.
- Call Guy! Click [HERE](#) to see his non-toxic cookware in action!

WHAT'S IN YOUR MOUTH?

Contrary to what you may have been told, fish are *not* the primary source of mercury. Nope, that would be the mercury amalgam fillings you have in your mouth. Your dentist may call them silver fillings. But they're actually 52% mercury, so I'm going to call them mercury!

Mercury is a well-known endocrine disruptor that can be stored in tissues throughout your body. If you ever want to see for yourself how easily mercury vapor is released by fillings, check out a YouTube video called [The Smoking Tooth](#). Send it to your dentist!

If you ever decide to have your "silver" fillings removed, be sure to contact a biological dentist who has been trained to properly remove them. When I had a few of mine removed, there was a vacuum in front of my face ensuring that I did not inhale or absorb any toxic vapors. Traditional dentists do not take this precaution, putting themselves and YOU at risk.

I have had many experiences with clients whose health challenges began with the improper removal of their mercury fillings. What a shame. With just a little information, along with some open-mindedness on the part of their dentists, these people would have been spared so much time, energy, and money in recovering their health.

WHAT TO DO

- Visit www.iaomt.org to find a biological dentist who will help you properly and strategically remove your amalgams.
- Listen to my podcasts with David Kennedy, D.D.S. and Rami Nagel before making your next dental appointment. Both are on the *Recommended Podcasts* list.

As I stated earlier, the above are but a short list of the chemicals you may be exposing yourself to daily. Additional obesogenic chemicals include:

- Vinyl: used in some shower curtains, purses, and floorings
- PCBs: contaminated meats, fish, and dairy products
- Nicotine: mothers who smoke while pregnant predispose their babies to obesity
- Flame retardants: used on beds, cribs, couches, and other furniture; found in contaminated animal foods

Let's just keep it real; you will never be able to completely eliminate obesogens from your life. By making educated decisions as to what items you spend your hard-earned dollars on, you can reduce your toxic load substantially and give your liver—and detoxification system in general—a well-deserved break. Once the function of the liver is restored, your body will flip the switch on the fat-burning hormones and enzymes needed to maximize your fat loss.

By now, I imagine you're either fascinated by the information in this book, or you're totally overwhelmed. If you're feeling like the latter, you're probably asking yourself how you're going to replace the foods you eat *and* the products you use; how you're going to get to bed on time with such a hectic schedule; and how you're going to make it to yoga 3 times a week?

Don't worry about any of that stuff right now. Just set it aside and hang with me for one more chapter. Although we've managed to blow your Box to pieces, you're still missing the most important piece of this permanent fat loss puzzle.

Last stop, coming up.

RECOMMENDED READING

The Hundred Year Lie by Randall Fitzgerald

Our Toxic World by Dorris Rapp

The New American Diet by Steve Perrinne

Detoxify or Die by Dr. Sherry Rogers

Cure Tooth Decay by Rami Nagel

RECOMMENDED PODCASTS

What's in Your Water? with David Getoff

The Truth about Fluoride, Mercury, and Root Canals with David Kennedy

Cure Tooth Decay with Rami Nagel

The Organic Manifesto with Maria Rodale and Leah Zerbe

THE SCIENCE

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10

DO IT!

The Final Destination

“Your life is demonstrating what your real values are. Any time you set a goal that doesn’t match those values, you’re automatically going to live with a moral dilemma. You’re going to beat yourself up. You’re going to wonder why it’s not happening. You’re going to be asking why you can’t stay focused. You’re going to be looking for outside authorities to motivate you. The key is to be congruent with your highest values, so you are setting goals that are congruent, so you confirm and achieve what you say. And you develop the habit of knowing and building confidence that every time you say something, you do it. The key is knowing what your values are.”

— John F. Demartini

I first sat down to write a book almost seven years ago. It was a health and fitness survival guide for college students. It was a nightmare. I would start. I would stop. Start. Stop. Eventually, I threw in the towel and filed it away with the rest of my writings that never saw the light of day.

It happened again. In 2009, I returned to the writer's chair with redemption in mind. Pulling a long string of all-nighters, I got about fifty pages deep in a new book with a new topic. Feeling like I was about halfway done, I enthusiastically sent my first chapter to a friend for review. Instead of the encouragement I expected, all I got was criticism. Motivation gone. Strike two.

My dream of becoming an author goes back to my childhood. I may have been the only kid who spent hours in the local Walden Books store for the fun of it. The shelves upon shelves of stories, novels, and biographies were more than just books; they represented the time, effort, and persistence of each author who painstakingly converted thoughts and ideas into a physical manifestation. All I wanted was to be one of them, to do what they did. Yet, no matter how hard I tried or how much I *thought* I wanted it, self-sabotage would creep in and shut my dreams down.

For seven years, I carried around the frustration of never finishing what I had started. I would wonder just how many books I could have completed by now. Who would have published me? How different would my life have been? How would it feel to have accomplished what I had set out to do?

At the same time, I was working with personal training and diet coaching clients who were dealing with similar challenges. Although they wanted nothing more than to feel better and look amazing, they too started and stopped. Started and stopped. Their struggles were a reflection of my own. Still, I completely lacked all empathy and understanding. I figured if they wanted it bad enough, they would simply DO it. Unfortunately, it doesn't work that way. It certainly was not working for me.

I convinced myself that my clients lacked self-discipline. They didn't have what it took to achieve what they had set out to do. I was wasting my time with them. They were wasting their money with me. From time to time, I even pondered finding a new occupation. I was tired of banging my head against the wall. I just wanted to help people. Yet, they did not seem to want to help themselves.

I'm sure you can relate. Everyone has that one thing—maybe more—that they yearn to accomplish. Maybe you dream of owning your own home, having a job that you are passionate about, or traveling around the world. As life-altering and fulfilling as your big vision may seem, it remains equally elusive. You start. You stop.

Just as this is not my first crack at writing and completing a book, I assume this isn't your first attempt to lose fat and get healthy. You've likely tried and failed over and over again, using

every gadget and gimmick you could fit inside of your Box. In the end, you found yourself among the ever-growing rank and file of dieters—ninety-five percent, in fact—who lose weight and gain it all back—and then some.

What's going to be so different this time around? Believe me, there is no magic in reading this book. The preceding chapters gave you the tools and know-how. Now, it is up to you to put them to use. Easier said than done. I had read plenty of books on how to write one of my own, but they never got me any closer to finishing. To break the cycle of self-sabotage, I had

to master the most overlooked component of accomplishment—the mindset. Or as my mentor and author of *The Impact Body Plan*, Todd Durkin, would say, *I had to get my mind right*.

So do you.

Getting your mind right requires that you have the following:

- A BIG enough WHY
- Value-driven Goals
- Mentoring & Support
- Teamwork
- Accountability
- Flexibility

If you have ever purchased a product—furniture, maybe—that you had to put together yourself and found that the little baggie with the screws, nails, and bolts was missing from the box, you know exactly what lacking the fat loss mindset is like. You have all of the big pieces, but no way to assemble them.

Let's put this thing together.

WHAT'S YOUR WHY?

So, why *are* you doing this?

The above question has spawned countless

DARK SIDER PROFILE

Todd Durkin

Author of *The IMPACT! Body Plan*



Todd is a performance coach, personal trainer, and motivational speaker who educates and inspires people worldwide. Founder of Fitness Quest 10 in San Diego, CA, named one of the Top 10 Gyms in the US by Men's Health, Durkin is the head of the Under Armour Performance Training Council and has twice been honored as Personal Trainer of the Year (IDEA and ACE).

He has appeared on 60 Minutes, ESPN, and the NFL Network, and has been featured in Sports Illustrated, USA Today, Men's Health, ESPN the Magazine, and others.

Websites

www.todddurkin.com

www.fitnessquest10.com

UW Radio Show Appearances

[Train Like the Pros!](#)

[The IMPACT! Body Plan](#)

[The 8 Forms of Wealth](#)

[The Difference Between Success and Failure](#)

answers, many of which border on absurdity and superficiality. Common responses include looking good for an upcoming high school reunion, winning a weight loss challenge, and getting six-pack abs. If your intentions are similarly hollow, you may want to reconsider your motives. Your results are sure to be short-lived.

When you have a big enough reason to do something, you will DO it. If your WHY is tiny, you're done for. Your bullet train to the Dark Side will never arrive at its final destination if you lack the requisite initiative to put *The Code of The Underground* into action.

Dark Siders are DOers.

As I've repeated throughout this book: you don't lose weight to get healthy, you get healthy to lose weight. If there's one thing I know for sure it is that **health is not convenient**. What's your reason to stay in the game when you're too tired to cook; when it's too early to work out; when you have to buy foods you've never bought before at a store you've never shopped before; when you're out of town and have less control over what to eat and when to sleep; when you're bombarded with holiday goodies; or when that little voice in your head tells you that you can't DO it?

When life happens.

What about the constant peer pressure? Your friends and family will make it their own personal missions to sabotage you and your new lifestyle. They will go to great lengths to get you to stray from your path. Be ready. They know not what they do. Their attempts of sabotage are unconscious acts to preserve their own egos. When those you are closest to see you overcoming resistance and moving toward your ultimate goal, they wonder why they cannot overcome their own.

You need a BIG reason that you can call upon to keep you moving forward when temptation, inconvenience, sabotage, and negative self-talk present themselves. If you don't have one or can't create one, you will find yourself flat on your face and fatter than ever with the rest of the gang. You *will* become part of that ninety-five percent.

If "starting on Monday" has been a recurrent theme of your fat loss journey, you must consider your WHY. Chances are it's small, superficial, and downright trivial in the grand scheme of things. Your WHY needs to be bigger than you. It should move you mentally, spiritually, and physically. It may even move you to tears.

"When those you are closest to see you overcoming resistance and moving toward your ultimate goal, they wonder why they cannot overcome their own."

To be frank, no one really cares what your excuses are. If you've got 5 kids, a 50-hour per week job, and a tight food budget, you will make this work if you have a big enough reason to. Do you somehow think that the small percentage of people who achieve permanent fat loss *don't* have families, jobs, relationships, social lives, and that same discouraging voice in their heads telling them they should just quit? Tolstoy had 13 kids when he wrote *War and Peace*! The difference is in the WHY.

My own personal WHY is to meet my great-grandchildren and still be able to remember their names—maybe even race them around the block. The thought of being in the same room with four generations of Croxtons moves me. Not many of us will ever get to know what that feels like. And to feel that feeling requires that I take tremendous care of my body as well as my mind.

At the time of this writing my WHY was deeply enriched as I traveled east for a family reunion. During my trip, I visited my father's grave for the first time. I could not help but think about all of the great things he never got to see: his beautiful grandchildren, his boys become men, his youngest son writing his first book. If he had only taken better care of himself, cancer may not have taken him away so soon.

I don't want to miss a thing.

So, what's your WHY?

A VALUABLE LESSON

One last story.

I spoke with Diane (not her real name) via Skype. She was a 60-something-year-old grandmother living overseas. Diane had been trying to shed 30 pounds since the Reagan Administration. She had tried every diet under the sun but couldn't find one she could stick to. I found this odd. Thirty—maybe forty—diets and she couldn't stick with a single one? Something else was going on here.

I asked Diane what she valued in life. What was important to her? After a little coaching, she decided that her top five values were God, travel, family, community, and her career.

Bingo!!!

This "values" exercise works like a charm with people like Diane. With a big smirk on my face, I asked her if she noticed anything missing from her values. After about 20 seconds of silence, she exclaimed, "HEALTH!" Some might call this an *a-ha moment*.

Setting a goal that is out of alignment with your core values is an exercise in futility. For thirty years, Diane had been doing just that. In the grand scheme of things, health just wasn't that important to her. Furthermore, her WHY was microscopic. She could give it her all for a few days or weeks, but eventually the things that mattered most to her crept in and crushed her fat loss dreams. My program would have become yet another casualty in a long run of failures.

Values aren't hard to find. They are your life. As I write this, I am sitting in my living room surrounded by hundreds of books. Most of them are about health and wellness, but there are also shelves dedicated to politics, Black history, marketing, and personal development. I can see pictures of my family on top of my bookcase. There are empty Whole Foods bags on the kitchen counter, adjustable dumbbells and an Ab Wheel on the floor, and outlines for blogs and videos scattered about my desk.

Health. Education. Family. Career. Service. These—in no particular order—are *my* values. For me, living well and staying fit are fairly easy, as they are objectives that align with what I treasure most. But is it any wonder why I've become well-known among internet marketing circles for having a following to behold with little income to show for it? A prosperous man does not own 300 books on health and absolutely none concerning business and money management. He values finances. Therefore, he acquires it with greater ease and less resistance.

See how this works?

If you determine your values and find that health lies well outside of them, you can do one of two things:

1. You can stop beating yourself up and go find yourself a new goal.
2. You can shift your values by finding your WHY and determining the ways in which getting healthier will benefit what you value most.

For example, if you value family, church, travel, social life, and your career, in what ways can superior health and a leaner appearance enhance them? Would you initiate more outdoor activities with your friends and family? Would you start a walking club at church and help others improve their health? Would you have more stamina when sightseeing overseas? Would you feel more comfortable in a crowded bar? And we all know that people with better appearances make more money and get more promotions.

When I come across prospective clients with incongruent goals and values, I have them complete what I call my *100 Benefits* assignment. Before becoming my client they must write down 100 ways in which improving their health will benefit what they value most. When they can do this—as well as create their WHY—a fire gets lit under them like never before! It's amazing.

For me, my dreams of writing a book had been thwarted by a fear of financial success. At some point in my life, I learned that money was corrupting. I made up a story in my head that my readers, viewers, and listeners would abandon me if they ever saw me convert my internet success into a prosperous living. The truth is that some actually will turn their backs on me. But that's their issue to deal with. Like I said, those who have been unable to overcome their own resistance will do all they can to sabotage you once they see you overcoming your own. It's part of the game.

I always knew that this book would serve thousands of people. However, through serving my readers I would eventually stumble into the corrupting forces of money. Quite an interesting predicament, to say the least. Finally moving beyond this long-standing obstacle was a matter of shifting my values. I had to reframe my self-defeating perception of financial success by doing the very same *100 Benefits* assignment I had been giving my clients for years. Here's some of what I came up with:

Increasing my income by way of creating an info-product (e-book) will bolster my values of health, education, family, career, and service by:

1. Giving me the ability to open an Underground Wellness facility that offers employment opportunities, one-on-one consulting, and courses on various health-related topics. These courses can be attended live or viewed via streaming video on the UW website.
2. Holding the annual Underground Wellness conference with the leaders of the Dark Side presenting the best of the best health information in front of thousands of Undergrounders and Real Foodists.
3. Creating a passive income that will allow me to spend more quality time with family and friends.
4. Serving thousands—if not millions—of people with life-saving information that has been hard to come by through mainstream outlets.
5. Finally following the advice of my YouTube commenters and buying high-quality video and audio equipment to present this information with more professionalism. *UW Radio* listeners have been demanding improved audio quality for years. Let's get it!

My list went well over a hundred. Since then, I've been a man on a mission. Finishing this project will take this Real Health movement to an entirely new level. In just a few pages, it will be complete.

Now, it's your turn. Ponder what it is that you value in life. Then, pull out a clean sheet of paper and start your *100 Benefits* assignment. It's a real game changer. Feel free to email it to me at sean@undergroundwellness.com. I love reading them!

MENTORING & SUPPORT

Several years ago, I became very intrigued with Neurolinguistic Programming (NLP). Regarded as the art and science of achievement, NLP introduced me to the concept of modeling. Modeling identifies the behavior patterns of successful people and replicates these patterns to achieve the same outcomes.

For example, if you dream of opening your own business, the odds of succeeding will rise exponentially by finding a mentor who has successfully opened his or her own. This mentor can provide you with the blueprint for reaching your objective. Through his or her experience, you will be able to navigate the mistakes and pitfalls commonly made by those who do it on their own. Your mentor will also be a source of inspiration by symbolizing proof that it can be done.

To lose fat and get healthy, find a mentor or coach who has been where you have been and has gotten where you wish to go. Sometimes, we don't receive the support we need from our friends and family. A mentorship will give you the much-needed encouragement and know-how you need to DO this. Look high and low for someone to guide you through your journey. If you cannot find one, post a comment on the Underground Wellness [Facebook](#) page and we'll be sure to set you up with someone.

TEAMWORK

Climbing a mountain by yourself is never a great idea.

When I made the decision to not only write but finish this book, one of the first things I did was contact Luke Shanahan, co-author of *Deep Nutrition* and *Food Rules*. Since he had written several books and taught courses on writing, I asked Luke to be my writing coach—my model. He and I spent many hours on the phone and Skype mapping out chapters and doing a little tweaking here and there. Without his invaluable mentorship, this project may have never gotten off the ground.

In addition to Luke's assistance, I contacted Dr. Marla Brucker. A hypnotherapist and peak performance coach, Marla and I worked on overcoming any limiting beliefs that stood in the way of this book's completion. I'll admit that a few of our sessions looked like scenes from *Good Will Hunting*, but they were well worth it. Without her, you would not be reading this.

Achieving any goal is matter of teamwork. One of the biggest mistakes you can make on this path to fat loss—or any other goal for that matter—is to go at it alone. This seldom pans out for anyone and typically ends in loneliness and frustration. I know the feeling. Never be afraid—nor too proud—to ask for help. Behind every accomplishment lies a corroborative effort. In this case, it took myself, Luke, Marla, Carrie Medeiros (graphic design), Allyson Drosten-Brooks (recipe coordinator), Brett Klika (workout manual), Stephanie and Andy Anderson (fitness video

filming and editing), David Sinick (marketing), Stephanie Matos (research), and over 50 recipe contributors from all over the world.

In the past, I had failed by doing everything myself. This time, I learned to trust others to get us where we wanted to go.

Who's on your team?

ACCOUNTABILITY

Make a declaration. Make it LOUD enough for everyone to hear!

What is it that you are setting out to DO? When do you want to have it done by? How are you going to do it? WHY are you going to do it? Who is going to be on your team?

Once you have your answers, tell everyone you know about what you are *going to* accomplish. When you make this kind of demonstrative declaration, consider yourself on the hook for the rest of your life. If you don't do what you said you were going to do, your friends and family will always remind you of it. Every time you see them, they will ask you about your declaration. Some will ask out of encouragement. Others will ask as a way to taunt you. Regardless of their intentions, they are keeping you accountable. The last thing you'll ever want to admit to is quitting on your dream.

Keeping your fat loss goals to yourself is taking the easy way out. It's downright chicken. If you're really serious about this, you'll increase the stakes. On May 19, 2011, I wrote a blog declaring that I would finish this book. I tweeted it to 10,000 people. I shared it with 5,000 Facebook friends. I blasted it out to my entire email list. From that moment on, I was on the hook. I asked my followers to send tweets now and then asking me how the book was coming along. One particular follower—@reverahealth—checked in on me almost every day! He held me accountable. That's what friends do.

Who's holding you accountable? What do you declare?

FLEXIBILITY

Sometimes, things don't go as planned. Your goal date will arrive and you may find that you've come up a little—or a lot—short of your objective. But that's no reason to get down on yourself. You simply assess the situation, make the proper adjustments, and set a new goal date. The knowledge and experience you gained on your first try will serve you tremendously as you press onward in your pursuit of perfect health and ideal body composition.

Functional Diagnostic Nutrition founder Reed Davis always tells his students that working with

people on matters of health is analogous to sailing a ship. You set the sail to catch the wind and move you in the desired direction. But sooner or later, the winds will change. In this situation, you have two choices: you can allow the wind to steer you off course or you can reset the sail.

Life is an unpredictable force. Its winds shift without notice and can blow us every which direction if we let them. Making the proper adjustments is critical to accomplishing *anything*. If you have an all-or-nothing mentality, you are setting yourself up for failure. As long as you are learning from your experiences and staying on course, you are well on your way to doing what you set out to do.

This book was supposed to be completed and launched on July 1, 2011. Two months after my goal date, I am still working on the final draft. But I never let it break my resolve. I just continued to keep chopping away with the expectation that my dream would soon come to fruition. At no point did I—or anyone on my team—doubt this would be completed and launched. We took the hits and kept moving forward. There really is no other option.

DON'T BE THE WEIRD ONE!

I saved the best advice for last. My listeners, viewers, readers, and clients love me because I keep it real. If I went out last night and had a few too many gluten-free (or not) beers, I'll own up to it. I've been caught in line at Whole Foods with chocolate raspberry cake in my basket on several occasions. So what! (Note: If you have wheat/gluten issues, I wouldn't do this. I recommend you purchase or make your own gluten-free treats.)

I'm a big believer in the 80:20 Rule. This whole healthy living thing can make you crazy if you let it. I've known people who literally stopped hanging out with their friends and became estranged from their families out of F.E.A.R. that certain social situations and family gatherings would push their ships off course.

Newsflash! Everyone goofs. No one is immune to breaking their diet! I sure as heck do. In fact, I get to speak with some of the most respected health gurus in the world and even they indulge in "bad foods" every so often. We stay up past our bedtimes now and then. We get stressed out. We even get confused about things from time to time. No, it's not hypocrisy. It's being human!

You're human.

Don't be the weird one who can't go to certain restaurants with your friends because the food isn't organic. That's what I call unusual behavior. Healthy living isn't worth it when you're really not *living*.

The 80:20 Rule means that you follow your diet—as well as the other principles in this book—80-percent of the time and the other 20-percent is all about letting loose. Live a little! Most people have it backwards. They live poorly 80% of the time and decide to eat a vegetable every blue moon.

Showing your family, friends, and co-workers that you can be healthy and still have a good time may encourage them to do the same. There's absolutely no need for rigidity or isolation. Just make sure you earn every cheat meal or late night, and stay mindful of your "20% days". You'll know when you're going overboard. That's when you have to reel yourself in and get back on track. Even I can get out of hand every so often.

As human beings, one of our most basic needs is to fit in. Changing your lifestyle for the better can be perceived as a threat to this need. But it doesn't have to be. Friends, family, work, and health can coexist. That is, unless *you* make it weird and awkward.

I'm the YouTube health guy. If I can do it, so can you!

GRADUATION

The time has come to set ourselves free. You, from the confines of your Box. Me, from my MacBook keyboard.

Although our journey together is coming to end, I encourage you to continue on this infinite path to living well. You never know where it will take you.

You are now part of a select group of well-informed men and women who question authority and think for themselves, all in the name of abundant health and vitality.

I proudly declare you an official Dark Sider.

And I am officially an author.

I DID it.

Now, it's your turn.

RECOMMENDED READING

The IMPACT Body Plan by Todd Durkin

The Simple Success Solution by Angie Flynn and Deb Cheslow

The War of Art by Steven Pressfield

Think and Grow Rich by Napoleon Hill

Law of Success by Napoleon Hill

The Breakthrough Experience by John F. Demartini

The Book of EST by Luke Rhinehart

Unlimited Power by Anthony Robbins

RECOMMENDED PODCASTS

The Eight Forms of Wealth with Todd Durkin

The Simple Success Solution with Angie Flynn and Deb Cheslow

