



PRIMAL POWER METHOD

UNLOCKING THE
ANCIENT SECRET
TO HEALTH

GARY COLLINS, MS





New American Nutrition (Primal Power Method Series)

The Primal Power Method (First Edition)

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Our Mission

New American Nutrition exists to help you, the individual consumer, make independent, accurately informed decisions about your fitness and wellness. We do this by offering the highest quality of fitness and wellness products available and by distributing information via books, articles and online sources to enable you to take charge of your health. We believe in a well-rounded, full-solution approach to maintaining a healthy weight – for now, and for life.

Results

Decades of experience working in public education, fitness and federal health programs have helped our team create a new wellness concept. This ground-breaking plan dispels diet misconceptions and makes weight loss straightforward and achievable.

Quality

Much time and care go into the selection of the products we offer. Thus, each is made from the highest standard of natural and organic ingredients. Plus, New American Nutrition carries as many American-made items as possible, and only offers products we actually use ourselves. Because the best results come from the best ingredients – and we love it when our clients get the best results.

Community

Because it's important to give back, a portion of every sale of *Factor X: The Last Health Program You Will Ever Need* is donated to the Phoenix Patriot Foundation, a charity for severely injured veterans.



About the Author



Gary Collins, MS was born in Southern California and raised in the High Desert at the basin of the Sierra Nevada mountain range. He has been involved in organized sports, nutrition and fitness for over 30 years. A self-declared sports junkie, he participated and excelled in various organized sports since the age of seven. He is extremely passionate about the pursuit of optimal health in mind, body, and soul. Collins has two goals: To make being healthy as simple and enjoyable as possible and to give people the truth.

Collins' background is very unique and brings a much-needed perspective to today's fields of both health and nutrition. He holds an AS degree in Exercise Science, BS in Criminal Justice and a MS in Forensic Science.

After an exciting career in military intelligence Collins then worked for the U.S. State Department, U.S. Department of Health and Human Services and U.S. Food and Drug Administration as a Special Agent. His career took him around the world and gave him a unique perspective on not only how the United States, but the world is affected by our food, drug and healthcare policies.

The highlights of his career took him from protecting some of the most powerful people in the world to investigations involving the biggest tainted pet food death case in the U.S. to the intricate dealings of one of the largest counterfeit prescription drug rings in the world. He has often said, "if Americans really knew what was going on in the area of healthcare and nutrition in this country, they would be appalled."

It can be safely said no one in the health and fitness industry has the inside knowledge and background that Collins has. He is a hybrid of a high intensity health expert and an investigator all rolled up into one. In addition to his published health-related articles and the Primal Power Method Series, *his total health program, Factor X: The Last Health Program You Will Ever Need, blows the lid off of conventional wellness expectations and is essential for every American seeking better health.*



In addition to being a college professor, Mr. Collins is a specialist and consultant for high-level organized sports programs and gyms. He is currently an exercise and nutrition consultant for the San Diego City College Men's Basketball team, one of the most successful Junior College sports programs in California.

In addition, Collins is a Master level personal trainer (only a few in the world hold such a designation) specialist in fitness nutrition, specialist in exercise therapy, specialist in strength and conditioning, youth fitness trainer specialist in senior fitness, CrossFit member, a member of the International Sports Science Association, International Mountain Bicycling Association, Nutritional Therapy Association, National Association for Nutrition Professionals, IDEA Health and Fitness Association, a member of the Weston A. Price and Price-Pottenger Nutrition Foundation.

Due to his unique background, Mr. Collins, conducts workshops worldwide and is a highly sought after guest speaker at wellness conferences, colleges, and fortune 500 companies.

For more information on speaking engagements please send your request to contact@newamericannutrition.com



From Our Clients

I read Gary's Factor X and was impressed. It cut away a lot of the inconsistent, sometimes incomprehensible material on nutrition and provided sound advice on multiple facets of nutrition, including supplementation. I'm not a neophyte to biology or nutrition. I have a degree in biology and worked in the exercise physiology lab in college. I have also tried in vain over the past few years to adjust my dietary habits to adjust for middle age and genetic problems with high cholesterol and a family history of diabetes. Over the past 7 years I ate mostly using the American Diabetes Association and American Heart Association's guidelines of what a healthy diet is. This just led to weight gain and little reduction in my bad cholesterol or blood sugar levels (as measured by A1c). I have read a number of books recently to begin adjusting, however I found the advice very inconsistent. I have tried a number of different supplements but found the results poor. Gary's books cut through the nonsense. His experience as an actual federal investigator of food and supplement companies shows in his recommendations of products. Gary has simplified the advice on nutrition to the essential explanations necessary for a good diet for the rest of your life. Gary's recommendation for supplements are also a cut above what is found at mass market chains like GNC, Vitamin Shoppe, or Costco. I recommend you give Factor X a thorough reading. It is well worth the time.

-Binu W.

"Gary Collins has been an unbelievable speaker in my Health and Wellness 101 classes. My students keep asking me to invite him back, and even as a 'Health Professional' I learn from him every time he visits too! Gary has become a consultant to our basketball team and provided our guys with his multi-vitamin and valuable nutrition information. He is the best!"

-Mitch Charlens

Head Coach - Men's Basketball
Professor - Kinesiology Dept.
San Diego City College



"Ran a half marathon in Atlanta this morning in 1:50. Today I'm thankful for friends that inspire me to continue to improve myself. Thanks Gary Collins and New American Nutrition!"

-Dwain Chambers

"Thanks for visiting us at our offices of the San Diego County Credit Union today. You were very informative. I'm hoping to learn more from you (especially for my daughter)! Thanks again!"

-Melissa Brummer

"Gary, just wanted to say thank you for all your help and advice. Your information and products helped me prepare and get ready for the Las Vegas Tough Mudder. The nutrition advice helped me drop the weight as well as gave me that extra boost of energy that was much needed. Thank you again!"

-Nick S.

"Gary, thank you for introducing me to your detox Green Smoothie recipe, I feel so much better, have more energy and also lost a few pounds. I have given the recipe to my children and we are all enjoying green smoothies and our new found health together."

-Ben L.

"Gary, thank you so much for all the advice, and also for guiding me to find the proper nutrition for my specific lifestyle! You are very knowledgeable, and I thank you for being there when I have questions."

-Attila Vecsernyes

"Thank you Gary for all your nutritional support! It's nice to have someone who can answer all my questions regarding food and nutritional products. I am loving the Jay Robb Egg White Protein Powder, Tulsi Green Tea and the Innate Renewal Greens. The Greens are by far the best tasting Greens I have ever had! I am very confident that New American Nutrition has all the best products out there and look forward to trying them all."

-Rabecca I.





PART I

INTRODUCING THE PRIMAL POWER METHOD

I'm going to start this book by telling you how it ends.

If you're reading this, it's probably because you want to change your life.

Maybe you're already fit, but want to take your health program to the next level.

Or maybe you are like almost all other Americans: You are really out of shape and want to be energetic, lean and sexy but just can't seem to get motivated.

This book will help you begin. But how will this story end?

The truth is, to change your life, even a little, you'll need to take action. It does no good to learn about your health and do nothing.

The harder truth is, you're going to have to get uncomfortable in the short term to be fit, lean and sexy in the long run. The good news is, once you get there, it will be much easier to maintain a healthy body and spirit than you imagine now. Plus, you are not alone. Consider me your new personal trainer and health Guru, here to help you from the comfort and privacy of your own home.

No matter where you start, this book has been written for you: to inspire and motivate and inform.

But there is a catch. Don't worry, it's a good one.

At the end, I'm going to ask you to take action. I am going to ask you to be the kind of person who does more than think great thoughts and read books about diet and exercise from the comfort of your couch.



I want you to do great things and reach your fullest potential. So I'll ask you to join me in doing great things for your health at the end of this book.

Now, let's get started.

My Journey to Wellness

This is my story. Although legally, I can't tell all of it.

As a former special agent for the US Food and Drug Administration, I am restricted from revealing specific details of investigations not already in the public record. But let's just say that what you don't know about how the FDA and food and drug industries work could definitely hurt you. Through the years I felt a growing desire to spare others that hurt.

So what I can share with you, I will. I will also tell you how to live a healthy and fit life.

Here's how it all started for me.

If you're anything like me, you didn't spend the majority of your life knowing the best way to be healthy. For me, it took many years to assemble all the requisite pieces of the puzzle – diet, exercise, and insider knowledge about the health care and food industries.

Like many of you, my childhood sporting endeavors were largely fueled by sugary cereals, sweetened drinks, processed cheese-and-mayonnaise sandwiches, and other nutrient-free non-food concoctions.

This was also the way all my friends ate, rich or poor. Yet almost all of us were all skinny. I mean really skinny. How was this possible with such lackluster nutrition?

Simply put, we ran around and played almost non-stop. Thus, we all burned huge amounts of calories.

Yet we also frequently came down with strange ailments. Generally, we didn't feel well, since we were calorie-rich but nutrient deprived. If we hadn't exercised as much as we did, I'm sure we would have been overweight and unhealthier.



I look back now and realize I had no idea of how to eat well, or of the importance of avoiding extreme, quick-fix type diets and workout plans. I had been taught the usual carbohydrate-heavy approach to eating and thought that, plus sports, was all I needed to be fit for life.

My misguided approach continued in college, where I tried various over-the-top ways to gain muscle mass. Instead of eating well, I focused only on how many calories I was taking in. I exercised at what I see now were inappropriate levels of intensity. My unhealthy approach left me exhausted and ill, especially when playing the sports I loved.

I majored in criminology, taking various classes in health studies along the way. After working in the warehouse of a multinational food company (a brief stint that stirred the beginnings of my interest in the origins of our everyday food), I joined the U.S. military.

Back then in the military we ate cafeteria-style food every day. If you've never done that, I am here to tell you, don't start. That, coupled with the harsh and rigorous physical training for my military role led to long-term injuries.

The damage would later inform my caution with my personal training clients – the exercise you perform should work with your body, not against it. This is a lesson I wish someone had taught me back then. My whole focus was on fitness; I was too inexperienced to recognize the value of wellness just yet.

Even as I served our country, my dual interests of forensic investigations and wellness were a part of my daily life. I worked as a cryptologist and also worked as a physical trainer for various military personnel. But I wanted to take my investigative interests to the next level. So when the opportunity arose, I completed a master's degree in forensic science. This led to my first non-military law enforcement job as a special agent for the U.S. State Department.

I subsequently became a special investigative agent for the FDA (Food and Drug Administration) and the Department of Health and Human Services (HHS). My work included investigating health care fraud, tainted food, prescription drug counterfeiting, the illegal importation of medical drugs, and other systemic and patient abuses.



My work as a Special Agent was stressful and demanding, frequently taking me around the world to far-flung locations of dubious repute. These voyages opened my eyes to how other cultures viewed food and health – often in much more different (and successful) ways than I had ever observed in America.

During my career I investigated a broad spectrum of health care providers, from purveyors of backroom “miracle” cures to the most respected of medical doctors (some of whom were doing very unrespectable things). To say that some of the activities that even “top” doctors are up to are shocking would be an understatement. Let’s just say these insider experiences quickly convinced me of the importance of taking preventative wellness measures to avoid the need for later medical “care.”

Fortunately, my investigations also involved many wellness-focused, non-MD professionals. So oddly enough, it was my role with the FDA that introduced me to the concepts of natural eating and healing. Now, there are certainly a lot of nefarious snake-oil sellers out there, don’t get me wrong. But there were also many reputable wellness-based professionals with alternative healing approaches that helped me rethink what I thought I knew about being “fit.”

It was then that I realized that my skills as an investigator could be used to finally find the missing link between popular fitness programs and natural healing, the “X” factor needed to really lose weight and be healthy in the long term... and within the broken systems of today’s food supplies and healthcare.

Thus the seeds of the Primal Power Method were sown. In my spare time I began my study of wellness and holistic healing in earnest.

It was, for a while, a dual life. By day I investigated dietary supplement fraud for the FDA, by night I studied the benefits of genuine, high-quality supplements. At work I saw how a misguided public is duped by the food industry, corporate marketing and even the government. So I used my professional skills as an investigator to scour medical journals and scientific research to find the missing piece in the nation’s wellness equation.



Finally, the time was right to bring this missing X factor to light.

The questionable practices I witnessed in my previous FDA work inspired me to found New American Nutrition and create the Factor X program. Now, instead of quietly documenting all that goes wrong with our nation's food and supplement supplies, I am proactive and talk about health and the positive aspects of quality supplements.

Instead of relying on muzzled investigators of a federal agency, I want everyday Joes and Janes to make informed decisions based on information that has, until now, been routinely hidden from public view.

My new mission in life is to bring such information to light. This is at the core of New American Nutrition and the Primal Power Method.

The Primal Power Method

Chances are, if you bought this book you are ready for a change.

Well, there's no shortage of health and diet fads out there – some more sane than others. The shelves of most bookstores are literally collapsing under the weight of the latest lose-the-pounds text. Presumably if they all offered the keys to the slim-and-slender kingdom we would all be lean and healthy, right?

Yet more Americans are overweight and unhealthy than ever before. Something is clearly missing.

Recently, there has been a surge of investigative-style journalism focusing on the corporatization of America's formerly nutritious food supply. An industrial-food machine has taken the place of America's bread basket, as animals and plants alike are mistreated, artificially stimulated, and even genetically modified so a massive corporate entity can make money – regardless of the appalling health consequences to you or your children.

Finally, the terrible truth about the man-made degradation of our soils, foods, and farming traditions is filtering into the light. Enlightening books such as *Fast Food Nation* and *In Defense of Food* and films like *Food Inc.* and *Supersize Me* have begun to enter the mainstream.



Interest in natural foods is likewise coming to the fore; organic foods are increasingly popular, and interest in preventative wellness measures is on the rise.

Yet there is a dearth of information that combines these concepts. On one end of the spectrum are books that describe the failings of our food supply. On the other end are the books that focus on natural and holistic ways of eating. The former are often entirely journalistic and theoretical; the latter, intimidating and frequently lacking in any exercise advice.

Until now.

I created New American Nutrition and the Primal Power Method to address what I see as a lack of accurate, harmonious, integrity-based information for people who want to lose weight the right way – for good, and for life.

The New American Nutrition stance is embodied in the Primal Power Method: wellness-based eating, real-world exercise plans, and insider expertise on the food-industrial complex – combined in one program.

What is Primal Power?

The secrets of health and longevity today are the same as they were thousands of years ago for our prehistoric ancestors. This idea is at the heart of the Primal Power Method.

While we have many creature (and culinary!) comforts in our modern lives, our bodies and digestive systems have changed little since our prehistoric cousins found the secret to life-long health: active lives and natural foods. So, we need to eat and move like they did. It doesn't get simpler than that!

This is not to say you need to live like a caveman – far from it! Hey, I don't want to give up my car or computer either. But when it comes to your body, realize that the diet and movement patterns that kept our species alive and empowered for many millennia haven't changed. Anytime you are confronted by a seemingly confusing health choice, just think of how your primitive brethren would have lived... with whole natural foods and an active lifestyle. That, in essence is Primal Power.



Modern humans evolved consuming a diet of natural foods based on actively gathering plant-based foods and hunting animals. Our bodies, though highly adaptive, need specific nutrients that can only be found in nature to function properly. This has been the case for millions of years, and for far longer than our modern ways of eating have existed. This nutritional paradigm has only changed in the last few hundred years, thanks to the advent of industrialized agriculture and factory food production.

The prehistoric man/woman concept is an easy tool to use when you become confused about food or health choices. If the modern world as we know it were to end, and you had to live off of the land like our predecessors, what would you eat? What foods would you have access to in your immediate area?

Whenever you have a question about your food selections, just think what a prehistoric man or woman would have had as food choices. Would they have had access to sugary flavored water, processed starchy pasta, high fructose corn syrup, sugary breakfast cereals, or artificial sweeteners? Did prehistoric man/woman worry about saturated fat? Humans before us did not concern themselves with counting calories or our other modern dietary concerns. They just ate what was naturally in abundance around them, when they were hungry.

Some skeptics may say that the life expectancy of the average prehistoric human was actually quite short, throwing doubt on the health benefits of our early ancestors' ways of living.

However, their life spans were no doubt affected by other circumstances rare in our modern lives, such as death by trauma or injury. Moreover, they lived in a lawless world and may have fought vicious battles against neighboring tribes and groups – and sometimes against each other.

They lived a much harsher and more violent life than modern humans, and died for many reasons beyond the scope of nutrition. Had they had constant access to readily available foods, and didn't suffer so many survival-related stresses, fewer would have died at an early age. Let's face it a badly sprained ankle or broken arm could have meant death, for our prehistoric ancestors. Indeed, in such idealized circumstances, many prehistoric humans may have lived far longer – possibly longer than we do today.



Our prehistoric brethren were not at the top of the food chain; they were themselves hunted by large predators and did not always enjoy the constant abundance of food that we have today. Being fat and slow, meant an easy tasty meal for others!

The human body is in fact so resilient that it has contingency plans even when little or no food is available. Remember that periodic fasting would likely have been a part of pre-historic men/women's everyday lives. They would not have access to a grocery store and be able to eat a bag of potato chips at midnight.

Having access to food at all times is a very recent modern phenomenon. Throw in the availability of highly processed food products, and what you have is today's obesity problem.

Primal Versus Paleo

Recent years have seen a spate of caveman diet-based books. Alternately termed hunter-gatherer diets, caveman diets, Paleo (as in Paleolithic) diets, or Primal diets, they are all based on the idea of eating as our ancient ancestors did.

But while there are plenty of "Primal" and "Paleo" food books out there, the Primal Power Method offers something different: It combines the best of what each approach offers with a health-based exercise plan.

To help you understand why, here's the run-down on the differences between the two typical prehistoric diet approaches: Paleo and Primal. In their fullest incarnations, the differences are nuanced and will tie your brain in knots, but here are the basics.

Paleo diets recommend animal protein, healthy fats, vegetables and fruits, but no dairy or grains. Paleo followers also believe saturated fat (found in items like animal skin and butter) is unhealthy.

Primal diets incorporate animal protein, healthy fats, and fruits and vegetables. But unlike the Paleo approach, they include some dairy products but few grains (properly prepared) or no grains. Primal devotees believe saturated fat is a healthy part of a well-balanced diet plan.



Each approach takes a contrasting view on saturated fat. Where do I come down on this controversial topic? I'm on the primal side and believe saturated fat is a big key to overall health... bring on the butter. (We'll talk more about fats in Part 2 of this book.)

In general, primal approaches are more like holistic approaches to health. Primal devotees typically support the moderate use of dietary supplements when needed, healthy movement (exercise), and ancestor-driven food choices. In contrast, Paleo methods are primarily (if not exclusively) concerned with dietary choices.

The Primal Power Method is clearly a primal-based approach. Additionally, it includes the stance that everyone is physiologically different and therefore has unique dietary requirements. There are no one-size-fits-all answers.

Some people tolerate grains well, while some people can't eat them without feeling ill. Others are lactose intolerant and cannot tolerate dairy products, while others thrive on dairy. Some people experience several food intolerances and sensitivities.

Every "expert" book seems to have a different way of addressing these kinds of personal dietary sensitivities. It gets very confusing, and it doesn't have to be. The Primal Power Method recognizes that what works for one person may not work for everyone, and that solving digestive challenges is not likely to be a one-step fix.

That's why our website and all Primal Power Method publications provide you with factual information. You then can make your own choices based on your body's unique dietary tolerances and physiological make-up.



Principles of the Primal Power Method

It's important to strive for what is realistic rather than idealistic. In this spirit, the Primal Power Method follows five truth-based, real-world principles designed to keep you on track. These form the practical foundation of the Method:

1. Knowledge is power
2. Avoid extremes
3. Keep it simple
4. Something is better than nothing
5. Take action today and every day

Primal Power Principle 1: Knowledge is Power

As you read this material, you may wonder why I have taken the time to go over why to do things and not just what to do. Well, it's because this program is not about fads or quick fixes. Moreover, I have a simple philosophy when it comes to health: "Knowledge is power."

With correct, in-depth information, you will see that nutrition and healthy living are simple to maintain.

But what is not simple is trying to change decades of bad health decisions based on bad information. Almost every day, another article or news program promotes a means to "be healthy," yet most of the information is just flat out wrong, dangerous, and sometimes a bit of both.

Following advice you don't fully understand rarely results in success. Instead new habits are most effective when you know why you are doing something. Otherwise, you are likely to be swayed by the next fad "miracle diet" or "10-minute workout" program that comes along, without really understanding how it works (or more in likely doesn't).

Fad diets are often shrouded in vague pseudo-science and cheesy ads; I want you to have the truth about what you are eating and on how to understand the basics of exercise.



Primal Power Principle 2: Avoid Extremes

It's time to stop the fad madness!

Anytime I hear a phrase like “flat abs in just minutes a day!” or “lose five (or 10 or 12) pounds by the weekend!” I get really ticked off. Why? Because extreme claims may sound appealing, but they don't work. Once again, John Q. Public is the one to pay the price. While less “sexy,” a slow-and-steady, healthy lifestyle approach, day after day, week after week, delivers true health and wellness – year after year!

Here's the bottom line: Any so-called health program that has you eating only one kind of “miracle” food (papaya and cabbage soup all day?), nuking something prepackaged in a cardboard box for dinner, or paying for an expensive and complex piece of exercise equipment that an aging TV star favors is to be avoided. If it seems odd and sounds ridiculous, it is.

Extreme diet and exercise programs don't work in the long term!

Nevertheless, just like everyone else, I have fallen victim to the numerous eating and exercise fads.

One of the most resonating memories I have on the topic is of a younger version of myself waking up two or three times a night with a friend to do hundreds of push-ups, sit-ups, pull-ups, and other exercises, not to mention eating thousands of additional calories our bodies could never process. It sounded like a good idea at the time, but the results begged to differ – we just ended up fat and tired!

From such experiences I have learned a very important lesson: a fad is merely a fad for a reason, and diet and exercise fads have no basis in the continued pursuit of genuine health. Their main focus is to sell you something short term. The purveyors of such works-for-the-moment “cures” don't care if their product or system works for the long-term or not. When the diet-trick-of-the-month doesn't work or stops working, guess who is ready to sell you the next “miracle” product?

But removing symptoms of poor health (such as excess fat) for a limited period of time does not cut to the real concern – the need to better care for our individual health statuses! Avoiding extremes is an important part of getting there.



Primal Power Principle 3: Keep it Simple

Eating should be simple. If you pick up a food product in a grocery store, and it contains ingredients you cannot pronounce, or a list of ingredients so long that it takes up an entire side of the container, it is probably a bad choice. Plus, I'm pretty sure it would not be recognized as food by our prehistoric ancestors.

As a culture we have made eating and exercise into a confusing and overwhelming selection of products, regulations and fad diets. The government's involvement in the creation of nutritional guidelines shows how far we have drifted away from the basics of proper health and nutrition.

Against this backdrop of confusion, Americans spend more time worrying about how, when and what to eat than do the people of any other country. Did you know the average supermarket is 48,745 square feet in size and contains nearly 50,000 items? If you bought one item each day it would take you over 125 years to sample all of them. No wonder we are confused about what to eat!

You don't need to understand biochemistry or to be a nutritionist to feel good and be healthy. This book will cover a lot of in-depth information. However, it will be as user-friendly as possible.

Because in reality, health is simple. Think of a primitive man or woman – they just had active lives, moving steadily throughout their days, and ate whole, natural foods.

Primal Power Principle 4: Something is Better than Nothing

At first, overhauling your entire lifestyle can seem daunting, especially if you have really let it get out of hand.

But here's a thought that always bears repeating: Little changes and choices add up. When it comes to doing nothing versus doing at least something, something is always the right choice. Think of it like dropping a dollar into a piggy bank every hour of the day for years and years... eventually, you'd have a nice nest egg.



You can always do something! Instead of bemoaning your stressful, unhealthy life, answer this question: What would it take to make a healthier choice in this situation, at this exact moment? Even if it's only an incrementally better option, that little bit counts!

- Can't get to the gym? Do 10 minutes of push-ups, crunches and stretches in your living room. Even a few push-ups are better than none!
- No time to cook a healthy dinner? Skip the dollar-meal fast food takeout and pick up some precooked chicken and a premade salad at the grocery store.
- Missed breakfast? Eat some nuts and a banana in your car on the way to work (kept there for just this purpose!)
- Sit at a desk all day with an aching back? Make it a point to stand up move around each hour – even if only for two or three minutes!
- Exhausted and haven't seen your kids all day? Turn off the TV and catch up together on brisk walk around the neighborhood (yes, they may complain, but try it anyway!)

When circumstances aren't ideal, don't assume you have no control. You always do. So, instead of feeling bad that you can't do "everything," do something!

Primal Power Principle 5: Take Action Today and Every Day

Look, America is full of people who want to be lean and strong and sexy. But statistically, very few of us are. So what's the difference between those that wish and those that win?

Here's the simplest answer. Fit people take action today, and every day. Their lives are an answer to the question: what's it going to take to stay healthy today?

Maybe that means getting up a bit earlier to get to the gym. Maybe it means having a kitchen that doesn't get clean in order to make time for



an exercise DVD while the kids nap. Maybe it means making a bagged lunch on Sunday night so that Monday's midday meal is healthy and inexpensive. Fit people think like this and take action today, and every day. Small choices add up to a lifestyle, which dictates long-term success. That's the real-world truth.

So, what's it going to take for you to be fit and healthy today? Every day? This ties into principle four: Something is better than nothing. If you can't get to the gym today, do 10 push-ups in your living room... today. Don't let "not getting to the gym" be an excuse for doing nothing. Always ask, if I can't do the ideal, what else can I do?

No time to for a full workout today? How about taking the stairs instead of the elevator at every opportunity this week?

If you hurt your knee and can't run, what else can you do? Besides knee-friendly swimming and cycling, you could always do a few bicep curls and ab exercises in your living room while watching the news. It won't make you an athlete, but it will help maintain fitness momentum.

Life gets hard and healthy choices are sometimes inconvenient. Want to be lean and sexy? The secret is to make the right choices, slowly and surely, today and every day. Today's choices matter, and are under your control, every day.

That's the hard truth. But the good news is, once it's a habit, it gets easy. Taking action is always the key.

Overcoming My Own Resistance

Find it hard to get motivated?

I want you to understand you are not alone. I have also struggled over the years with my health.

About 8 years ago I was drinking too much alcohol and eating a lot of processed foods, and my health suffered because of this. At the time I was living in a very cold climate and kept telling myself that after winter I would get back into it, it's just too cold to go run or exercise right now. I was taking the easy way out and I knew it.



Finally told myself to stop making excuses and get out there and take action.

I remember there was a little snow on the ground and the wind was blowing. It was probably 30 degrees outside. In this dark and gloomy weather my inner thoughts reminded me how nice and warm my house was. All I had to do was go back inside.

But I took that first stride. I froze my butt off for the first mile, but once my body warmed up I started to feel better and better. Once I broke through that mental barrier it was no longer such a struggle. I didn't notice how cold it was anymore. Every time I would make it back to my house after a run in the cold, with my nose red and runny and my ears freezing, I would look in the mirror and smile. What a sense of accomplishment.

I still look back at those winter runs with fond memories of tranquility and their therapeutic effects. Now, you don't necessarily need to go run in freezing weather to start this program. But you must mentally prepare yourself for the first step. It will be the hardest one you will make. There are going to be days when you'd rather pick up some chicken nuggets and sit on the couch and watch TV instead of preparing a healthy meal and heading to the gym. Everyone has done this at some point, including myself.

From here on in, you will have to climb mountains you never thought you could climb. You are going to stumble at times. Just keep climbing.

Above all, don't give up!





PART 2

MACRONUTRIENT MYTHS

Many Americans have unfortunately been left with an inadequate working knowledge of how best to preserve their health.

Learning the truth about fat, obesity and exercise has changed my life, as well as my relationship with food. I know that this knowledge will have a profound effect on your life, too!

Perhaps you, too, have been taught to believe some of the following falsehoods:

- **Myth #1: Eat as little fat as possible.** Food choices should have the fat removed, even if it means substituting chemicals in its place.
- **Myth #2: Animal protein is bad for you.** It causes heart disease, it raises your cholesterol, and it makes you fat (because it contains fat). Choose lean meat over other “fat-filled” meat.
- **Myth #3: You must exercise more to lose weight, because exercise is more important than diet.**
- **Myth #4: Eat six to eleven servings of carbohydrates per day,** and as long as the source of the carbohydrates is low-fat, it's okay.

This latter falsehood was especially perpetuated for many years by the old USDA Food Pyramid, which outlined recommended eating habits for the American public. This has recently changed in the updated “MyPlate” federal nutrition guidelines. Nevertheless, these old carb-dominant misconceptions unfortunately remain pervasive – and erroneous – beliefs to this day.



Below is an excerpt from the book *Good Calories, Bad Calories*, written by Gary Taubes, the only print journalist to win three Science in Society Journalism awards from the National Association of Science Writers. I don't agree with everything Taubes promotes, but I do agree with the majority of his ground-breaking conclusions in nutrition and science. Here are his words:

Throughout this research, I tried to follow the facts wherever they led. In writing the book, I have tried to let the science and the evidence speak for themselves. When I began my research, I had no idea that I would come to believe that obesity is not caused by eating too much, or that exercise is not a means of prevention. Nor did I believe that diseases such as cancer and Alzheimer's could possibly be caused by the consumption of refined carbohydrates and sugars. I had no idea that I would find the quality of the research on nutrition, obesity, and chronic disease to be so inadequate; that so much of the conventional wisdom would be founded on so little substantial evidence; and that, once it was, the researchers and the public-health authorities who funded the research would no longer see any reason to challenge this conventional wisdom and so to test its validity.

As I emerge from this research, though, certain conclusions seem inescapable to me, based on the existing knowledge:

1. Dietary fat, whether saturated or not, is not a cause of obesity, heart disease, or any other chronic disease of civilization.
2. The problem is the carbohydrates in the diet, their effect on insulin secretion, and thus the hormonal regulation of homeostasis—the entire harmonic ensemble of the human body. The more easily digestible and refined the carbohydrates, the greater the effect on our health, weight, and wellbeing.
3. Sugars — sucrose and high-fructose corn syrup specifically — are particularly harmful, probably because the combination of fructose and glucose simultaneously elevates insulin levels while overloading the liver with carbohydrates.



4. Through their direct effect on insulin and blood sugar, refined carbohydrates, starches, and sugars are the dietary cause of coronary heart disease and diabetes. They are the most likely dietary causes of cancer, Alzheimer's disease, and the other chronic diseases of civilization.
5. Obesity is a disorder of excess fat accumulation, not overeating, and not sedentary behavior.
6. Consuming excess calories does not cause us to grow fatter, any more than it causes a child to grow taller. Expending more energy than we consume does not lead to long-term weight loss; it leads to hunger.
7. Fattening and obesity are caused by an imbalance — a disequilibrium — in the hormonal regulation of adipose tissue and fat metabolism. Fat synthesis and storage exceed the mobilization of fat from the adipose tissue and its subsequent oxidation. We become leaner when the hormonal regulation of the fat tissue reverses this balance.
8. Insulin is the primary regulator of fat storage. When insulin levels are elevated — either chronically or after a meal — we accumulate fat in our fat tissue. When insulin levels fall, we release fat from our fat tissue and use it for fuel.
9. By stimulating insulin secretion, carbohydrates make us fat and ultimately cause obesity. The fewer carbohydrates we consume, the leaner we will be.
10. By driving fat accumulation, carbohydrates also increase hunger and decrease the amount of energy we expend in metabolism and physical activity.

You may now be curious as to why so many of Taubes' ideas run contrary to the weight loss "how-to's" commonly promoted by morning television and newsstand magazines.

We'll debunk these macronutrient myths in detail throughout this section. But what exactly is a macronutrient?



Macronutrients are chemical compounds that, when eaten, provide fuel (energy) to your body. The three major categories of macronutrients are carbohydrates, fats, and protein. Each will be discussed in turn within this section.

I've called it "macronutrient myths" because as you've seen, most of what you have been learned about nutrition – from magazines, government health initiatives, in school, and certainly from the food industry – is likely just plain wrong.

Experts, scientific literature, schools and our government all play influential roles in what we perceive "healthy living" to mean. However, much of this previously accepted information may be proven incorrect as new research and thinking emerges, and as older, previously repressed or forgotten research is revealed.

To start, let's consider why almost all of us need a huge dietary overhaul.

Reversing the Western Diet

Of particular relevance to our journey together will be your understanding of what most American's eat today: the so-called Western Diet. You have, of course, likely heard this term many times, but you may not understand what it actually entails.

The Western Diet is typically eaten in developed (and some developing) countries throughout the world. It is heavily weighted toward large amounts of processed foods and factory-farmed meat, large quantities of added unhealthy fats and oils, sugars, and refined grains. Fruits, vegetables and unprocessed, fresh foods of any type are largely missing.

Populations who eat a standard Western Diet tend to suffer from high rates of obesity, type 2 diabetes and cardiovascular disease. Some research indicates more than a third of all cancers (I argue it is close to half) can be linked to this way of eating.

It gets worse. Industrially produced foods prevalent in the developed world frequently contain unnatural chemicals and hormones. Recent research from the Cincinnati Children's Hospital Medical Center has shown that young girls are starting to undergo puberty earlier – some



as young as seven or eight years old. These chemical “endocrine disruptors” are implicated in other metabolic disorders involving thyroid dysfunction, mood impairment, and more.

Does the Western Diet sound like your way of eating? I know it used to be mine. How did we learn to eat this way? From our schools, popular cookbooks, government food recommendations, or our family? Perhaps it was a bit of each. What is certain is that the typical Western Diet leads to impaired health and an earlier demise than do the eating habits of poorer, less developed countries, where food is still fresh, clean, and unprocessed.

Thanks to medical advances, we live longer than we used to. But what is the benefit of these added years if they are spent in and out of hospitals with chronic, diet-related diseases or not feeling well? Who wants to be wasting away for years with cancer due to a condition caused by the Western Diet? I know I don't!

Our advances in medicine, health care, and science are exciting, but relying on them to prolong an unhealthy life is not the answer. Just because an individual lives longer than his forebears, yet is sick and miserable, is no blessing for him or his family and community!

But there is good news. Years of research now indicate that the effects of the Western Diet can, for the most part, be reversed. Studies have shown that people who have abandoned the Western Diet for a more traditional and natural diet will regain health and reduce their chances of suffering from the usual Western-Diet-induced chronic diseases.

To solve this problem, you'll need to understand the right way to eat carbohydrates fats, and protein.

Carbohydrates

Good carbs? Bad carbs? No carbs? Today, most information you hear about carbohydrates and losing weight is confusing and confounding.

Americans often think “healthy” carbohydrates include processed grains, such as breads, pastas and cereals. Few people, however, recognize natural foods such as fruits, vegetables, beans and whole grains as the best sources of healthy carbohydrates.



Instead, we are often duped by processed food labels. These labels often falsely claim that unnatural food products are a viable source of health-giving carbohydrates. In the Primal Power Method, we derail that train of thought and get on track to well-being.

Today, white flour accounts for one-fifth to one-fourth of the average American's daily caloric intake. Yet eating fewer refined carbohydrates is a huge part of the weight loss equation. No wonder so many Americans are overweight!

In the American obesity epidemic, the two biggest carbohydrate culprits are refined sugar and white flour. I want you to think about how many food items you eat every day that contain these two items. I'm guessing quite a few. As you read through this, you will soon realize how eliminating the dual culprits of sugar and white flour will help you lose fat, gain energy and travel down the road to lifelong health.

Carbohydrates Defined

What exactly is a carbohydrate? Sugars, starches and fibers are all considered to be dietary carbohydrates since they have similar chemical structures. More specifically, they are all made up of a collection of carbon, hydrogen, and oxygen molecules, with a two-to-one ratio of hydrogen to oxygen.

Carbohydrates are naturally occurring, organic substances. According to some nutrition scientists, they are essential for life. The brain and central nervous system can function on a continuous supply of carbohydrate-derived glucose, which is the principal circulating sugar in the blood and the body's major energy source when dietary carbohydrates are plentiful.

The amount of carbohydrates you consume affects the fuel your body uses and the way it stores fat. In a nutshell, if you eat too many carbohydrates, the excess amount will often be stored as fat. Too few, and your body will cannibalize your muscles for nutrition. Not good.

If you're reading this book, it's a safe bet you'd like to burn fat, right? Good news: With the right diet, the human body can also derive fuel from ketones, which are the metabolic energy units of fat metabolism. These provide a steady source of energy over a long period of time. The secret is to eat the right kinds of carbs in the right amounts. That's what we'll discuss in this section.



These concepts will be returned to and discussed in depth throughout this book and our other New American Nutrition programs. For now, note that excess carbohydrates – and particularly sugar- and white flour-based products – are anathema to a successful fitness and weight loss program.

Here's the carb low-down you'll need to maximize fat-loss:

Empty Carbohydrates are carbohydrate-based foods that are highly processed, usually containing mainly sugar, white flour, and vitality-sapping additives and chemicals. They only provide calories and contain very little (or no) nutritional value. Translation: Your waistline increases while your energy decreases. Not good.

Refined carbohydrates (a type of empty carb) are produced when carbohydrate-rich plants are processed in a way that strips away everything but the most quickly digestible components (which are starches and/or sugars).

This unnatural technique removes healthy components such as vitamins and concentrates the carbohydrates; your body then processes them very rapidly, usually causing an unhealthy spike in blood sugar.

Refined and highly processed carbohydrates – such as processed (usually white) breads, white pastas, white rice, packaged oatmeal and processed cereals – are digested rapidly. This can result in a concurrently rapid rise in blood sugar and a slow rise in your pant size. Still not cool.

Health-Giving Carbohydrates are natural carbohydrate-based foods that contain vitamins and minerals that our bodies need for optimal health. Most of the carbohydrates you eat should come from the following health-giving sources: fruits, vegetables, and nuts. To clarify your primary carbohydrate source should come from vegetables, with nuts and fruits scattered in. Most people over consume fruits in their path to lose weight, but the fact is there is not one nutrient you cannot get from vegetables that are contained in fruit. People will often eat hands full of nuts daily thinking it is the Primal way to go. Yes, Nuts are Primal, but they contain a high Omega 6 to Omega 3 ratio and should be moderately consumed.

These foods help control your blood sugar, energy and insulin (an important regulatory hormone; we'll discuss insulin in detail as we continue). They also help keep you lean and fit. Not surprisingly, these are the kinds of carbs at the core of the Primal Power Method.



High Blood Sugar, High Fat Storage: The Insulin Connection

We'll now hone in on an incredibly important concept at the heart of Primal Power success: how the hormone insulin influences weight loss (or gain!), and why carb consumption is the key to this regulation.

You want to be lean and sexy? You need to understand insulin. Period.

Primal Point: The presence of sugar in the blood and the subsequent release of the hormone insulin play important roles in fat storage and weight gain. You must understand insulin's influence to succeed in your weight loss goals!

What is Insulin?

Insulin, in brief, is a hormone secreted by the pancreas that serves to coordinate and regulate the storage and use of nutrients and the maintenance of homeostasis (a healthy physiological balance) in your body. Stated another way, it ensures you have healthy blood sugar levels and prevents sugar-induced imbalances.

Insulin is a very powerful hormone – the most powerful when it comes to fat storage. Yet insulin is rarely discussed when it comes to weight loss. But in the Primal Power Method, it's key.

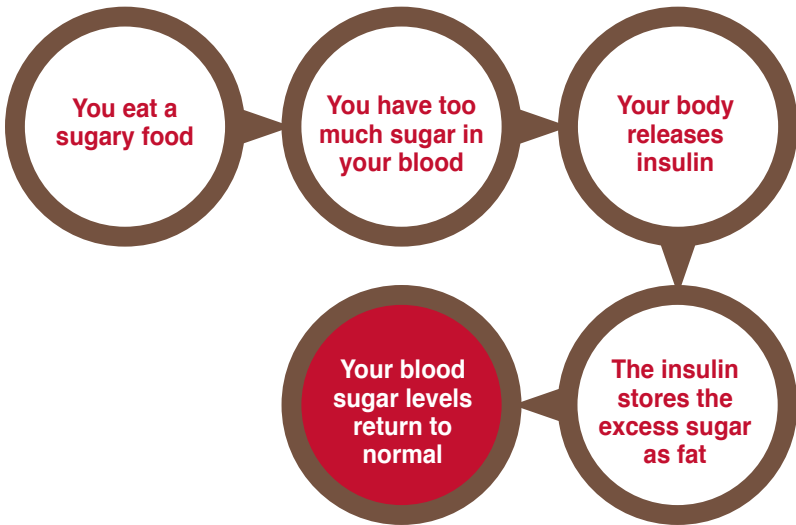
The bottom line is, if you control your insulin levels through quality food choices you will see remarkable changes in your physical appearance and your mental well-being. It doesn't get simpler than that.

How Insulin Works

Here's how insulin keeps your health in check: When your blood sugar levels increase rapidly, or are continuously heightened because you've eaten a lot of sugars or refined carbohydrates ("empty" carbs), your body produces insulin. Insulin "mops up" the sugars and stores them in the most accessible energy storage option your body has: fat tissue. Without insulin, you could literally get sick or die from drastic blood sugar fluctuations (a problem at the core of diabetes.) Simply put, insulin's job is to save your life.



Let's review:



Our prehistoric brethren would not have needed this life-saving response very frequently since they didn't eat many sweet foods. However, in our convenience-food world we are overtaxed by sugar-laden snacks. Your body wants you to give it a break!

Primal Point: Insulin's job is to store excess sugars (energy) as fat, which is simply the body's "storage warehouse" for energy supplies. Therefore, a big reason to control your carb intake is to control the levels of sugar (and therefore insulin) in the blood.

But remember, sugar doesn't just come from candies and cakes. Refined carbohydrates, such as those present in white flour-based foods, are broken down into simple sugars as you eat and digest them. That's right: Eating white bread kind of like eating candy, at least as far as your fat-storing hormones are concerned.

To get lean and healthy, ditch the white bread and pasta and eat the same high quality, real foods your ancestors would have, like fresh vegetables and organic meats. Primal Power is choosing far fewer refined



carbs and more healthy fats and proteins, period. **In fact, if you did nothing but drop white-flour based and sugar-filled foods from your life, you would already have taken a huge step towards better health.**

Of course, refraining from sweetened, white-flour pseudo-foods does not mean banishing all carbs entirely from your diet. I firmly believe in avoiding extremes. Instead of total elimination, relegate refined sugar- and white flour-based products to occasional-treat status only!

Insulin's Powerful Influence

Let's review the impact that a sugar-driven insulin surge has on your body:

1. It leads to carb crashes: Insulin encourages your body to use more carbohydrates, and less fat, as fuel. This leads to detrimental energy crashes and carb cravings.

For your body, refined carbohydrates are like kindling: they “burn” fast and hot, are used up quickly, and must be continually replenished to produce energy. Energy from refined carbs is short-lived just as kindling for a fire is quickly exhausted. This is why a sugary breakfast of cold cereal and orange juice is quickly burned off, providing a temporary surge of energy followed by a mid-morning slump.

This renewed hunger and fatigue leads to another carbohydrate-based snack, another temporary elevation in energy followed by the inevitable fall. This cycle continues all throughout the day, with concomitant rises and falls in insulin levels. You feel exhausted and your pants slowly get tighter.

If the problem is continuous or chronic, you may never get rid of the pounds, and you'll be chronically exhausted. Does this sound like your story?

2. It encourages fat storage: Insulin converts almost half of your dietary carbohydrates to fat. So if you want to burn away the pounds (i.e., use more stored fat for energy) you must discourage the release of insulin in your body.



3. It causes hunger, which often leads to overeating. If you eat a meal that is high in carbohydrates, your blood sugar will tend to increase rapidly. Therefore, insulin levels concurrently rise in order to stabilize your blood sugar levels (i.e., bring them back down to homeostasis). This decrease in blood sugar then stimulates hunger, often soon after a meal, and perpetuates the vicious cycle described in the first point above.
4. It hinders helpful hormones: High insulin levels suppress the actions of important fat-burning, muscle-building hormones. These are glucagon (a hormone secreted by the pancreas that increases blood sugar levels) and growth hormone.

Glucagon promotes the burning of fat and sugar. Growth hormone is used for building new muscle mass and muscle development. So if you want to burn fat and sugar and build muscle, you will need to maintain high levels of both hormones by avoiding high insulin levels in your body.

How Glucagon Works

If we created an overly simplified version of how fat storage and fat burning work in the body, it would look something like this:

- You eat a lot of sugar/simple carbs -> your body releases **insulin** -> the sugar is stored as fat tissue -> waist line increases
- You don't eat sugar/simple carbs -> your body releases **glucagon** -> your body burns fat for energy -> waist line decreases

When sugar (and therefore insulin) is not present in the blood, the body begins to use fat as its energy source through a process known as gluconeogenesis. This process is activated by the hormone glucagon, a pancreatic hormone that works in opposition to insulin.

Glucagon stimulates an increase in blood sugar levels, opposing the sugar-decreasing actions of insulin. **But if you eat a sugary snack that stimulates it into action, insulin will hinder the release of glucagon.**

In this way, insulin prevents the use of fat as an energy source (i.e., it keeps you from "burning" fat and therefore prevents you from losing weight).



Primal Point: Insulin (and therefore sugar) hinders the release of glucagon... and therefore hinders fat-burning. Solution: don't eat simple carbs and sugars!

The Insulin Solution

How can you avoid insulin-related weight-gain? Some of the most powerful actions you can take are as follows:

1. **Eat fewer sugars and refined carbohydrates:** This should be obvious by now!
2. **Eat more fiber:** Fiber-rich foods slow your body's insulin response. Insulin responses vary greatly from person to person. Generally, refined foods (such as pastries, white potatoes, white pastas, or white breads) evoke a stronger and/or more rapid insulin reaction than unrefined carbohydrates (think sweet potatoes or yams). This is because refined carbohydrates have been stripped of their natural fiber and, in the case of grains, their oil-bearing germ during processing.

This dietary fiber would otherwise have minimized or slowed the body's carbohydrate/insulin response. The natural fiber found in unrefined carbohydrates (such as brown rice or sprouted whole-grain breads) can reduce the intensity of the negative cycle of blood sugar reactions previously described.

Primal Point: Protein-, fat-, or fiber-rich foods slow digestion and inhibit the release of sugar into your blood stream, which helps you maintain a healthy weight.

3. **Or, do both!** Note that foods that contain simple sugars rarely contain fiber – so by avoiding sweet foods you usually kill two dietary birds with one stone. Remember, without fiber, there is nothing to slow down the digestion of sugary foods. This leads to excessive insulin release (a.k.a. the dreaded insulin spike), which slows or stops the body from using fat as an energy source. In other words:



processed sweet foods = less “fat burning,” and less weight loss

Of course, eating lots of fiber does not automatically lead to weight loss. But generally speaking, aim to avoid sugary foods.

A Dieter's Dilemma

Here's a frequent weight loss mistake: To lose weight, a dieter decides to have a light lunch. He or she then eats only a baked potato. This sounds reasonable when we use old theories on dieting (eating fewer calories and much less fat leads to weight loss), but if you want to lose fat, or if you are carbohydrate sensitive, then this is the wrong approach. Why? Because it's not the amount of calories, but the quality of calories you consume that allows you to lose and maintain a healthy weight. (More on calories later.)

Making matters worse, our dieter will often wash down the potato with a sugary soda or sports drink (most of which contain 20 or more grams of sugar). Now we have the perfect storm: A fast-acting simple carbohydrate (the soda or sports drink) followed by a slower-acting complex carbohydrate (the potato).

The result? Blood sugar levels rise higher, over a longer period of time. This stimulates the release of more insulin, which stays in the blood for a sustained period, and leads to increased fat storage.

Even today the above example is looked upon as the perfect dieter's meal, just adding to more confusion. I have witnessed misguided dieters opt for this meal as part of an attempt of weight loss more times than I can count.

Remember: When you are trying to lose weight (fat), do not eat carbohydrates or simple sugars alone. This can often seem counterintuitive. For example, a dieter may eat one, several pieces, or even most of their calories in the form of sweet-tasting fruit, by itself.

While fruit is healthy, when eaten alone it is not ideal for weight loss. If weight loss is your goal, eat fruit (and especially very sweet types of fruit), with or immediately after a meal that contains digestion-slowing proteins, fats, or fiber. This will dull your body's insulin response to the sugars and help you to store less fat.



Carbohydrates and Water Retention: A Real-Life Example

People who consume a disproportionate amount of refined carbohydrates almost always have a puffy look to them. As you can see from our discussion, this has to do with how their bodies use insulin and retain sodium (and therefore water). One example of this phenomenon in particular comes to mind.

Years ago, I knew a young woman who didn't give much consideration to her diet. She was in college and ate like she was in college, which means her diet was made up of many refined carbohydrates and a lot of fast food. She enjoyed frequent Mexican food splurges, and socialized over cocktails and other alcoholic drinks with friends. Sounds harmless, right? Sadly, it wasn't.

Fortunately, she was physically active. However, she did not realize her diet was a hindrance to good health despite consistent workouts. Thus she experienced many diet-related health troubles such as fluctuations in weight, water retention, bloating, years of stomach issues and fatigue. Many people today find themselves with similar symptoms, mostly because they eat way too many refined carbohydrates. For my friend, fluctuating weight loss or a weight gain of seven to ten pounds in a span of three to five days was a frequent occurrence. Although the amount of food she ate each day stayed relatively constant, her symptoms were heightened when she ate mainly processed carbohydrates.

As we have discussed, bloating and water retention are symptomatic of high levels of blood-borne insulin and the retention of sodium. However, two medications, a CT scan, and one colonoscopy later, doctors still could not find out what was wrong with my young friend. So, with my help she began to run her own experiment with a healthier, more balanced diet. Soon, she did not need her medications, or any more doctor visits, and she has maintained a consistent weight ever since. By recently fine-tuning her diet, she lost an additional 15 pounds and weighs the same as she did in high school.

The only time that she now has stomach issues is when she treats herself to the very occasional meal at a restaurant. This is not surprising, since typically the body will become accustomed to eating better, healthier



foods, and it will noticeably object when anything that is less than healthful is reintroduced into its systems.

If only her doctors had spent more time researching her nutritional habits, and helping her to eat fewer carbs, she could have saved a lot of money, time and distress.

At this point you may be wondering what my formula was for diet change in the preceding story. Well, there was one thing that immediately stuck out to me when I analyzed my friend's diet. Specifically, she consumed almost no protein or healthy fats. Her everyday diet comprised primarily bagels, sugary and processed yogurt products, and granola bars. She would literally go days just eating these three items.

The amazing part was that she has a background in modern day nutrition, and thought she was eating a perfectly healthy diet! I would like to say that this type of belief is the exception, but sadly this is what I find is the case with many of the people with whom we work. They too eat mostly processed carbohydrates in the mistaken belief that they are eating a healthy diet, since this approach is promoted by the current health and medical communities as the best way to avoid weight problems and illness. This type of misguided thinking is part of what inspired me to create the Primal Power Method.

But Don't We Need Carbs to Survive?

Today's health community often tells us that without eating "proper" amounts of carbs, you will not thrive, since your body needs carbs in order to produce glucose. This is not the case, as your body has a backup system that uses amino acids (the building blocks of protein) to form glucose. Thus without any dietary carbs, you will not waste away, and (barring outright starvation) your body will not cannibalize your muscles to fuel your body.

How does this back up system work? Glycogen is the storage-form of carbohydrates in humans and animals and is found mainly in liver and muscle tissue. It is readily converted to glucose (a sugar), when required, to satisfy the body's energy needs.

In other words, after you have used all readily available blood glucose for



your immediate energy needs, your body will turn to this stored glucose (glycogen) as a backup energy source. The human body typically packs about 400 grams (14 ounces) of glycogen into its liver and muscle cells.

Nevertheless, take note: I do not advocate eliminating all carbs from your diet. After all, vegetables contain carbohydrates, and I recommend eating a lot of those!

The Right Way to Eat Carbs

Some people will experience a decrease in energy or more fatigue and sleep problems when strictly avoiding all carbohydrates. These folks must eat some more carbohydrates, if it is in the form of grains they must be properly prepared for optimum digestibility and in the appropriate quantities for their constitutions. What do I mean by this?

Grains in their natural states - such as rice, or oatmeal -are not meant to be consumed by humans. In this form they are seeds, which are meant to pass through mammalian digestive tracts and deposited in a nice pile of fertilizer, ready to grow.

Grains in their natural forms contain many toxic proteins and other natural chemicals that actually harm your digestive system and cause numerous health problems.

I encourage you to greatly reduce your grain consumption (remember you can get carbs and fiber from non-grain sources such as vegetables and fruits.) However, when you do eat grains or food made of grains they should be sprouted or soaked.

Sprouted grains have been released from their toxic protein-rich pods and are easier to digest. This is not something you cannot easily do at home, although you can buy sprouted grain products at natural food markets and even many supermarkets (typically in the frozen foods section.) This being said people with grain sensitivities can still suffer health issues from sprouted grains.



Soaking grains is something you can do at home to help break down whole grain-based toxins. Soak brown rice or oatmeal (yes this is raw grain) for 24 hours in filtered water and a tablespoon of vinegar or lemon juice. This acid base will help break down the chemicals detrimental to your health. Then just rinse of the grains and cook as you normally would. Nevertheless, you must be cautious when reducing the amount of grains your eat. Why? Another common dietary mistake is to avoid all carbohydrates except vegetables – a “no-bread-no-grains” diet. In theory this is not a bad way to lose weight, but people forget that one must eat far more vegetables than before. Instead, many would-be dieters will have the usual small serving of veggies with their meal. In reality, they need to double or triple their vegetable serving sizes to make up for a lack of carbohydrates and maintain healthy glycogen stores.

Sadly this “no-grain” dietary approach is often combined with extreme exercise. It’s the perfect storm and not the healthiest approach.

A lack of grains combined with extreme exercise deplete all glycogen stores. If you followed this approach, your body would turn to protein to make glucose – a reserve back up system called gluconeogenesis that your body uses to keep you alive during times of intense physical stress.

But sadly, many extreme dieters do not eat adequate amounts of protein either. The result? Their bodies start to cannibalize muscle tissue to get life-sustaining glucose. The result, less lean body mass, decreased energy levels and a slower metabolism. This is the exact opposite of what extreme dieters want to happen, so what do they do? Reduce their caloric intake even more – they eat less – thinking that must be the answer.

This is how people damage their metabolic system causing great harm to their bodies and eventually overall health.

This is just to show you that you don’t need to eat as many carbs as you have likely been previously told in order to be healthy. As always, I never recommend extreme approaches, such as above, to eating – the solution is to eat the right kind of carbs, and to create a realistic lifestyle plan that feeds your body the fuel it needs to maintain vitality in the long-haul.



To Grain or not to Grain – The Primal Question

When it comes to whole grains it can get a little confusing in the Primal/Paleo world. In some cases, when properly prepared, soaking for 24 hours or sprouted, they are considered acceptable by some groups. Others say no to grains period.

Where do I land in the questionable grain universe? I feel do to their minimal nutritional content, when compared to energy used to digest them they are not worth the effort. In addition, I feel grains were never intended to be digested by humans, because they have several toxic defense mechanisms that damage our digestive system. Remember grains are seeds meant to grow not be digested that is why they are passed through most animals digestive system completely intact. Many of our modern ailments such as, asthma, eczema, allergies, migraines, irritable bowel syndrome, leaky gut syndrome and Crohn's disease have been linked to consumption of both processed and whole grains.

I have personally eliminated all grains and have had clients do the same with amazing results.

Now that is not to say you can never consume a grains ever again, but just be aware that they can cause great distress to your digestive system and health.



FATS

Misleading and false information concerning dietary fat has confused many (if not most) of us. Should we eat some fat? Any fat? What kind of fat? One thing that is certain: In our dietary quests to cut the fat, it's the truth that has most often been removed.

We are bombarded with low-fat foods by a food industry that promises to lower our cholesterol and make us thinner and healthier. But in reality, we are getting fatter and sicker at an alarming rate.

What we can conclude from this charade is that healthy fat is not the culprit. Rather, it is the consumption of vast amounts of high-carbohydrate, low-protein and low-fat food products that is actually making our collective health much worse.

This section will bring misconceptions about fat to an end. Dietary fat is not bad and is not to be confused with body fat. Rather, fat is an important source of energy and plays many vital roles in all aspects of your health. Read on for the skinny on dietary fat.

Common Misconceptions about Dietary Fat

Almost every day, an article comes out expounding the so-called evils of fat, alongside another (contrary) column refuting such claims.

Common myths about dietary fats include:

1. You don't need fat in your diet.
2. To lose weight, it's best to eat low-fat products.
3. Heart disease is mainly caused by excessive saturated fat consumption.
4. Margarine is better than butter for your heart.
5. Excessive dietary fat causes diabetes.
6. Carbohydrates are healthier than natural fats.



7. Meat is bad for you because it contains fat.
8. Dietary fat automatically leads to body fat.
9. Cholesterol-containing foods are bad for you.

Surprised that these are all untrue? Well, the truth about fat runs counter-current to the vast majority of what mainstream sources say regarding this essential macronutrient.

Herein, we'll examine how fats got a bad rap. We'll also discuss common misunderstandings about the relationship between dietary salt and high blood pressure.

By the end of this section, you will understand why the preceding misconceptions are incorrect and how these untruths are detrimental to the average American's health.

Finally, you'll be able to eat your steak, topped with some salt and a bit of butter as part of a – yes, that's right – healthy and wholesome meal. Let's tuck in.

Benefits of Fat Consumption

Dietary fat is essential for optimal health.

Fat has several important functions in the human body: as an energy source, in the creation and balance of hormones, in the formation of our cell membranes, in the formation and healthy functioning of our brains and nervous systems, and in the vital transport of fat soluble vitamins (A, D, E, and K) within the human body.

Fats are also important for the health of the following organs and systems:

- **Immune System:** Some fats ease and modulate inflammation, helping your immune system and metabolism function properly.
- **Digestion:** Fats slow down digestive processes, providing your body with more time to absorb nutrients. They therefore can help maintain and prolong stable energy levels and satiety (a feeling of fullness). Fat-soluble vitamins (A, D, E and K) can only be absorbed by your body when fat is present; these vitamins could otherwise be excreted via your urine and stool.



- **Lungs:** Saturated fat is needed for the proper functioning of lung surfactant (a substance produced by the lungs that helps you breathe normally).
- **Heart:** Certain fats help to maintain a regular heart rhythm. Plus, fat literally keeps your heart ticking; as a primary cardiac fuel source, fat accounts for 60 percent of the heart's fuel supply.
- **Brain:** Fat is essential for proper memory, learning abilities, and mood regulation. Sixty percent of the brain is composed of fat. Consuming fat is especially important for pregnant women, since fats are essential to fetal brain development.
- **Cells:** Cell membranes are composed of fatty acids. Fats allow cellular walls to be flexible, healthy and to retain their normal electrical conductivity.
- **Nerves:** Fats create the material that protects and insulates nerves. This supports the internal communication system of the body by isolating electrical (nerve-based) impulses and speeding their transmission.
- **Eyes:** Fats are essential to eye function and tissue health.
- **Organs:** Fats protect and cushion your internal organs.

Saturated and Unsaturated Fats

At its most basic level, a fatty acid is made up of a group of chemical elements such as carbon, oxygen and hydrogen. The group is organized into a chain-like structure, and some of the elements are joined together with links known as chemical bonds. The types of chemical bonds that involve the carbon atoms of a fatty acid are what help determine whether it is a saturated or an unsaturated fat:

- If all of a fatty acid's available carbon bonds are joined to (i.e., saturated by) hydrogen atoms, it's called a saturated fat.
- If a fatty acid's carbon bonds are not occupied by hydrogen atoms, and are instead linked to the other carbon atoms within the fatty acid molecule, the carbon atoms are unsaturated. These types of fatty acids are what make up unsaturated fats.



- Both **monounsaturated fats** and **polyunsaturated fats** are types of unsaturated fats. The prefixes “mono” (one) and “poly” (many) refer to the number of carbon-to-carbon chemical bonds in the molecular structure of the fat. Monounsaturated fats have one; polyunsaturated fats have more than one.

It is these differences in chemical structure that give each type of fat its unique characteristics, such as chemical stability (does it go rancid easily?), physical texture (is it liquid or solid at room temperature?), and its ability to withstand heat (is it suited for high temperature cooking or will it easily burn?).

A special note: Many fats, such as cooking oils, are made up of more than one type of fat. For example, an oil may contain both mono- and polyunsaturated fats. However, for our purposes it is sufficient to describe them in terms of the type of fat that makes up the majority of the cooking oil, and it is this convention that I have followed.

Rancid Fats and Chemical Stability

Chemically speaking, **saturated fats are stable** and tend to not react with other chemicals in their environment, such as the oxygen in the air around us. They tend to last a long time and not “go off,” which is why you can keep a tub of cooking lard in the cupboard for months at a time.

In contrast, **unsaturated fats are relatively unstable**, chemically speaking. This means they are more **reactive** to other chemicals in their environment, such as oxygen in the air (which involves a reaction known as oxidation).

As unsaturated fats break down on a chemical level, they are described as becoming rancid. This is why unsaturated cooking oils (such as olive oil) may have a strange or “off” smell after sitting in the cupboard for several months and become unusable over time.

Texture, Temperature and Cooking with Fats

When at room temperature or refrigerated, **saturated fats are solid or semi-solid** (e.g., butter, lard, coconut oil). Saturated fats are chemically stable at high temperatures and are ideal for use in cooking.



At room temperature, **monounsaturated fats are usually liquid** (e.g., olive oil). Monounsaturated fats may become solid if refrigerated. They are useful for cooking at low to medium temperatures.

At cold temperatures, **polyunsaturated fats are usually liquid** (e.g. flax oil, cod liver oil). At room temperature, polyunsaturated fats are less chemically stable and are therefore usually best stored in the fridge or a cool dark place to prevent rancidity. Polyunsaturated fats are not recommended for use in cooking but may be eaten cold, such as on salads.

The Right Way to Use Oils

Always use unrefined organic oils whenever possible. This means the process of extraction was “cold” and did not involve the use of high heat and potentially health-sapping hexane gas.

Take advantage of each oil's chemical properties by following these guidelines for use:

Healthy Salad Oil Choices

- Extra virgin olive oil (also okay for cooking up to 325° Fahrenheit)
- Sesame and peanut oils
- Flax oil (in small amounts)

Healthy Cooking Oil Choices

For use **without** heat (stable up to 120° Fahrenheit) e.g., drizzle over vegetables for flavor

- Flax seed oil
- Hemp seed oil
- Cod liver oil

For use **with low heat** (stable up to 212° Fahrenheit)

- Safflower oil
- Sunflower oil
- Pumpkin oil



For use with medium heat (stable up to 325° Fahrenheit)

- Sesame oil
- Pistachio oil
- Hazelnut oil
- Olive oil

For use with high heat (stable up to 375° Fahrenheit)

- Coconut oil
- Ghee (clarified butter)
- Palm oil
- Lard

Sources of Fat

Saturated fats are usually solid or semi-solid at room temperature and are mostly found in animal fats and tropical oils. Examples include butter, coconut or palm kernel oils, and the fat in cheese, full-fat milk, and meats.

All meats contain some saturated fat. Pork and beef contain the most. However, chicken, turkey, and fatty fish such as salmon and mackerel also contain saturated fat, albeit much less. Indeed, compared to pork and beef, fatty fish contain minimal amounts.

Monounsaturated fats are most commonly found in olive oil, as well as the oils of avocados, almonds, cashews, pecans, and peanuts. Chicken skin and lard also contain significant amounts.

Polyunsaturated fats tend to remain liquid even when refrigerated. Examples include sunflower seed oil, canola oil, fish oil, as well as some of the fats contained in eggs and walnuts.

Temperature has an impact on less chemically stable oils, and polyunsaturates in particular.

They can easily go rancid and, when heated, oxidize quickly (i.e., lose electrons and become chemically unstable).



For this reason, these fragile fats should only be prepared through traditional cold-press techniques. This occurs when the oil is extracted from the parent seed, grain or nut through compression at the lowest temperature possible. Polyunsaturated cooking oils should only be consumed at room temperature or below and should never be used for cooking.

Cold-Pressed Oils

Oils that are labeled **cold pressed** are essentially unrefined oils; no solvents of any kind should be used in their extraction.

Unlike cold-pressed oils, highly processed oils should always be avoided. Why? Many of the cheap, refined oils sold today are derived through the use of chemical solvents. These solvents help to extract more of the oil from the parent source (such as the olive or nut) and increase the oil's stability and shelf life, but these oils are problematic once in the body. In addition, canola oil is almost always derived from genetically modified (GMO) rapeseeds, so as a rule it should always be avoided unless labeled UDSA 100% Organic.

The solution? Always purchase oils that say “cold pressed” or “virgin” on the label as these are the least refined of all oils, and buy organic whenever you can.

How Processed Polyunsaturated Fats Affect Your Health

Two polyunsaturated fats that have received a lot of media attention of late are omega-3 and omega-6 fatty acids. Your body cannot generate these types of fatty acids. Thus, they are termed “essential” fatty acids since they are both required for healthy body functioning and can only be efficiently obtained from the food you eat.

Recently, the benefits of omega-3s such as flax seed oil and fish oil have been heavily promoted by the numerous food and supplement companies that sell them. But before you use any such supplements, let's investigate the facts behind these fats that have incurred so much publicity.



Polyunsaturated fatty acids (such as omega-3s and omega-6s) have recently become a hot topic in health and wellness circles. Of particular concern are the quantities of omega-6s that sneak into our meals via processed and junk foods.

A healthy diet contains a balance of omega-3 and omega-6 fatty acids. Omega-6 fatty acids are considered to be essential; they are necessary for human health, but the body cannot make them, and they must be obtained through dietary sources. Along with omega-3 fatty acids, omega-6 fatty acids play a crucial role in brain function and normal growth and development. They stimulate skin and hair growth, maintain bone health, regulate metabolism, and maintain the reproductive system of the body.

Omega-3s confer a number of health benefits. They reduce inflammation throughout the body – in the joints, blood vessels, and elsewhere. Omega-3 supplements, such as EPA and DHA, also appear to aid cellular function and to reduce blood viscosity by lowering heart-hostile blood levels of homocysteine (an amino acid that may raise the risk of heart disease).

Unfortunately, the typical American consumes disproportionate levels of omega-6s in commercially produced vegetable oils derived from soy, corn, safflower and canola oils. Sadly, in many processed foods healthy animal fats such as butter or lard have been replaced by these omega-6-heavy vegetable oils.

Unfortunately, polyunsaturated fats (such as omega-6s) that originate from vegetable oils have been proven to increase the risk of heart disease and cancer. They also contribute to immune dysfunction, liver damage, digestive disorders, impaired growth and weight gain, amongst other health concerns.

Primal Point: While polyunsaturated fatty acids are not inherently “bad,” it is unhealthy to consume them in unreasonable or disproportionate amounts. The sad truth is that the typical American diet contains mostly harmful polyunsaturated fats, since highly refined vegetable oils are used as ingredients in the majority of the foods (and especially the processed foods) that Americans consume today.



Why do polyunsaturated fats cause health problems? It's because of the way they are processed. Polyunsaturated oils become damaged and rancid through both their extraction and during the process of hydrogenation, as described below.

As liquid vegetable oils are chemically and mechanically altered to become semi-solid or solid in consistency, the oils are exposed to high heat, oxygen and moisture levels. Hydrogen is forced into the vegetable oil to change the shape of the molecules, creating a more solid texture. This is how liquid vegetable oils are "turned into" solid margarine.

Rancid oils, such as these hydrogenated oils, contain free radicals, which are unstable and highly reactive chemicals. Because they are chemically unstable, free radicals tend to cause damage to human tissues, and are believed to accelerate the progression of cancer, cardiovascular and age-related diseases. Free radicals attack red blood cells and cell membranes in the body, damaging DNA and RNA strands (protein strands that contain your body's genetic "blueprint"). Research shows that free radicals are directly linked to Alzheimer's disease, autoimmune diseases, and skin damage (i.e., wrinkles).

Consuming anything more than small amounts of polyunsaturated oils may contribute to heart disease, cancer, autoimmune diseases, premature ageing, learning disabilities and intestinal problems. **We tend to already consume enough naturally occurring polyunsaturated oils in a healthy diet through nuts, seeds, certain vegetables, and fish oils.** These amounts are not harmful so long as they are from healthy sources and we don't overdo them.

Remember, the consumption of large amounts of polyunsaturated fat is new and unique to the modern industrial diet, due in large part to the widespread prevalence of cheaper liquid vegetable oils, their hydrogenated counterparts, and the plethora of processed foods containing them. Food manufacturers increase their profit line by using these cheaper, damaged oils at the expense of the public's health.

Your current diet may lack foods that contain a healthy balance of omega-3 and omega-6 fatty acids. In a perfect world we would be able to get adequate and balanced amounts of omega-3s and omega-6s from food sources. However, this is not necessarily possible in today's world. Many vital nutrients are diminished or destroyed in commercially mass-produced foods. So for some of us, a well-chosen fatty acid supplement is beneficial.



To determine whether or not you need a supplement, consider the symptoms of a deficiency:

- Achy or popping joints (essential fatty acids lubricate the body's joints)
- Dry or brittle hair, fingernails or toenails
- Feeling fatigued and unmotivated
- Irregular bowel movements, constipation, gas, or bloating

If you have any of the symptoms I highly recommend you take an essential fatty acid supplement. Carefully monitor your symptoms thereafter to determine if supplements help to alleviate or reduces your concerns.

New American Nutrition sells what I consider to be the highest quality fish oil supplement on the market. In both quality and level of research, the Nordic Naturals brand has been the leader for decades. I personally take their fish oil supplement daily. For more information or to purchase this product, go to **www.NewAmericanNutrition.com**.

Trans Fats

Trans fatty acids, also known as trans fats, are an artery-clogging, unhealthy type of fat that is formed when vegetable oils are hardened (hydrogenated) into margarine or shortening. Some experts refer to man-made trans fats as “plastic fats” due to their unnatural chemical processing and texture. These plastic fats (hydrogenated trans fats) are very unhealthy and should be avoided at all costs.

Trans fats are found in many industrially produced foods including fried foods (e.g., french fries, fried chicken) and countless commercial baked goods, such as doughnuts, cookies, chips, pastries and crackers.

Unfortunately, many food companies use trans fats instead of traditional, healthy, solid baking fats such as butter and coconut oil in order to reduce production costs, extend the storage life of their products, and mimic the texture of baked goods made with traditional fats.



Hydrogenated trans-fats are associated with:

- An increased risk of heart disease
- Impaired immune function
- An inhibition of the body's use of omega-3 fatty acids and the production of long-chain omega-3 fatty acids
- An increased incidence of asthma
- Weight gain
- An increased incidence of cancer
- Infertility
- Clogging of the arteries
- Type 2 diabetes
- Impede optimal functioning of cellular walls

Additionally:

- Dietary trans fats are absorbed into brain cell membranes where they disrupt the cells' ability to communicate with one another.
- Trans fats build up in cell membranes but break down very slowly and therefore remain in your body for a long period of time.
- Trans fats are known to increase blood levels of low-density lipoprotein (LDL), the so-called bad cholesterol, while lowering levels of high-density lipoprotein (HDL), also known as "good" cholesterol.

Primal Point: Hydrogenated-oil based food products (including many butter substitutes such as margarine) each have a laundry list of negative health effects a mile long, not including any as-of-yet undiscovered concerns. Avoid products containing them at all costs.



Natural versus Unnatural Trans Fats

Unnatural, man-made trans fats, such as margarine and Crisco, are to be avoided like the plastic-fat plague they are. However, trans fats also occur naturally in meat. But take note: this does not mean you need to become a vegetarian. Here's why.

Trans fatty acids are found in very small amounts in the fat of ruminant animals. Ruminant animals are herbivores that primarily eat grass and grass-like vegetation. Examples include cows, as well as antelope, buffalo, deer, goat and sheep. Trans fats make up only between two and five percent of the fat in the meat from these species. Natural trans fat (such as vaccenic acid found in small amounts in dairy and beef fat) have in fact been associated with lowering risk factors for diabetes and heart disease.

In contrast, 50 to 60 percent of today's processed and hydrogenated vegetable oils are typically made up of "plastic" trans fat! This alone should show you that the easiest, most logical way to reduce your trans fat consumption is not to go vegetarian, but rather to give up processed carb-based foods made with trans-fat rich hydrogenated oils (an explicit list of such foods is shown below).

But it's not just about quantity; it's about the quality of trans fats varies as well. The chemical structure of the trans fats found in ruminant animals is far different from the trans fats found in the uber-processed foods that populate grocery shelves. Simply put, the trans fats in ruminant animals are not harmful for you to consume, and your body treats them as a healthy fat. So put down the trans-fat laden pastry and nosh on some steak instead. Your heart will thank you for it.

The bottom line? Pay attention to fat quality (think natural meats, not processed carbs) and the quantity will take care of itself!



PROTEIN

The word protein comes from the Greek word “proteios” which means “of the first importance.” Fittingly, protein is involved in every biological process in the human body.

In our carb-heavy world, it's important to remember that protein is an essential part of our diets. Our bodies use it to repair muscle, grow tissue, regulate hormones, assist with metabolic control, defend against illness and assist in healing wounds. Every cell in the body is partly comprised of protein and is constantly exposed to wear and tear. Regular protein consumption is vital to help repair and replace these cells.

Protein makes up your ligaments, tendons, muscles, hair, nails, skin, teeth, tissue, organs and bones. Of all the non-water mass in your body, 75 percent is made up of protein.

Enzymes – the managers of all of our biochemical processes – are specialized proteins, as are illness-fighting antibodies. Insulin is a protein and, as we have discussed in depth, the management of insulin is unquestionably important in the quest for a slimmer, healthier body.

Protein, in short, is necessary for life.

Probably the best (albeit morbid) example of the importance of dietary protein is the true story of those aboard an airplane that crashed into the Andes Mountains in 1972 (made famous by the 1993 movie “Alive”). To live, the crash survivors had to consume the flesh of those who had died in the plane wreck. They were able to survive solely just human flesh for 72 days. However, without this valuable source of protein and fat, they would surely have perished within weeks. Here's why.



Protein in the Lives of Primitive Humans

Our ancestors lived as hunter-gatherers for approximately 84,000 generations and some 2.4 million years, the American Journal of Medicine recently noted. But here is substantial food for thought: Our primitive counterparts survived mostly on a diet of meat and fat, supplemented by vegetables, fruits, seeds and nuts. Studies of ancient remains show that these primitive peoples typically had excellent bone structure, heavy musculature and flawless teeth. Many had incredibly thick skulls and strong teeth in relation to modern-day humans.

Most ancient cultures ate a varied diet which included roots, berries, large and small game, insects, scavenged meat, and in some instances, other humans. Without the benefit of modern farming and agriculture, they did not have the ability to consume only one type of food, such as corn, for the entirety of a year. Instead, natural food availability dictated the specific content of their diets. They ate what was naturally abundant and “in season.”

For many of these cultures, this meant a truly seasonal menu, since fruits and vegetables do not typically flourish year-round except in tropical regions. Foods from animal sources, such as meat, were a necessity for many, especially those living in colder climates. Clearly, meat, eggs, and to a lesser extent, dairy products, were important parts of human life well before the first diet book was ever written.

This seasonal cycle created a balanced diet. Without easy access to calorie-dense convenience foods, our early ancestors ate because of true hunger. This was survival at its most basic: eating to live, not living to eat. Perhaps this is a principle we would do well to understand again.

The good news is that meat from traditionally raised animals is good for you, and you don't have to feel guilty about eating it. Plus, you don't have to go find it, kill it, or even butcher it like pre-historic humans did. However, only a handful of companies produce the majority of the commercial, factory-farmed meat in the U.S. While the workings of mass meat production is beyond the scope of this writing, watch out for future projects from New American Nutrition that will reveal the importance of natural meats and other organic foods.



Simply you should purchase humanely, organically-raised meat whenever possible and economically feasible. I personally only purchase organic meat, but I know this is not always possible for everyone. Just do the best you can. But I urge you to consider going organic. Trust me, your health will greatly improve from this choice.

On one extreme, we live in a fast-food world dominated by empty carbs. On the other extreme, bodybuilding lore and so-called fitness magazines extol the purported fat-blasting virtues of the powdered protein supplement du jour. How can you wade through the hype and make the right choices for you?

To start, you need an understanding of what goes into protein supplements. These can have a useful place in your fitness routine – but only when you choose well and use them properly.

In this spirit, we'll begin by zooming in on the chemical structure of protein so you can wade through the hype and help cut the fat. Let's get started with the building blocks of all protein: amino acids.

Amino Acids in the Human Body

Like carbohydrates and fats, proteins are made up of carbon and hydrogen molecules arranged in specific ways. An amino acid is the smallest unit (or building block) of a protein. When amino acids are joined together, they form peptides (also known as peptide chains). These peptide chains form the primary structure of protein. Unlike other macronutrients such as fat and carbohydrates, protein also contains nitrogen within its amino acid groups.

In humans, amino acids are involved in energy production; hormone synthesis, activation and release; the production of ammonia and urea (a component of urine); and the regulation of proteins. They also have health-boosting antioxidant properties.

Even though numerous amino acids are found in nature, only 20 different amino acids are found in the human body. **All proteins in your body are made up of a combination of these 20 amino acids, which are categorized as either essential or non-essential.** These 20 amino acids are commonly found in animal-based sources of dietary protein.



The Eight (or Nine) Essential Amino Acids

Of all of the 20 amino acids that are found in the human body, only nine are considered to be essential. This means they are required for physiological functions yet can only be obtained from the food you consume.

Primal Point: Proteins are made in the body when amino acids are strung together. This is why amino acids are often referred to as the “building blocks” of your body.

However, many biology and biochemistry texts list only eight essential amino acids. This is because the ninth, histidine, has only recently been labeled as semi-essential. Research now shows that histidine is essential only for some people – specifically, for infants and competitive athletes with rigorous training schedules – which explains its new, in-between classification.

For continuity in our discussion, and because this program deals with the health of average adults (as opposed to infants or high-level athletes), I will defer to the traditional reference of eight essential amino acids. However, be aware that if you work out at a particularly intense level, you will also need to consider histidine in your nutritional plans.

The Eleven Non-Essential Amino Acids

The remaining 11 amino acids can be generated within the human body, if the essential amino acids are already present in the proper amounts. Two of these – cysteine and tyrosine – are sometimes considered to be semi-essential (more on this follows).

If someone is deficient in any of the essential amino acids, his or her body will be unable to produce the other proteins it needs, even when overall protein consumption is high. This is why it is essential for weight-loss and health enthusiasts to consume protein, and especially animal proteins when possible.



Cysteine and Tyrosine: A Special Case of Semi-Essentials

Cysteine and **tyrosine** are two amino acids that, while usually classified as non-essential amino acids, are sometimes considered semi-essential. This is because if you eat sufficient amounts of cysteine and tyrosine (from meat, milk, fish, poultry and legumes, for example), the body can use them in place of two other essential amino acids (methionine and phenylalanine, respectively).

Complete and Incomplete Proteins

Consuming protein (and therefore amino acids) every day is essential to your overall health and ability to function. This is because your body is able to maintain relatively stable levels of carbohydrates and fats. But it cannot maintain a consistent amino acid supply pool without a regular dietary supply.

The relative quantity of any one essential amino acid, as compared to all the others, forms a metaphorical bottleneck for your overall nutritional status. Therefore, you must have both an adequate intake of, and relative balance among the amino acids you eat.

Primal Point: The most limited essential amino acid you consume affects how well your body uptakes and uses the remaining amino acids. Thus, you should eat some of all eight essential amino acids each day, most easily found in complete proteins from animal sources.

Nutritionally speaking, food sources of protein are generally referred to as either complete or incomplete:

- A complete protein contains all eight essential amino acids
- An incomplete protein only contains some of the eight essential amino acids

Almost all complete proteins comes from animals. Examples include meat, fish, eggs and dairy products. In contrast, vegetables, beans and other plant products contain incomplete proteins, since they do not have all eight essential amino acids.



So what happens when you don't eat complete proteins? To answer this properly, you must understand **that your body cannot store essential amino acids for later use**. So, if you don't eat sufficient levels of essential amino acids, your body turns inwards and cannibalizes protein from the only source it can: your own muscles. You become weaker as a consequence.

Primal Point: Incomplete proteins contain only some of the eight essential amino acids. If you don't get essential amino acids from complete protein sources (which have all of the essential amino acids), your body may actually lose muscle instead of building it.

Just one day of insufficient essential amino acids consumption can wreak havoc on your muscles, and, as a consequence, your fitness! It is imperative for the right kinds and amounts of protein to be included in your diet.

To ensure this happens, I typically start my day with all eight essential amino acids right out the gate. I eat a breakfast consisting primarily of complete proteins such as eggs or meat, and include vegetables for fiber and other nutrients. That way I know that, no matter what my day throws at me, I have already eaten all the essential amino acids and have prevented my muscles from being sacrificed to supply these critical nutrients.

Complete Proteins and Vegetarianism

I know some current or former vegetarians will object to some of the aforementioned statements and claim that complete proteins can also be found in plant sources. This is true to an extent; you can combine two or more vegetarian sources of incomplete proteins to create a complete set of amino acids within a meal.

Known as forming **complementary proteins**, this technique might include pairing beans with brown rice, corn, wheat or nuts. Moreover, some soybean products such as tofu and soymilk are complete proteins, albeit without the ideal balance of amino acids to carbohydrates. So in theory, a meat-free diet can still deliver plenty of dietary protein.



Primal Point: Complete proteins contain all eight essential amino acids. Complete proteins can also be created by combining incomplete but **complementary proteins** from plant sources, such as when wheat, rice, and legumes are combined in one meal. That is why vegetarians might mix rice and beans in one meal; they must have complete proteins in their diet, otherwise they will lack essential amino acids.

However, here's the problem: All vegetarian protein sources also contain a lot of carbohydrates relative to their complete protein content.

So guess what happens? As a vegetarian who faithfully combines complementary plant protein sources, you would still have insulin spikes and an increased propensity to gain body fat. You would also likely be hungry all the time, due to a lack of healthy fats and animal protein that would otherwise reliably provide satiety and contentment. That's why the Primal Power Method recommends eating animal products as a healthy way to stay lean and fit.

Quality and Quantity of Protein Intake: Practical Applications

The quality of the protein you eat is very important. As in the case of carbohydrates, if you consume highly processed proteins you could develop health problems from the chemical additives contained therein, as well as from the processed (damaged) amino acids themselves.

To help you assess the quality of your protein intake, a list of healthy and unhealthy protein sources follows below. This will help you determine whether the addition or elimination of certain proteins would be appropriate for your diet. Remember that meat typically contains more fat than vegetarian protein sources, but that this protein-fat combo is the best, most natural way to eat to allow vital nutrients to be absorbed.



Healthy Protein Sources

- Meat (non-processed)
- Organ meats (from wild or pastured animals)
- Fish (wild caught)
- Milk
- Cheese
- Yogurt
- Almond butter
- Nuts
- Eggs
- Cottage cheese

Unhealthy Protein Sources

- Fish (farmed)
- Processed meat (lunch meat, sausage, chicken nuggets, hotdogs, etc.)
- Protein powders (most are unhealthy, but not all – remember to do your research – more on this later)
- Sugar-filled protein bars
- Soy products
- Fried meat (although bacon is okay on occasion)



How Protein-Based Diets Help Keep You Thin

Like many people, you may find it difficult to overeat or binge on foods that contain lots of protein and fat. However, with carbohydrates, we don't seem to have that same physiological reaction. When we consume large amounts of carbohydrates, we seem to be able to eat, eat, and eat. Hunger overtakes us, and we become ravenous for more. Researchers have studied the metabolic component of hunger, and they made two important observations.

First, it's possible to still be hungry after consuming large amounts of carbohydrates. Secondly, obese people seem to prefer carbohydrates more than individuals who are thin or lean.

Translation? Not only is a protein-based diet healthier than a carb-rich menu, but it also can be more satisfying. Evidence shows that consuming fewer calories on a carbohydrate-restricted diet can be more satisfying than eating up to 800 calories or more while on a carbohydrate-dominant diet. In other words, you will feel (and stay) less satisfied when eating 800 extra calories of empty carbohydrates instead of fewer calories of healthy, complete protein and its naturally accompanying fat.

This is one of the main reasons the Primal Power Method doesn't focus on calories alone. Understanding how calories work has its place. However, the caloric volume of your food intake is just one of many factors to consider when it comes to health and weight control.

Protein Supplements

When you think of protein, what do you think of? Meat? Perhaps you do, but then again, maybe not.

Grocery chains, health food stores and the internet are filled with America's new protein variants: soy, whey, casein, egg whites, rice and hemp – all usually in the form of some powdery substance that no longer resembles an actual food. With so many choices, many of us no longer look to our traditional protein source – meat from animals – as a viable way to receive our daily protein.



Over the last two decades, meat has become the enemy of public health. We are told that it makes us fat, it causes cancer, it's hard to digest, and you have to kill innocent animals to get it. In comparison, powdery protein alternatives seem easy in preparation as well as on our ethics and potential health worries. You just mix them with liquid, and like magic you have a "steak in a glass." No animal is harmed nor blood spilled. It sounds great, right?

Not really. It turns out some of these new miracle powders may not be as healthy as claimed.

In mid-2010, Consumer Reports investigated some of the leading meal replacement and protein drinks. In the study, an independent laboratory tested fifteen protein drinks, including ready-to-drink formulas and powders that were designed to be mixed with milk, juice, or water before consumption.

"Consuming these kinds of protein drinks on a regular basis can in some cases create the risk of chronic exposure, even at low levels, to heavy metals such as cadmium and lead that can pose health problems, particularly to vulnerable people," says Andrea Rock, the Consumer Reports editor for the investigation. Such at-risk groups include children under the age of 18, pregnant women, and people with diabetes or chronic kidney conditions, she says.

These products were tested for contaminants, including arsenic, cadmium, lead and mercury. Most products contained a low to moderate range of the heavy metals. However, Rock notes that people who have at least three servings of protein drinks per day might be exposed to high levels of three substances: arsenic, cadmium and lead. Some products even surpassed the maximum limit of heavy metal exposure proposed by the U.S. Pharmacopeia (USP), which sets voluntary standards for health products.

Three daily servings of the products below were particularly suspect.

The worst of the products tested in the aforementioned Consumer Reports study was Muscle Milk chocolate powder, which contained all four toxic metals, three of them at the highest levels of all products tested, as follows:



Muscle Milk brand chocolate powder contains:

- 5.6 µg (micrograms) cadmium
- 13.5 µg of lead
- 12.2 µg of arsenic
- 0.7 µg of mercury

Muscle Milk Vanilla Crème contained slightly less lead, but still exceeded the USP lead limit of 10 µg.

Muscle Milk's liquid Nutritional Shake Chocolate also tested high in arsenic, providing an average of 14.3 µg of arsenic per day, very close to the USP limit.

But it's not just Muscle Milk. Another popular brand - the EAS Myoplex Original Rich Dark Chocolate Ready to Drink Shake – contained an average of:

- 16.9 µg of arsenic
- 5.1 µg of cadmium

The proposed USP limits for these two toxins are 15 µg of arsenic and 5 µg of cadmium. Yikes.

I have used several protein supplements over the years, many of which were named in this Consumer Reports study. Needless to say, when I first read this study I cringed. How many toxins have these supplements introduced into my body over the years? I will never know, but I hope I didn't do too much damage.

Protein is an important macronutrient, but you don't need protein drinks to get enough, says Jeannie Gazzaniga-Moloo, Ph.D., R.D., a spokeswoman for the American Dietetic Association. She recommends people primarily turn to natural food sources. "Don't rely [heavily] on these protein drinks to be your primary protein source in your diet. Look to dairy, meats, and beans and some whole grains to provide protein," she noted in a June, 2010 article on www.WebMd.com.



More Thoughts on Protein Powders

Now in the perfect world you'd eat only organic, natural whole food sources of protein, not any kind of powders. But in the real world, the demands of family and work often mean we are eating less-than-ideal meals. A high quality protein powder, occasionally used, can be an excellent way of closing the gap between the ideal and the real.

I do, however, recommend certain type of high quality protein supplements, which I explain later in this section. Suffice to say, low-quality powders have no more place in your diet than low-quality anything. But even in the case of high-quality supplements, I never recommend them as protein replacements; they should be used as supplements only in certain situations, and even then in moderation.

Dietary supplements are vitamins, minerals, herbs and other substances meant to boost your nutritional intake. They may take the form of pills, capsules, powders or liquids. Protein powders are one example.

In our modern, often overly-scheduled world, a product that should be a legitimate, occasional dietary supplement (protein powder) has been distorted into a diet staple complete with unrealistic health promises. Many people overuse protein powders, and worse, purchase the cheapest options available to supplement their organic foods diets. That's like using rusty bent nails to hold together a deck made of the finest woods. It won't work.

You must choose dietary supplements with tremendous care. Many are designed to do only one thing: to make you believe you need them in order to be healthy. However, the only thing they inarguably do is make your wallet lighter.

There's another reason not to overuse protein powders. Natural carbohydrates and fats can be devitalized through commercial processing and refining. The same is true of proteins. Isolated protein powders made from soy, whey, casein and egg whites are frequently created via high temperature processing methods.

This heat alters the natural structure of the proteins until they become virtually unusable by, and even harmful to, the body (this chemical process is called a "denaturing" of the proteins).



Meanwhile, the levels of nitrates and other carcinogens in processed proteins are also often high. Thus although many protein powders are included in so-called healthy and low-fat diets, their use can actually deplete vitamin A and D reserves in the body.

As you've seen, many protein drinks and powders don't contribute to health, and may in fact introduce illness and toxic contaminants into our lives. I emphasize this point since the overuse of inferior protein powders is especially prevalent amongst busy folks who want to get fit.

Let me switch hats for a moment. Instead of a fitness expert's opinion, let me give you the FDA insider's perspective.

According to Nutrition Business Journal, the supplement industry is booming in the United States, to the tune of almost 24 billion dollars per year. This translates to approximately \$75 dollars spent on supplements per person each year.

Not only is the supplement industry in the U.S. big business, but it is also very loosely regulated. Most people believe when they purchase a supplement that it has been highly scrutinized and deemed safe by some federal agency such as the U.S. Food and Drug Administration (FDA) or U.S. Department of Agriculture (USDA). However, nothing could be further from the truth.

This is why I – a former FDA investigator – am meticulously careful about which supplements I use myself! The supplement industry is seen as the “Wild West of nutrition” by many experts, because of the scanty oversight that it receives. It's truly buyer beware! We'll discuss this at length in a subsequent section of this book, but here's what you need to know for now.

According to the National Institutes of Health (NIH), manufacturers do not have to provide the FDA with evidence that dietary supplements are effective or safe. In theory, manufacturers are not permitted to market unsafe or ineffective products, but in practice it's hard to stop. Once a dietary supplement is marketed, the onus is on the FDA to prove that the product is not safe in order to restrict its use or remove it from the market.

This essentially means that nothing happens to manufacturers selling unsafe supplements unless they are caught! Does this make you as uncomfortable as I am with the supplement industry?



Now, a lack of FDA regulation is not necessarily a bad thing. Indeed, I'm not a big proponent of the government regulating our entire food industry and telling us what we can and cannot eat (I'm sure you figured that out already). Just be aware that not all supplement companies (and not all food industry giants) are looking out for your health.

Moreover, certain food industry corporations have recently purchased some established, reputable, health-focused supplement companies. What was once a good product may no longer be the genuine article. Yet again it is the responsibility of consumers to continually do our homework and research up-to-date information about what we put in our bodies.

Bearing this in mind, it's not necessary to throw out all of your supplements. However, you do need to be diligent and do your homework before you purchase any such products. Always ask yourself: Do I need this to be healthy, or am I falling for a fad?

A great way to research a specific supplement is to conduct a web search on the supplement and its manufacturer. You could also ask questions at your local health food store; the staff typically has a great deal of knowledge about these products and will know up-to-date customer feedback on each. Most reputable health food stores will also refund your money for a supplement purchased in-store that is not living up to its claims, or to which you have an adverse reaction.

Finally, if a supplement is making unrealistic or exaggerated health claims, stay away from it. Such high-blown claims are one of the best red flags to raise your healthy suspicions when choosing supplements.

A great resource for information on supplements is **www.consumerlabs.com**. This company also tests functional foods — that is, foods that are “enhanced” or “enriched” with other ingredients to offer other benefits — and personal care products.

There is no miracle shortcut to wellness. That's why the Primal Power Method – which is far from an overnight quick fix – actually works. There are unhealthy short-term ways to lose weight on fad diets. But you can't fake the long-term fitness, vitality and health you'll get with the Primal Power Method. We'll review how to choose the right kind of protein powder, and other dietary supplements, later on.



The Right Way to Eat Protein

Eating protein is not just about magical powdered shakes and the occasional porterhouse steak. Keep quality and quantity in mind as we discuss the details of how to best include protein in your diet.

In theory, your body can only process and digest up to 30 to 40 grams of protein per meal – or so says a commonly promoted guideline. I have researched this claim and have been unable to find any information to back it up. So why would this assertion exist?

My belief is that when you consume 30 to 40 grams of protein, you will feel full. Indeed, you basically have to force yourself to eat more protein than this, a situation that limits most people to less than 40 grams of protein per meal. Plus, most protein is accompanied with fat, which is also nutrient- and calorie-dense, which helps you feel full and satisfied with your meal.

Forcing oneself to eat more protein despite feeling full is a common technique used by bodybuilders striving to gain muscle mass. However, I do not recommend you use this technique. Trust me – in my younger years I did this in order to gain muscle like my bodybuilding heroes. Suffice to say, the pain, bloating and frequent trips to the bathroom that this method ushered into my life were unhealthy and, more importantly, unnecessary!

So how much meat and protein should you eat? Well, the days of eating 32-ounce steaks are gone, which is two pounds of meat! My stomach hurts just thinking about that. To start, the portions of meat that you eat should be smaller than what you see in restaurants and in food ads. To keep things simple, try to make a portion of meat match the size of your fist. This portion will be around four to six ounces of meat per meal.

Obviously, the more muscular or active you are, the more protein you will need in order to maintain your current level of strength. Again you will have to experiment to determine your protein levels since they should be based on your muscle mass, weight, and whether or not you are trying to maintain or increase your muscle mass.

Try also to have some type of complete protein with each of your three main meals, such as eggs, fish, chicken or beef. Include some other



proteins such as yogurt, cheese or nuts in your snacks and smaller meals throughout the day.

Primal Point: A portion of meat should be roughly the size of your fist, although this will vary with the intensity of your exercise. Try to eat complete proteins, such as meat or eggs, at each meal.

The amount of meat you should eat also depends on your genetic makeup and on hormonal factors. Some people need a lot of dietary protein. However, others are not able to produce adequate levels of hydrochloric acid in their stomachs to break down and digest large amounts of meat. Everyone's different. In my experience, people who eat the correct diet of healthy organic foods often begin to produce enough acid to digest animal meat without any issues.

Moreover, individual requirements for essential amino acids vary greatly. For example, people with darker skin may need more tryptophan, which is found in eggs and dairy products, since this essential amino acid is used in the production of melanin (a substance that gives skin and hair its color). Conversely, some people have high dietary requirements for carnitine (a non-essential amino acid found in lamb and beef) since they have difficulty manufacturing enough on their own for healthy cardiac function.

For these reasons, we sell a high quality, great-tasting protein powder's on our website, **www.NewAmericanNutrition.com**. If you have a difficult time processing or digesting meats, this is an excellent way to get protein in another form.

Even if you can eat meat, protein shakes are still a great way to ensure you get the protein your body needs while traveling or on-the-go.

Protein and Exercise

Your body is made up of approximately 20 percent protein, of which 15 to 20 percent may be used for energy. In athletes, this figure can be as high as 50 percent. In other words, carbohydrates are certainly not the sole source of energy for your body, despite what you may have been taught.



You constantly lose amino acids via exercise, muscular contractions and movement, all of which stimulate the use of protein stores (i.e., protein metabolism). This is why athletes regularly eat large quantities of complete proteins to maintain easy-to-access supplies of amino acids for muscle repair, growth and energy.

In contrast, if your amino acid intake falls below the amount required for your activity level, your body will cannibalize your internal sources of protein, such as enzymes and structural proteins. This commonly occurs in conjunction with overtraining, leading to fatigue and muscle loss.

For example, you may have seen someone in the gym who trains for hours, yet never seems to get stronger. He or she is also likely to have less muscular tone than expected for such a level of exercise. Odds are, he or she is overtraining and does not consume enough protein to repair, maintain or build more muscle tissue.

According to research published in the May 2010 issue of the academic journal *Medicine and Science in Sports and Exercise*, consuming a protein shake before exercise correlates to a higher rate of calorie burning, even at rest, in the 24-hour period that follows the workout. Dr. John Berardi suggests having a liquid meal, such as a protein shake, since it can be absorbed more quickly than solid food.

I usually consume half of a protein shake prior to working out, and then the other half after I have completed my workout. This also helps me to be less hungry after my workout, alleviating any desire to overeat.

Primal Point: Every day you should eat roughly equal amounts of rapidly-digested and slow-to-digest proteins from a variety of sources to ensure you get all eight essential amino acids as found in complete proteins.

Primal Point: The post-workout period is the most important opportunity to eat for muscle gains. Working out with weights breaks down your muscle tissue, and supplying protein helps promote growth and rebuilding. Protein shakes are a practical on-the-go way to get the protein you need.





PART 3

NUTRITIONAL SUPPORT: SUPPLEMENTS, WATER AND SALT

Dietary Supplements

Put down the protein shake! Don't take that vitamin pill until you read further! The dietary supplements you are taking for your health may, in fact, slowly be killing you.

In an effort to curb carb consumption, many people have, as of late, turned to dietary boosters such as energy drinks or the ever-ubiquitous protein powders that dominate muscle magazines and juice bars alike. But there is definitely a right way and a wrong way to do this.

Before we go any further, you need to know about why you should not replace the carbs you cut with some random protein supplement. I'm here to tell you, as a former FDA insider, the truth about nutritional supplements will shock you, but will also potentially save your life.

The FDA is the federal agency charged with regulating dietary supplements. Most people think that this means the government is busily checking that all the vitamins sold at name-brand supermarkets, mega-stores, sports nutrition chain stores, and even health food shops are safe to consume. In fact nothing could be further from the truth.

I'm going to give you the information the FDA knows about supplements that rarely makes it into the public discourse. But first, let's address what nutritional supplements can do for you, and why I recommend taking a few – of the right kind.



Why Do We Need Nutritional Supplements?

The discussion of what has gone wrong in our food supply is, slowly but surely, bubbling up to the surface of our national health care conversation. Quality organic food is slowly becoming more readily available, and incrementally more people are becoming aware that the modern, conventional way of eating is slowly making us fatter... and killing us.

In the perfect world, we'd all eat a diet based upon freshly-picked, locally-grown organic vegetables, fruits, legumes and nuts, complemented by the meat, eggs and dairy products of organically and humanely raised animals. I talk about these ideas a lot, because the preceding sentence, coupled with exercise, really represents the proverbial holy grail of health.

However, we don't live in an ideal world. Not all of us have access to (or the funds for) the quality of foods we should be eating – the quality that your great-grandparents, who did not have access to processed junk, most likely ate. Making matters worse, few of us have much extra time to prepare homemade meals and snacks each and every day.

Moreover, if you eat poorly, it's likely that you are deficient in key vitamins and minerals. In addition, studies show that today's soils produce foods with about 30 percent fewer nutrients than those of a century ago. This is due to soil degradation (a natural or human-caused reduction in soil quality) and to the use of modern pesticides and chemicals. So even if you are eating a healthy diet, it is still possible that your nutrient intake is insufficient. For this reason, I recommend taking a well-rounded multivitamin every day.

So how do you split the difference between what's ideal and what is real? In an imperfect situation, for those times that our best efforts to eat what we know is ideal fall short, there are practical, real-world strategies you can use to work around the lack of time we all experience and to mitigate the short-comings of our failing food supply.

A big part of these strategies is the use of **nutritional supplements** (also known as a **dietary** or **food supplements**). These are products that aim to make up for or supplement certain nutrients in your diet, such as protein, fatty acids, or vitamins. Nutritional supplements may be botanicals (natural herbs) vitamins, minerals, amino acids, enzymes or



fatty acids, to name a few examples. They are often sold as pills (such as vitamins), powders (like protein powder), energy bars, or in a drinkable liquid form.

The Nutritional Supplements Everyone Can Benefit From

What dietary supplements can almost everyone benefit from? Here's my list of top choices to consider for your pantry, all of which are available at www.NewAmericanNutrition.com:

- High quality protein powder
- Multi-vitamins (organic whole foods based)
- Vitamin D3 (75% of Americans found to be deficient)
- Fish oil (must be high quality over 50% of fish oils found to be rancid)
- Green food supplements (greens)
- Protein/energy bars
- Curcumin/turmeric (potent cancer fighting and anti-inflammatory herb)

I think almost everyone benefits from taking a multi-vitamin. I encourage you to consider using nutritional supplements, such as protein powders and protein/energy bars, to complement your dietary efforts and, very occasionally, to help replace meals when your schedule is hectic.

But here's where I need to get a bit dark. You should only be consuming the highest quality, most natural supplements. I told you about my background with the FDA at the start of this book. That's what compels me to reveal the truth here... before you have one more sip of any purportedly healthy, pre-packaged protein or meal-replacement drink or energy bar. I'd like to now disclose what the government isn't protecting you from.



The FDA's Role in Regulating Dietary Supplements

Most members of the public are happy to hear that the FDA regulates dietary supplements. The limitations of the scope and application of this regulation, however, would shock most people. In words taken from the FDA's own website, here's how it works (with my italics):

[The] FDA regulates both finished dietary supplement products and dietary ingredients under a different set of regulations than those covering "conventional" foods and drug products (prescription and Over-the-Counter). Under the Dietary Supplement Health and Education Act of 1994 (DSHEA), the dietary supplement or dietary ingredient manufacturer is responsible for ensuring that a dietary supplement or ingredient is safe before it is marketed. [The] FDA is responsible for taking action against any unsafe dietary supplement product after it reaches the market.

This basically means that if the manufacturer of a nutritional supplement says the supplement is safe, the FDA takes the manufacturer's word at face value.

More depressing revelations are offered on the FDA website (with my italics):

Under DSHEA [the 1994 Dietary Supplement Health and Education Act], a firm is responsible for determining that the dietary supplements it manufactures or distributes are safe and that any representations or claims made about them are substantiated by adequate evidence to show that they are not false or misleading.

This means that dietary supplements do not need approval from FDA before they are marketed. Except in the case of a new dietary ingredient, where pre-market review for safety data and other information is required by law, a firm does not have to provide FDA with the evidence it relies on to substantiate safety or effectiveness before or after it markets its products.



What all of this really means is that there is precious little in the way of a safety net between you and a supplement manufacturer somewhere in the world whose primary goal is to relieve you of your hard-earned dollars. Like many cheaply made products today, many nutritional supplements consumed by Americans were made somewhere far overseas.

Are Your Supplements Made In China? An FDA Insider's Perspective

Although the FDA is not responsible for approving dietary supplements before they are sold, that is not to say that the FDA never investigates anything. I should know; I was an investigative special agent for the FDA.

During this time, I primarily conducted criminal investigations concerning our nation's food supply, prescription drugs, and unsafe supplements of all varieties. My investigations gave me rare insight into what truly affects the average person's health today. What follows is the truth I learned after nearly 10 years behind the curtain of healthcare and health product regulation in America.

The Wild West of Health

The world of dietary supplements can literally be the Wild West of the health industry. As previously noted, the FDA very loosely regulates dietary supplements. This is not necessarily a bad thing; I am not a fan of over-regulation either. However, it does mean that consumers must be very diligent when purchasing such products.

It is very difficult to find out what a supplement's true ingredients really are and where it was actually manufactured. The latter point is important, since different countries have varying levels of quality control for supplements (as for most other kinds of products).

A magic pill with a fancy label, sold at reputable name-brand store, doesn't necessarily equate to a high quality product. (Just ask celebrity TV trainer Jillian Michaels, who has been sued multiple times for endorsing bad supplements.)

Trust me on this. I was shocked to see the lab results on some of the products we were investigating while at the FDA. A great deal of them contained active pharmaceutical drugs, none or only some of the ingredients listed on the product's label, or toxic metals and chemicals harmful to humans.



Unfortunately, the supplement industry is rife with loose regulations and opportunism. This brings out some of the worst kinds of hucksters who will attempt to sell you anything in the hopes of making fast money. Most consumers would be horrified at how many criminal enterprises are involved in the supplement industry.

Nevertheless, there are also a lot of supplement companies out there who truly care about the consumer and the products they produce. You just have to have the right information to filter the good from the bad.

What to Look For When Purchasing Supplements

There are two main issues of concern regarding the quality and safety of dietary supplements. The primary concern is who is manufacturing the product, and where (i.e., under what country's set of regulations and oversight) is it being manufactured?

Secondly, is the product the real McCoy, or a cheap counterfeit of a high quality product that you love and trust?

Let's tackle the first issue: the where and who of the product's origin.

Look, when it comes to supplements, in the majority of cases, you get what you pay for. I frequently hear comments like "I just bought a bottle of 120 vitamins for \$9.99 at the bulk products warehouse in my neighborhood. Why should I buy a more expensive brand?"

For starters, cheap vitamins are usually not packaged at the point of manufacture. So the label that you recognize might buy the pills from the exact same place as the label you don't trust. Supplements are frequently repackaged by bulk warehouse chain stores, so you have no idea who makes them and no way of knowing the quality (or lack thereof) of the product.

Secondly, I know the supplement industry very well, and I promise you there is no way to make a high quality multi-vitamin and then sell it for \$9.99 and make a profit – at least not in the U.S. Again, the phrase "you get what you pay for" never rings so true as when you reach for no-name, über-cheap vitamin pills.



Why Made-in-the-USA Matters

"What do I care if my supplements are made outside of the U.S.? The price is fantastic!"

I hear this all the time. Let me give you an insider's perspective: You should care! There is absolutely no oversight or regulation concerning supplements manufactured outside of the U.S. To sell its products in the U.S., all a foreign company has to do is say that they comply with U.S. import and FDA regulations. They pinky swear, and you end up ingesting who-knows-what. I kid you not, it's that easy.

All supplements made in the U.S. or sold in the U.S after being manufactured in foreign countries must follow FDA Final RULE 21 CFR 111, which governs quality control of dietary supplements.

However, the consequences of not following this rule are, in practical terms, mostly symbolic. Foreign supplement manufacturers may be subject to few if any of their own domestic regulations, and the chances of actual prosecution are slim. In other words, there is little downside to selling you garbage.

For profit-hungry foreign companies, the low risk-to-cash reward ratio may prove too tempting, especially in the face of effectively "self-regulating" their compliance to U.S. standards. Some will not comply with any U.S. regulations at all, and the consumer will be none the wiser.

In contrast, a U.S.-based supplement manufacturer cannot slip so easily through technical loopholes. An American manufacturer can be prosecuted and ordered to pay damages for selling dangerous supplements. You can now see why buying American-made products is important.

According to the FDA Final Rule 21 CFR 111, all domestic and foreign companies that manufacture, package, label or hold dietary supplements, including those involved with testing, quality control, and dietary supplement distribution in the U.S., must comply with the Dietary Supplement Current Good Manufacturing Practices (cGMPs) for quality control.

In addition, the manufacturer, packer, or distributor whose name appears on the label of a dietary supplement marketed in the United



States is required to submit to the FDA all serious adverse event reports associated with use of the dietary supplement in the United States.

Nevertheless, only a small percentage of the hundreds of facilities producing drugs and dietary supplement products in China have ever been inspected by U.S. regulators, according to a new report from the Government Accountability Office. The implications of such lax regulatory oversight include the importation of dangerous adulterated products and counterfeit drugs into the United States, the Kansas City Star reported Nov. 6, 2010.

Remember, most cheap, mass-produced supplements found on the shelves of U.S. discount chain stores are made in Third World countries, such as China and India. If you haven't seen the manufacturing practices of these countries, take it from me it is not pretty.

The Unintended Consequences

Purina, the pet-food giant, found this out the hard way, when the company purchased wheat gluten (a binding agent used in food for animals) that contained melamine.

Melamine is a toxic chemical used in plastics, cleaning agents, laminates, fertilizer and other industrial products. It's **not** approved as a food ingredient in Europe, which applies to both domestic and foreign manufacturers whose products enter the European food supply chain.

In America, Melamine's related compounds **have no approved use** as an ingredient in animal or human food. Yet this industrial chemical found its way (via contaminated wheat gluten) into some batches of Purina pet foods in the U.S. Because the wheat gluten was contaminated, nearly 10,000 pets died of kidney failure. Sadly, it was a painful death for most of these pets.

Where did this cheap contaminated wheat gluten come from? China. Why did Purina purchase it? Because it was far cheaper than other wheat gluten options that were available at the time.

Now you may be relieved to hear this concerned pet food and not supplements or food intended for humans. Not quite... tainted wheat gluten was subsequently found in the animal feed supply. These animals (such as cattle) were then consumed by people, like you and me!



While at the FDA, some of my work involved the melamine/pet food contamination case. It was horrifying and heart-wrenching, especially when you consider that thousands of people lost their only or primary companion. These people had to live with the guilt that they killed their pet. They did so unknowingly but were ultimately responsible and had to watch their beloved companions die a slow and painful death. All this suffering was wrought so that someone, somewhere, could save (and make) a few extra bucks.

I can almost guarantee that this tainted wheat gluten ended up in products consumed by humans, including a few “health” food items. The only reason the contamination was even discovered was because the pets didn’t have the ability to process it and died.

Without these animal deaths, we would have never even known about it. How many other contaminated, cheaply made products are on the marketplace, without a proverbial canary in the coal mine to warn us of their dangers?

From my professional experience, I know that this type of tragic situation happens far more frequently than you would like to know. As someone who spent years investigating similar issues, I can assure you that I don’t give even a second glance to a “health item” that is really inexpensive – especially when compared to its competition. If it’s a bargain price, I’m pretty confident it contains cheap ingredients manufactured outside the U.S.

As someone with insider information, I am not willing to take that gamble. You shouldn’t either.

Counterfeit Products: A Worldwide Epidemic

The market for counterfeit health products also came under the purview of my previous role in the federal government. People would be appalled if they knew how prevalent counterfeit products are. Counterfeit supplements and pharmaceutical drugs are not just some black market phenomenon. These products have firmly made their way into the general consumer market.

The IACC (International Anti-Counterfeiting Coalition) estimates that brand-holders (legitimate companies behind name-brand, non-counterfeit products) lose approximately \$600 billion of revenue annually due to



counterfeiting. According to Michael Danel, the secretary general of the World Customs Organization, if terrorism did not exist, counterfeiting would be the most important criminal act of the early 21st century.

Here's the bottom line: If a supplement or pharmaceutical drug is popular, you can bet someone in China or another third world country is counterfeiting it. I'm not saying this as some off-the-wall scare tactic; I was there, and investigating this crime was my job.

I have been a part of several investigations relating to supplements and pharmaceutical drugs that would shake the core of the average American. People often think counterfeit products are sold in some dark alley by notorious criminals. Today this couldn't be further from the truth.

Counterfeit supplements and drugs can be found in almost every major retail chain store. That massive discount department-and-grocery store that you shop at every week? Yes, there.

Primal Point: Today, counterfeit products masquerading as genuine nutritional supplements are so prevalent they are almost unavoidable.

What to Look For in a Nutritional Supplement

For optimal health, try to only consume supplements that meet the following criteria:

- Made in the USA
- Organic
- Non-GMO (not genetically modified)
- Gluten-Free
- No added sugars or artificial sweeteners
- Made from natural, whole food sources (not chemicals)
- Product contact information clearly displayed on the supplement label and manufacturer's website



How to Avoid Counterfeit, Cheap, and Dangerous Supplements

The good news is that, with some basic tips, you can greatly reduce your likelihood of coming into contact with dangerous supplement products. Here are my top insider's tips to buying the right kind of nutritional supplement:

If a movie star or celebrity says it's the best thing since sliced bread, save your money. Better yet, just mail your money directly to them instead of purchasing the product, as it would probably be better for your health (insert sarcasm here).

If the supplement says it can cure an ailment, or have some dramatic, semi-miraculous effect on your health, avoid it. This is proverbial snake oil, and just like in those old Western movies, nothing has changed. The biggest ones to watch out for are "miracle" weight loss supplements. I like to call this the Dr. Oz effect... yes Dr. Oz does this all the time. Bottom line: There is no supplement or pill on this planet that will magically make you lose weight and get ripped in 30 short days... unless you consider death to be a valid weight loss technique!

Buy supplements that are considered pharmaceutical grade or professional grade. They contain higher quality ingredients, and usually undergo stringent testing before being brought to market.

Only buy supplements from a reputable company. Do your research and check them out. If the website is based in a foreign country, has no contact information or customer service number, there is a good chance this a company involved in nefarious activities. Believe me, these companies exist, and we are talking about your health, and possibly your life.

Always purchase supplements manufactured in the U.S., or that have strong U.S. ties. This is not a perfect way to avoid counterfeit and cheap supplements, but it is far better than buying supplements that are produced outside of the U.S. Note that U.S.-manufactured products are distinct from supplements "distributed by" an American company; be careful when you check the label. Look for the words "manufactured in..." followed by an American city to ensure a supplement is U.S.-made.

There are a great deal of supplements and health related products that are made in Third World countries that have little or no regulations or



quality assurance standards. I don't know how many lives are lost every year, or how many people fall ill due to low-quality cheap products made in the name of sheer greed.

Sadly, I'm not just talking about the people who use the products, but also about the folks who make the products. The sweatshop-like surroundings they often work in are deplorable – I visited many during my FDA tenure and I wouldn't wish those conditions on anyone. Please don't support these companies.

Find out what standards are used to test the quality of the ingredients and the final products of the supplement companies you want to patronize. Reputable companies will have an informative label on their supplements will have more information about their testing measures on their website.

If it is cheap, avoid it. No reputable company using high quality ingredients can manufacture high-end supplements cheaply. It just isn't possible. Don't waste your money.

Substandard products are not just sold in some back alley. They have found their way into your favorite stores nationwide. They become intermingled with legitimate, quality products, and you have no way of telling the difference (at least by the packaging of the product at the store).

The ingredients that go into counterfeit and repackaged products are often just plain dangerous. Every year numerous people die or are severely injured by inferior vitamins or other "health" supplements, and there is no way for the FDA to track where the capsules originally came from. No one gets punished except the consumer. It's truly a "buyer beware" scenario.

Why Cheap Supplements Aren't Worth It

Listen, we all like to save a few dollars. But it's better to skip the supplements altogether than choose a cheap pill or powder.

Let me pull back the curtain a little bit on how the retail supplement industry works. Usually when a health or fitness company wants to sell a health practitioner grade supplement, it has to enter into contractual agreements with manufacturers that it will sell their products at a



specified price. As someone in this business, I know exactly what it costs for a retail store or website to purchase products wholesale from a legitimate manufacturer.

An inappropriate price is therefore a red flag that indicates to me when a high-quality product has been knocked-off (counterfeited) and is being passed off as the real thing at a “bargain” price. **The Internet is filled with companies who sell counterfeit versions of the products that we offer.**

I often see these products sold for less than what we pay for them, so it makes it easy to determine they did not purchase them directly from the manufacturer. I know as I go to these websites regularly, and I can tell by the packaging and especially by the pricing that they are more-than-likely counterfeited (and many years of investigative work and FDA work doesn't hurt either).

Now the corollary to the preceding point: **If you regularly purchase a supplement and then suddenly find it somewhere else for much lower price, beware.** This is usually a telltale sign that the cheap product is a counterfeit. High-end supplements are often the first to be counterfeited because the potential profit margin is so high. Criminals can make more money by copying expensive products, since it often costs the same to copy an expensive brand versus a cheaper one.

Is your health or even your life worth the few dollars you save by buying questionable products? I say definitely not! At New American Nutrition, we are here to help you and make our decades of experience work for you. That is why we work so hard to make sure you get the best products available.

It takes extra sweat equity and a great deal of time and to purchase our products directly from the manufacturer, but we feel it is well worth it. This is how we can guarantee the quality and ingredients of the products we carry.

How My Experience Helps You

Very few people in health-related industries have my kind of experience when it comes to recognizing counterfeits and cheap quality supplements. I know fitness and wellness, but I also know the darker side of the commercialization of so-called health products.



I don't blindly offer supplements to my clients just because "they worked for me" or "they taste good." Rather, I know the research and manufacturing backgrounds behind the products. I want you to be the beneficiary of my knowledge. That's why I created the Primal Power Method.

The team at my company, New American Nutrition, has spent decades researching and using various health supplements. We only sell what we feel are the best products, made with the highest quality whole foods, organic and natural ingredients. All are tested with the most stringent quality assurance standards.

At New American Nutrition, we personally use every supplement we sell. Our mission is to grow through quality and integrity. We would never put our health or yours at risk in the name of profit.

Why New American Nutrition?

- Entire product line is researched and selected by a fitness expert and former FDA investigator.
- Rather than offer a multitude of choices in every product category, we only offer the best of each.
- We regularly eat, drink and use each product we offer.
- We buy directly from the manufacturer to avoid mistakenly purchasing counterfeit products.

You don't have to spend endless hours researching or worrying about whether or not the product you buy from us is counterfeit. Based on my FDA skills and contacts, we have done all the research for you and buy directly from the manufacturer. We never use third party vendors. This is more time-intensive on our end, but we feel it is well worth it.

Results matter to us, and the best results come from the best input. After so many years spent on the dark side of health-product related tragedies, I'm thrilled to now be at the helm of a company that pushes the information you need into the light.



More information is available on our website. In the meantime, check the label on your current vitamins and other supplements to see the quality the offer is on par with your goals.

I don't want your dietary supplements getting in the way of your diet!

Water

Water makes up nearly 60 percent of your body weight, and two-thirds of that water is contained inside your cells. It is estimated that 75 percent of Americans are chronically dehydrated. Here's how and why to avoid falling into this harmful category.

Water's Many Benefits

In the human body, water has many functions. For example, it acts as a solvent, a catalyst, a lubricant, a temperature regulator and a mineral source. It helps flush toxins out of your system, and cleanses your kidneys – all important aspects of your body's healing processes.

Water's contribution to health is often overlooked, yet it is one of the easiest and cheapest deficiencies to correct. Here are some helpful facts about water:

- Ever crave a 3pm pick-me-up? The solution maybe simple. A lack of water is the number one trigger of daytime fatigue.
- Preliminary research indicates that eight to ten cups of water per day is capable of significantly easing joint and back pain for up to 80 percent of sufferers.
- A mere two percent drop in the amount of water in your body can trigger short-term memory challenges with basic math problems and difficulties focusing on a computer screen or printed page.
- Drinking five glasses of water daily decreases the risk of colon cancer by 45 percent, slashes the risk of breast cancer by 79 percent, and cuts the likelihood of developing bladder cancer by 50 percent.



- Water is free. Unlike carbonated soft drinks, which can cost \$1.50 per bottle, tap water costs you nothing. If you nix your daily soft drink habit and drink filtered tap water, you could save \$550 or more per year!
- Water helps prevent bladder infections. Studies indicate that men who consume more than 10 glasses of water per day are less likely to develop bladder infections than those who do not.
- Water promotes cardiac health.

How Much?

According to most sources, your daily water intake should be about 12 cups of water (96 ounces) per day. This doesn't mean you should force down a jug of water right now. Instead, on average you'll consume four cups of water (32 ounces) through the water-rich foods you eat (such as fruits and vegetables). This leaves eight cups (64 ounces) that must come from fluid intake.

Consider our prehistoric cousins: Would they have been able to consume 64 ounces of water outside of what was already contained in their everyday foods on a consistent basis? Maybe, but maybe not! They certainly didn't have the same convenient drinking options that we have.

Primal Point: Water comes from both the fluid you drink and the water-rich foods you eat. Yet another reason to nosh on fruits and veggies!

An easy way to estimate the amount of daily water you need is to divide your weight in half and then drink that number in ounces of water. For example, if you weigh 150 pounds you need 75 ounces of water (which includes the water content of the foods you eat) each day. Obviously this is less than the recommended "text book" amount previously stated. However, I recommend using the weight-based guide since it is less generic and more individual-specific.

Be cautious not to drink too much water; a range of five to eight cups per day should be sufficient. Of course, on days that you are more physically active you will need to consume additional fluids and salt (since salt is also lost through sweat) to maintain proper hydration.



How can you tell if you need to drink water? Your urine will be bright yellow and smelly. If you are properly hydrated, your urine will be pale and practically odorless.

There is one exception to this observation. If you take a daily multi-vitamin your urine will appear yellow and have a strong odor in the hours after you take it, since your body excretes any vitamins and minerals it does not need, making your urine darker and smellier regardless of hydration. This is normal, and your urine will become clear if you are properly hydrated as the day continues.

Other common symptoms of dehydration include constipation, dry and itchy skin, acne, nose bleeds, repeated urinary tract infections, dry and unproductive coughs, constant sneezing, sinus pressure and headaches. If you suffer from one or more of these concerns, drink some more water and see if that alleviates the problem.

Water and Digestion

Some research has shown that consuming excessive liquids with meals dilutes stomach acid and puts undue strain on digestive processes. Avoid drinking too much liquid before or after a meal, and sip beverages slowly with meals.

Drinking ice-cold water also makes digestion very difficult. Avoid adding ice to your beverages; drink them at room temperature whenever possible. Adding a squeeze of fresh lemon to your water helps add flavor and has been found to aid in digestion.

I usually do not drink any liquids with my meals, and if I do, I only take a couple of sips. Since doing so, I have noticed a drastic improvement in the quality of my digestion, and I rarely feel any bloating or discomfort after a meal. If you are used to drinking a lot of liquids with meals, try to gradually reduce the amounts you drink with food over time, and see if you notice a difference.

Water On-the-Go

The best way to make sure you get enough water throughout the day is to carry a stainless steel re-usable water bottle everywhere you go. (Avoid aluminum bottles. Unlike steel, aluminum is a reactive metal. Translation?



It can leach toxins into your water.) I have kept a bottle of water near me for years. Remember, you'll drink more water when it's handy and convenient – set yourself up for success!

A reusable bottle is also far more environmentally friendly than plastic throwaway bottles. Plus, plastic bottles have been shown to leach Bisphenol A (BPA). This toxic chemical is an endocrine (hormonal system) disruptor. BPA can mimic the body's own hormones (primarily estrogen) and may lead to negative health effects. These are now widely available, and we also offer a car-cup-holder-ready BPA-free plastic bottle on our website.

Salt

Too much food-based fructose causes high blood pressure – and not salt, recent research reveals. This is a far cry from what you've probably heard about why so many Americans develop heart disease and hypertension (high blood pressure).

Probably the most telling fact is that we consume about fifty percent less salt today than we did before refrigeration. Before refrigeration foods were primarily cured (preserved) by using natural salt. Considering hypertension was almost unheard of before refrigeration, it just flat out doesn't make sense that salt consumption is a primary cause of hypertension today.

Sadly, instead of targeting our real dietary concerns (highly processed carbohydrates, especially those that contain fructose) we have been eliminating salt from our diets, causing even worse health problems than we originally started with.

Why? Salt is a vital dietary nutrient and very healthy when consumed in moderation. To wit, entirely eliminating salt from your meals may have detrimental health consequences.

This begs the question: what is the right way to eat this essential yet much-maligned mineral? The key is to know the right quantity and quality of salt to include in your new way of eating.



Most people believe that salt is just salt. However, there is a big difference between table salt (refined sodium chloride) and natural salt, such as sea salt. While table salt damages your health, natural salt has healing properties and is beneficial to consume. It's that simple.

The Dangers of Table Salt

Natural salt is made up of around 84 percent sodium chloride (the main mineral constituent of salt). In contrast, table salt is 98 percent sodium chloride. The remaining 16 percent of natural salt is composed of naturally occurring minerals. The remaining 2 percent of table salt consists of man-made chemicals – many of which are unhealthy.

Some of the negative consequences of eating table (i.e. refined) salt are that:

- It increases perspiration and decreases muscle contractility (i.e., ability of the muscle to contract) - including in the heart muscle.
- It acidifies the blood, which can cause liver, heart problems, rheumatism, and gastric ulcers.
- It creates arrhythmia (inconsistent heart rhythms) from its abnormal impact on nerves and hardens arteries and other tissues. It also fosters calcium and fatty deposits on the artery walls.
- It inhibits digestion, damages and depletes enzymes, upsets the body's sodium/potassium balance and creates an acidic stomach.
- It over-stimulates the nervous system by activating the adrenal glands.
- It puts a huge burden on the kidneys and can weaken them until they can no longer function.

Refined salt starts out as natural salt. However, its chemical structure is altered when it is dried at 1,200 degrees Fahrenheit. This process mainly leaves sodium chloride molecules behind, since most of the minerals found in natural salt are basically baked off. Next, anti-caking and flow agents are added, which prevent the salt crystals from clumping together. Unfortunately some of these chemicals are dangerous and unhealthy.



These may include the following:

Sodium ferrocyanide is an anti-caking agent found in common table salt. It is also used in:

- Pigment production
- Street and snow removal salts (as an anti-caking agent)
- The chemical separation of trace metallic ions (for use in various chemical processes)
- Cleaning agents
- Corrosion inhibitors
- Steel surface treatment
- Galvanization processes (e.g., of silver and pewter)
- Photographic development processes
- The fermentation of citric acid and ascorbic acid

Sodium aluminosilicate is another anti-caking agent used in table salt. It has a high brightness and relatively coarse particle size and can partially replace titanium oxide in latex paints as a flattening agent. In addition, some dry laundry detergents, as well as powdered carpet and room deodorizers, contain sodium aluminosilicate as a flow agent. Aluminum-based chemicals, including sodium aluminosilicate, have also been linked to heavy metal toxicity and possibly Alzheimer's disease.

Other chemicals added to refined salt include sodium silicoaluminate, which is thought to be associated with kidney problems and mineral malabsorption. Sodium acetate, another added chemical, may cause elevated blood pressure, kidney disturbances and water retention.

The Right Sources of Salt

The best way to make sure you are getting enough sodium in your diet is to eat a healthy diet with very little or no processed foods, and add salt to taste.



Research indicates that sea salt in moderation (between one-and-a-half and two-and-a-half teaspoons per day) is healthy. Of course, this is in conjunction with a nutritious diet with very few processed foods and few carbohydrates.

Sea salt has many natural healing properties and plays an important role in your body's healthy physiology.

Natural salt replaces lost electrolytes and helps to balance the body's pH level (a measure of the body's relative acidity or alkalinity such as exists in the blood). It helps to stimulate the liver, regulate muscle contractions (mainly of the heart), and stimulates the production of digestive acids. Salt is also effective in stabilizing irregular heartbeats, and the iodine it contains is crucial to the thyroid gland.

Salt is vital for balancing sugar levels in the blood. It's also necessary for the absorption of food particles through the intestinal tract, for clearing mucus plugs and sticky phlegm out of the lungs (particularly for sufferers of lung conditions such as asthma and cystic fibrosis), for clearing up sinus congestion and catarrh (excess mucus secretions of the sinuses) and for the prevention of muscle cramps, gout and gouty arthritis, and varicose veins and spider veins on the legs and thighs. The benefits of sea salt go on and on.

Happily, the last few years have seen a rise in the prevalence of food products containing sea salt instead of refined salt. Make sure to read product labels to find out what is in your favorite foods.

The two best natural salts to use are Celtic sea salt and Himalayan crystal salt. These natural salts are some of the most pure and minimally processed in the world. They also taste fantastic – far better than refined table salt. Fortunately, minimally processed sea salt and safely mined Himalayan salt are becoming more readily available.

Primal Point: For best results, ditch the regular table salt and salt-ridden processed foods. Use one-and-a-half to two-and-a-half teaspoons per day of natural sea salt instead.



A final word of caution: There are now several salt substitutes available to consumers. Generally, salt-like replacements should be avoided since they are made of unhealthy chemicals. Remember, sea salt is the best and most natural way to get proper amounts of sodium and other minerals.

If you do not have medical clearance to use even natural sea salt in your diet, choose health-boosting spices or dried herbs for a food flavor kick before turning to chemically-based pseudo-salt products (think garlic granules, fresh ground pepper or dried oregano to start).

Eating for Exercise: Salt and Sports

Now that you are working out, you may be tempted to reach for a sports drink to replenish your fluids and, as the marketing teams behind bottled beverages are quick to claim, your electrolytes (more on these molecules below). Please don't – that gulp of Gatorade or its neon-colored clone may seriously set you back, both financially and health-wise. Here's why. Your bodily fluids are salty, including your blood, plasma, and interstitial fluid (the fluid between your cells). Each has a high concentration of sodium chloride.

When you exercise you lose minerals such as sodium, magnesium and potassium, which are types of electrolytes (salts with certain chemical properties in common).

Electrolytes are what your cells – especially your nerve, heart and muscle cells – use to carry electrical impulses (nerve impulses and muscle contractions). These allow “messages” (sensorial input) to travel from one part of the body to another.

Your kidneys work to keep the electrolyte concentration in your blood constant. These electrolytes must be replaced through dietary sources. This brings us to sodium, which is one such electrolyte, and an important one at that. If your blood sodium levels drop below an ideal range, a condition known as hyponatremia, your body's fluid levels rise, and your cells begin to swell. Hyponatremia has come into the public eye because marathon runners have died from not replacing the sodium lost during sporting events by drinking only plain water.

This is why most sports drinks have sodium chloride or potassium chloride added to them, (not to mention a great deal of sugar, which



should be avoided). Although sports drinks contain electrolytes, they do not contain anywhere near enough to replenish your body's supply. Moreover, the electrolytes they do contain are usually from synthetic sources and not from natural vitamins and minerals. Meaning? What they do is drain you of your health and hard-earned money, as the following story illustrates.

Not long ago I saw an aspiring young sportsman in the local grocery store who filled his cart with about 20 bottles of a popular sports drink. I asked him why he had so many. He said he had been working out a lot, trying to make the high school football team, and needed to replace his electrolytes.

When I asked him why he needed to replace his electrolytes, he didn't know - it seemed he had simply picked up the idea from one of those popular sports drink commercials. I grabbed one of the bottles and showed him how much sugar was in his sports drink (20 grams!) and indicated that I had a better solution.

I explained that electrolytes are found in sea salt, and that they are important for muscle contractions, therefore very important for athletes to replace. I led him to the sea salt section of the store and told him that for a couple of bucks he could have all the electrolytes he needs. He just needed to add a pinch or two of salt to plain water to make his own sports drink, and a much healthier one at that. He was very thankful and just shook his head as he put back all of the sugary sports drinks. I encourage you to do the same.

Primal Point: Just add a pinch or two of natural sea salt to your bottle of water for a healthy and inexpensive sports drink.

I wish I could have had this information when I was a young athlete. It would have saved me a lot of money on sports drinks and helped me take better care of my health. Sometimes simple is best.





PART 4

PRIMAL MOVEMENT

An Active Lifestyle: Think Primal Movement, Not Exercise

What you eat plays an enormous role in your vitality and physical appearance. While the importance of nutritious, natural eating habits cannot be understated, it's also important to get moving.

I'd love to see you in the gym regularly. But before you bemoan the idea, know that a major part of any fitness-oriented lifestyle is not the sweat you generate in the gym. It's how much you move, all day long.

What do I mean by this? Consider the world that humans evolved in – a primal world without cars or modern appliances. Or gyms.

It is estimated that prehistoric hunter-gatherers expended three to five times the amount of energy that we do every day, all while consuming far fewer, if any, empty calories (they did consume much more healthy calories than we do today to fuel their activities). Yet they would not spend three or four hours in a gym during the week. Obviously, there were no fitness centers! The physical activities they performed would have been of short duration and high intensity, unless traveling for long distances.

How would our prehistoric brethren get their exercise? Their sport was life itself: hunting, gathering, building and maintaining shelter, and basic survival activities such as sprinting away from a predator.

In our modern world we have the ability to move a woefully insignificant amount. Our bodies function best in conjunction with a lifestyle that involves relatively constant movement all day ("primal movement"). Yet many of us go from home to a car to a work desk to a car to home to the couch to watch other people play sports on television.



Indeed, it's possible to be financially successful and barely move one's body whatsoever in our day and age. But it's just common sense that walking a few hundred steps per day is not enough to keep you lean, fit and sexy!

So what's the solution? It's Primal Movement, which is encompassed in two steps.

First, look for ways to be more active throughout the day. This is the non-gym stuff, and you already know about it: Take the stairs instead of the elevator. Park further away from the store. Go for a 10-minute walk around your workplace instead of drinking another soda or coffee. Walk to your colleague's desk at the office to talk instead of sending another email. Little movements, all day long, add up over time. That's the first part of Primal Movement.

Second, you need to start a regular exercise program. Don't worry if you've never even thought about joining a gym before. Here's all the information you need to be well-informed and comfortable when starting an exercise program.

For in-depth explanations of exercises you can do in your own home, check out our exercise DVD's at www.NewAmericanNutrition.com.

I created these DVD's to address what I saw as a lack of real information in the "fitness video" world.

Here's what I don't like about most fitness DVD's out there: Most follow the same formula: a roughly-one hour workout, that never changes. Ever. How non-motivating is it to do the same old routine from a DVD you've already seen 100 times? Plus, your physical results plateau if you do the same thing every workout.

The DVD's I created are not designed to lead you mindlessly through a workout routine. Instead – based on the first Primal Principle, "Knowledge is Power" – they are designed to teach you how and why to do certain exercises. Think of it as a mini-training course designed to help you be your own trainer.

In the DVD's, I demonstrate several exercises for each body part, so you can add variety to your home or gym workouts using your own knowledge and according to your personal needs and preferences. All the exercises



can be done in the comfort of your own home, using your own body resistance, or with some simple and low-cost exercise equipment such as resistance workout bands or a weighted jump robe, both of which are available on our website.

It's the same information I give when training clients one-on-one in a gym. It's the same information I use when training sports teams. It's the right way to do things to get results and avoid injury.

If you'd like a visual encyclopedia of the right way to work out at home, presented by yours truly, check out **www.NewAmericanNutrition.com** for more information on our DVD programs.

Secrets to a Successful Workout

An effective and healthy workout has several components, including a warm-up, some stretching, cardio training, resistance training, and a cool-down.

I don't want you wasting your workout time on ineffective exercise! This section will enable you to take charge of your exercise habits with confidence, and get better results without squandering your precious time.

We'll begin by describing some principles of exercise that will help you with your new exercise routine.

Categories of Exercise

All exercise can be categorized as either aerobic (meaning "with oxygen") or anaerobic ("without oxygen").

Aerobic training refers to a type of longer-term energy use in the body that requires the presence of oxygen molecules. Examples include jogging, walking, moderate bike-riding, and aerobics classes (now you know where the name came from). Aerobic exercise also activates your immune system, helps your heart pump blood more efficiently, and increases your stamina over time.

If you're new to exercise, you may not know what they mean down at the gym when they refer to the "cardio" machines or "cardio" classes.



Basically, cardio is aerobic exercise that elevates your heart rate and makes you sweat – think running, dancing or cycling. It strengthens your cardiovascular system (your heart and blood vessels) – hence its everyday nickname, cardio.

Anaerobic training is a type of short-term energy use in the body that does not require the presence of oxygen molecules. Shot putting, pitching, weightlifting, and powerlifting are all examples of anaerobic activities. This type of training makes you stronger, creates denser muscle tissue, and increases the efficiency with which your body burns energy (increases your metabolism).

Aerobic and anaerobic exercises may be further organized into these categories.

Interval training can be a combination of aerobic and anaerobic training. You perform this type of training by alternating short-bursts of high-intensity exercise with gentle recovery periods. Riding a stationary bike can be an example, if you go for a burst of all-out, high-intensity pedaling for 30 seconds, trying to reach 80 percent of your maximum heart rate (this is described in more detail below). This would then be followed by 30 to 90 seconds (depending on your current physical condition) of easy riding, bringing your heart rate back down. The sequence would then repeat. I usually do this routine for only twenty minutes (including my warm-up) before I'm shot! I can assure you that people looking to push themselves will find this is an excellent training method.

Strength training (also known as **resistance** or **weight training**) is a one- to four-set training routine, depending on your exercise experience, performing enough repetitions to exhaust your muscles. The weight you use should be heavy enough so that you can only perform a maximum of 12 repetitions, but no fewer than 4 repetitions. This is a great routine to do once or twice a month to break up your exercise routine. You can do this with almost any resistance-based exercise and is an excellent choice when you only have a short amount of time to squeeze in a workout.

Now as you advance you should incorporate more and more resistance training into your routine. I recommend setting a goal of eventually performing resistance training two to three times a week.



Core exercises target the 29 core muscles that are primarily located in your abdomen, back, and pelvis. These muscles are the foundation for movement and support for your entire body. Core exercises – such as crunches, planks, and back extensions – help improve your balance and stability. I prefer to perform two to three core exercises with each of my workouts, usually right after my warm-up, as it helps prepare me for the bulk of my exercise routine.

If you are new to exercise, perform core exercises at the end of your workout until you gain enough strength in your abs and back to prevent early-workout fatigue in these muscles.

Exhausting your core muscles, while appropriate for the more advanced exerciser, could prevent you from maintaining correct form on your other exercises, since your core muscles are critical for maintaining good posture.

For anyone interested in creating core strength check our website for articles on the subject. In addition, we sell a core-enhancing wheel, which is an excellent piece of exercise equipment to strengthen abs and other core muscles. For more details go to **www.NewAmericanNutrition.com**.

Combined stretching-and-resistance training is an excellent way to kill two birds with one stone. A really good example is the practice of yoga. In yoga you stretch your muscles but also hold sustained and demanding poses in such a way that your entire body is strengthened. Personally I love yoga and bring it into my workout routine once or twice a week.

The human body is highly adaptive when it comes to exercise. If you do the same routine every time you work out your body and mind will go on autopilot and you will see fewer results. If you are going to take the time to work out, why waste your time? Do it right, and mix it up!

Maximum Heart Rate

Your heart carries oxygen-filled blood from the lungs and pumps it throughout your system. It then carries blood filled with carbon dioxide (an odorless gas) from the body's extremities to the lungs where the carbon dioxide is then released as you exhale.

Your diet and exercise program directly affect the health of your heart. Your heart is a muscle, so just like any other muscle, it benefits from regular workouts.



People who participate in both anaerobic and aerobic exercise typically have resting heart rates of around 60 beats per minute. A person who does not exercise will have a heart rate of around 80 beats per minute or higher, depending on other health choices such as whether they smoke and how well they eat. A low resting heart rate is an important measure of good health.

The health of your heart also depends on its size and how well it is supplied with blood vessels. An athlete's heart is strong and healthy. It's relatively large and highly efficient at pumping more blood with each contraction (thus its lower resting rate). It takes less effort for an athlete's heart to pump blood than that of a non-athlete; in other words, a fitter heart is more efficient. So how do you get a strong and healthy heart? Of course you need to eat right and exercise.

To this end, it's important to know your maximum heart rate (MHR). Your MHR is the highest rate at which your heart is able to beat in one minute. To calculate what your maximum heart rate is, subtract your age from the number 220. For example, if you are 30 years old your maximum heart rate is 190 beats per minute. This method produces a good estimation of your MHR; there are more complex ways to get a more accurate number but for the purposes of this program, the preceding formula is more than sufficient to use.

Knowing your MHR is important so you can avoid either underperforming or overdoing it as you exercise.

Exercise heart rates are usually categorized into different "zones" of effectiveness, which you will often see printed on cardio equipment or posters at your gym. These typically include:

- **Fitness Zone:** This is considered the "fat-burning" zone. Here, your heart rate count per minute while exercising is around 60 to 70 percent of your MHR. Try to reach this level of intensity at a minimum while performing cardiovascular training or exercise. This will help you to burn your fat stores more efficiently. (Note that the term "fat-burning zone" is frequently misunderstood. The so-called fat-burning zone is not the only heart rate range where fat burning will occur. Remember, if you are exercising whatsoever you are burning fat, just at a varying rate.)



- **Aerobic Zone:** In this endurance-training zone your exercise heart rate is around 70 to 80 percent of your MHR. This is the perfect zone for those seeking to improve their cardiovascular and respiratory fitness. This zone also strengthens your heart and allows it to function better.
- **Anaerobic Zone:** Also known as the performance-training zone, working in this zone will improve your cardio-respiratory system and help you fight fatigue. In this high intensity zone your exercise heart rate reaches 80 to 90 percent of your MHR, allowing you to burn even more food-derived energy (i.e., calories).
- **Red Line:** In this zone, your body is putting forth its maximum effort as you work at 90 to 100 percent of your MHR. Unless you have been exercising for years and currently have a high fitness level, you should not be in this zone. Check with your doctor before pushing your body to this level.

If you are new to exercise, I highly recommend that you purchase a heart rate monitor so you can tell exactly which zone you are in. You can purchase a good monitor for \$30 to \$60 at any athletic store or even department stores like Target. There are different styles of heart rate monitors, each designed for different types of athletic events. The most common model resembles a watch that is worn on your wrist, although other models are worn around your waist or upper arm.

If you belong to a gym, you can also use the built in monitors on the cardio machines. Most modern cardiovascular exercise equipment has a heart rate monitor built in to its handles. If you are unsure how to use it or have a question, ask a gym employee to help you.

Resistance Training: Bulking Up Versus Toning Up

Resistance training is sometimes referred to as strength training or weight training. This type of exercise increases your muscular strength with weights (resistance) such as a dumbbell, barbell, resistance bands, or your own body weight.

Resistance training can increase muscle strength and bone density as well as produce denser, stronger muscles. This is not to knock aerobic exercise; it is also very important. However, many people underestimate



the value of incorporating resistance training into their workouts, and I don't want you to make the same mistake. The bottom line is that you will get the best results when you combine both aerobic and resistance training for a synergistic training effect.

Many people often mistakenly think that only bodybuilders should lift heavy weights. Time and time again, new gym-goers say, "I don't want to lift weights or do resistance training because it will make me look bulky." Women especially have this fear, since many of them want to have a more streamlined athletic look.

However, the belief that lifting weights automatically leads to bulky muscles is a complete myth, particularly in the case of women. Creating the muscular look of a bodybuilder takes years and years of intense physical training, a great deal of dedication, protein and supplements, and a deep understanding of human biochemistry. Nobody looks like that without years of extremely intense, multi-hour, daily workouts. Working out with weights three to four times per week will not turn you into a hulking green superhero running around in shredded pants, I promise you!

You will, however, look slimmer and more toned and feel much stronger and more energetic. Resistance training is an essential part of efficient weight loss and the maintenance of a balanced, healthy body.

Exercise Sequencing

There are several theories as to what is the optimal combination and sequence of targeted resistance exercises. However, we'll leave that discussion to the realms of bodybuilders and elite athletes. To get you going on a basic and healthy routine, I have provided you with some starter workouts that are safe, achievable and effective.

On the New American Nutrition fitness DVD's, exercises are performed in groups according to parts of the body. Even if you do not have the exercise DVD's muscle groups are generally broken up by fitness professionals into the groups outlined below. Thus we will target the following muscles, one at a time:

- Biceps (bi's)
- Triceps (tri's)



- Legs, including your calves (You will also mix in calves on other workout days.)
- Back
- Shoulders
- Chest
- Abdominals (abs)

Stretching and warming up are also covered in the DVD's. The primary reasons to warm up and stretch at the beginning of each workout are to prevent injury and prepare the muscles for physical activity. Warming up and stretching properly boosts blood circulation and elongates muscles in preparation for your activity.

New exercisers often jump right in and start working out without first warming up or stretching because they mistakenly feel these preparatory steps are unnecessary. Once their main, higher-intensity activity is complete, they typically don't cool down. However, I urge you not to make this novice mistake! Whether it is a low-impact or intense workouts, it is important to warm up, cool down and stretch.

An example of a good warm-up, stretch, and cool-down routine is as follows. Warm up with some cardio and then perform ten to fifteen minutes of stretching before beginning your resistance training. Performing your cardio first like this is a great way to warm up and get some aerobic training in at one time

After you have completed your resistance training, perform five to ten minutes of light cardio (as a cool-down) and then another five to ten minutes of stretching. This type of routine helps avoid injuries.

Primal Point: To prevent injuries, always include a warm-up, cool-down and some stretches in every workout.

A special note on abs: I recommend including abdominal exercises in your workout routine a minimum of two to three times per week. Then over time, as you build up strength, try to include abdominals in every workout. But remember, you cannot “spot reduce” fat from your stomach area by



doing abdominal exercises. Only a proper diet combined with exercise can give you a six-pack!

Below are two sample exercise routines. The first one is recommended for those of you just starting out. The second one is for those already at a more advanced fitness level, or who are stuck on a pound-loss plateau. The exercise DVD's will guide through the how-to's of each exercise.

Something is Always Better than Nothing

Now to the nuts-and-bolts of your personal exercise plan. While 30 minutes of exercise, three times a week is enough to create minimal health benefits, it typically isn't enough for weight loss or real fitness results. You need to perform at least three to four hours of exercise per week to truly see benefits in your life.

However, if you can't find at least three hours to spare, you can still do something. Start with what you can do, no matter what. When it comes to doing nothing versus doing at least something, remember that something is always the right choice.

A special note on the terms “rest days”: You will see that the recommended exercise routines that follow include days reserved for rest. One “rest” day, in workout terms, doesn't involve sitting still and doing nothing. Rather, it means that you shouldn't do any resistance training or any challenging cardio such as running or sprinting on that day.

You can, however, still do light, low-intensity movement on a rest day. I recommend going for a short bike ride or a walk, as long as this is a low-intensity activity for you. Try to do so after dinner if possible, to help relieve the stress of the day and assist with digestion. Once your body becomes more adapted to exercise you can take on more challenging cardiovascular activities on your rest days, but keep it basic and easy for now.

Rest days are essential to your long-term improvements in strength. It is during the “rests” between your workouts that your body can get to the important business of repairing and strengthening muscles and replenishing essential energy stores. It is the proper balance of the right intensity of work (exercise) followed by restful activities that will give you the best results.



Finally, if you are feeling really run down or are coming down with a cold, you should take a break and get some rest. Your body will thank you and be revived for your next exercise session.

Workout #1: True Beginners

Perform the DVD exercises in the order they are written on each day of a seven-day cycle. If you do not have the exercise DVD's just follow the outlined plan below, but you will need to incorporate exercises per body part, by doing your own research. Below is not intended to give you an entire workout routine, but more of a guideline on what a beginner workout routine will look like.

Day 1	Bi's, back, tri's and calves. Two to three sets of each, 12-20 reps per set, 30 to 45 seconds of rest between each set. 15-30 minutes of cardio. A note on cardio: If you haven't exercised in years, or have never participated in a workout program, start with a maximum of 10-15 minutes of cardio per workout day.
Day 2	Rest day
Day 3	Chest, shoulders, legs and abs. Two to three sets of each, 12-20 reps, 30 to 45 seconds of rest between each set. 15-30 minutes of cardio (or 10-15 for true beginners).
Day 4	Rest day
Day 5	Bi's, back, tri's and calves. Two to three sets of each, 12-20 reps, 30 to 45 seconds of rest between each set. 15-30 minutes of cardio (or 10-15 for true beginners).
Day 6	Rest day
Day 7	Chest, shoulders, legs and abs. Two to three sets of each, 12-20 reps, 30 to 45 seconds of rest between each set. 15-30 minutes of cardio (or 10-15 for true beginners).



Workout #2: A More Advanced Routine

Day 1	Bi's, back and calves. Two to three sets of each, 12-20 reps, 15 to 30 seconds of rest between each set. Twenty to 35 minutes of cardio, such as speed walking, running, bike riding, or using other cardio equipment if you belong to a gym.
Day 2	Chest, tri's and abs. Two to three sets of each, 12-20 reps, 15 to 30 seconds of rest between each set. Twenty to 35 minutes of cardio.
Day 3	Rest day
Day 4	Legs, shoulders and calves. Two to three sets of each, 12-20 reps, 15 to 30 seconds of rest between each set. Twenty to 35 minutes of cardio.
Day 5	Bi's, back and calves. Two to three sets of each, 12-20 reps, 15 to 30 seconds of rest between each set. Twenty to 35 minutes of cardio.
Day 6	Chest, tri's and abs. Two to three sets of each, 12-20 reps, 15 to 30 seconds of rest between each set. Twenty to 35 minutes of cardio.
Day 7	Rest day

For those of you who have limited space I recommend you purchase a jump rope, as they are instant cardio and can be taken anywhere. We sell two excellent jump ropes on our website one for beginners and one that is weighted for more advanced exercise enthusiast.

For now, don't be intimidated when starting a new exercise program. It's normal to feel a little uneasy about something new that you may not completely understand. I know I was lost the first time I ever joined a gym, although I realized that there was no shortcut to optimal fitness. Be patient as you gain more knowledge and experience, and working out will become easier over time.



Including Exercise in your Family Plans When You Can

One of the most common exercise excuses is a lack of time. Consider that the average American watches over four hours of television per day. In this case, not having enough time is an excuse that just doesn't resonate with me. Most of us spend over one day per week watching television. So, I'm sure you can find three to four hours out of that time to do something more productive – like exercise!

But let's suppose you are super busy with work and family commitments and don't even have the extra time to turn the TV on. If you are like me and have very little time to spare, try this: Rather than trying to find time to exercise, try to fit exercise into your existing family and work routines. Here are some exercise suggestions for super-busy people with family and work commitments:

- Try to take a walk every night after dinner, and include your partner or kids in the activity. Not only does this after-dinner stroll help with digestion, it is family bonding. Don't let a cold or rainy climate stop you. Just invest in the right kinds of outdoor clothes and enjoy moving in the fresh air. Learn more in my article on "The Power of Walking" at www.GarysHealthTips.com.
- Instead of zoning out on movies or video games, plan family activities around kid-friendly exercise such as bike rides, playing in the park, or just playing physically active games in your yard. You don't have to be in a gym to get your heart pumping, and you'll be teaching your kids the value of healthy movement.
- On your lunch break hit the gym or go for a run or a jog. If you are short on time and don't have access to a shower, at least go for a short walk outside in your office clothes. Remember, something is always better than nothing, and every step counts!
- Plan to exercise during your children's naps or after they go to bed. You can use the New American Nutrition DVD and work out in your own home while the kids are asleep. Just let the dirty dishes and laundry pile up from time to time and get moving – remember your health is more important than a spotless house!



- Run, walk or ride your bike to and from work if possible. You'll lose weight and save a lot of gas money in the process. Another trick if your work is a long way from your home is to park a reasonable distance from your office, then walk, jog, run, or ride your bike the remainder of the way.

It is important that you plan a realistic exercise schedule that is in harmony with your everyday activities and responsibilities. If you don't, it's easy to miss a couple days and then fall into old sedentary habits. Once you have established your routine it becomes easier and easier to keep going, since movement will then be an integral part of you and your family's daily activities.

Family exercise time is not the only way to be a role model to your children. It is just as important that they learn healthy eating habits from you as well. After all, if they don't find out about proper nutrition from you, how will your kids learn to live energetic and healthy lives?

Of course, we all have bad days when plans go awry. However, I have almost always been able to squeeze in a little exercise every day no matter what, even if it's just a short walk. I truly believe one of the best gifts you can give your kids and loved ones is to be an exercise role model and demonstrate the value of healthy movement. It just takes a bit of time management and dedication to get there.

Finding Balance between Workouts and Work

I know from personal experience it can be very hard to fit it all in. Nevertheless, it's so worth it.

For example, during my career in the federal government, exercising was very important to me for relief from my day-to-day stress. Most of the time while traveling out of town for work I could find a gym nearby. However, even when I didn't have access to a full fitness center, I did what I could, taking 30 minutes for a run, doing some sit-ups and push-ups, or using exercise bands. I always felt better after completing my midday workout, since it helped release the tension I had built up throughout the day.

We specialize in selling exercise equipment that can be used in your home, office, or while traveling. Most of our products are compact so they can be taken anywhere and used in many time-constrained situations,



when you just want to get in a quick workout without the need for a gym. Our website **www.NewAmericanNutrition.com** has more details.

Making it Happen

You need to be adaptable! Your workout program or routine should never suffer because of your schedule. Being very busy is why a lot of people get off track or stop exercising altogether. Being busy will always be a reality in our lives; we need to plan around this, not succumb to the phenomenon.

Remember, if you miss a workout the world will not end. Just get back on track right away and do your missed workout on the next day. From time to time I have missed several workouts in a row due to my work schedule. But I didn't just throw in the towel. I picked up where I left off when I had the time again.

Missing a couple days here and there is not going to make you gain weight or get completely out of shape. It's what you do over the long term that really counts!





PART 5

THE NEXT STEPS

Now that you've been through the meat of the program (no pun intended) here are some important practical tips that tie together concepts for all parts of the Primal Power Method. These will help you keep on track in your continued quest for optimal health.

Simple Food Rules to Live By

Keep these food rules handy as you make your daily meal choices. (Partially adapted from Michael Pollan's book *Food Rules*.)

1. **Eat food.** It is always best to eat food (and not processed junk) in its natural form. Support your local economy by shopping at Farmers' Markets or family-owned food stores.
2. **Don't eat anything your great-grandparents would not recognize as food.**
3. **Avoid foods that contain high-fructose corn syrup.**
4. **Avoid foods that contain more than five ingredients.** The more ingredients a food has, the worse it usually is for your health.
5. **Avoid foods that contain ingredients that you cannot pronounce or recognize.**
6. **Avoid foods that are advertised on television.**
7. **Shop on the outside edges of the supermarket – not in the middle aisles.** The middle aisles are filled with your favorite sugary, carbohydrate-loaded, processed foods, while the outside aisles and walls are usually stocked with produce, dairy and meats in their natural, unadulterated forms.



8. **Eat foods that will eventually rot.** Nature has a built-in system to help us to eat the freshest foods. For example, an organic orange may last a week or two on the counter before it starts to go bad. However, a man-made McDonald's hamburger and fries will literally not rot – it has so many preservatives and additives that, if left uneaten, it will look almost the same after several months pass!
9. **Don't ingest foods made in industrial settings where everyone is required to wear a surgical cap.** If the worker preparing your processed meal on an assembly line is required to wear what appears to be the modern germ warfare suit, this is a bad thing! The less processed your food is, the better.
10. **Sweeten and salt your food yourself.** This allows you to have control over the quality and quantity of the sweeteners and salt in your diet.
11. **Eat sweet-tasting foods as they are found in nature.** Use whole, unprocessed, unpackaged fruits as your natural dessert selection.
12. **The whiter the bread, the sooner you'll be dead.** (This is one of my favorites.)
13. **Pay more, eat less.** Healthy, natural foods may cost more than highly processed pseudo-food products. However, they are more filling and have more nutrients, meaning you will be satisfied more quickly and eat less overall. You may pay more up front, but will surely save on health care costs in the long run.
14. **Stop eating before you are full.** There is a lag between the time you have actually eaten enough, and the moment you feel satisfied. For this reason, stop eating when you feel 70 to 80 percent full, since it takes about 10 to 15 minutes for the chemicals in your brain to signal that you have had enough. This will help you to avoid overeating by letting your brain catch up to your stomach.
15. **Eat when you are hungry – not when you are bored.**
16. **Eat slowly and chew your foods fully.**



17. **Limit your snacks to mostly unprocessed plant foods.**
18. **Treat treats as treats.**
19. **Plant a vegetable garden if you have space.**
20. **Cook, cook, and cook!** If you cook your food yourself you will appreciate it more. Plus, it's a lot cheaper than buying prepared foods.
21. **Break the rules – once in a while.** We are not food monks. Have your favorite food every once in a while and enjoy it – even if it is less-than-optimal for you.

Simple Supplement Rules to Live By

The cornerstone of your ultimate success lies in a natural, whole-foods diet and consistent workout habits. There is absolutely no magic supplement or miracle powdered drink that will make up for a junk food diet or a total lack of exercise, period. However, supplements, vitamins and protein powders can be powerful and positive complements to a solid overall health program.

We previously discussed the underworld of supplement manufacturers in depth. You will recall that chain store shelves are filled with cheaply made, low-quality, and sometimes downright dangerous (if not counterfeit) powders and so-called vitamins. I want you to be careful about what you choose to ingest.

NewAmericanNutrition.com has more articles and information about how to avoid dangerous and counterfeit pills and potions. In the meantime, here's a recap of my FDA-insider hit list of supplement criteria,

Here's what to look for when complementing your whole-foods meals with vitamins, protein powders, and other dietary supplements:

- Made in the USA
- Organic
- Non-GMO



- Gluten-Free
- No added sugars or artificial sweeteners
- Made from natural, whole food sources (not chemicals)
- Product contact information clearly displayed on the supplement label and manufacturer's website

Avoiding Dangerous and Counterfeit Dietary Supplements

A quick review of the tips previously discussed in Part 3:

- Avoid products endorsed by a famous actor, singer or model. Choose quality, not celebrity.
- Don't buy cheap supplements. It takes money to make a safe, effective health product. It's no bargain when a cheaply made supplement costs you your wellbeing.
- Avoid over-the-top "miracle" weight loss claims. If it sounds too good to be true, it is.
- Research the manufacturer. Look for a U.S.-based address and phone numbers. Try contacting their customer service line to ensure they are above-board.
- If you regularly purchase a supplement and then find it somewhere else for much lower price, beware. This is usually a telltale sign that the cheap product is a counterfeit or repackaged expired product.
- Always purchase supplements manufactured in the U.S, or that have strong U.S ties. This is not a perfect way to avoid counterfeit and cheap supplements, but it is far better than buying supplements that are produced outside of the U.S.
- Buy supplements that are pharmaceutical grade or professional grade products. They use better quality ingredients, and usually undergo more stringent testing.



- Find out what standards are used to test the quality of the ingredients and final products of the supplement companies you want to patronize via product labels and manufacturer websites.

Clean up your Supplements

Get out all of the bottles and containers of dietary supplements you currently use. I'm talking about vitamins, fish oil, protein powders and bodybuilding supplements, the lot.

Check to see if they meet the preceding criteria. Visit the manufacturer's websites. Actually read what's written on the product labels – even the fine print. Phone the manufacturer with your questions, if you have any. Get to know what you are really putting in your body.

If you are not completely sure that you are consuming the best quality supplements available, I strongly recommend you stop using them and check out other options. Just like junk food, junk supplements don't serve your ultimate goals. More information on this subject is available on our website, **www.NewAmericanNutrition.com**.

There are a lot of reputable supplement manufacturers out there. There are also a lot of cash-hungry, dishonest sham artists who are happy to sell you junk or dangerous pills to make a fast buck. I used to investigate them professionally; now I am trying to help make you aware of them. The bottom line: you need to be incredibly careful about what you put into your body.

I spent years investigating supplement manufacturers when I worked for the federal government, and I have spent decades using various items as a customer. From this experience, I have hand selected each dietary supplement we offer on our website, www.NewAmericanNutrition.com. I'd love for you to order through us because I know you'll be getting the best of the best. I personally stand by all of what we offer, and I use them myself.

Whomever you choose to purchase supplements from, please research their products meticulously first. The supplement descriptions on our website offer a template of what to look for in each product category. Only use the best quality items that meet these criteria.



Take it from a guy who has worked way behind the curtain and seen the proverbial puppet strings: You don't want to mess around when it comes to taking any kind of dietary supplement, period. Insist on the best – your health depends on it.

Practicing the Primal Power Principles

At the beginning of this book I told you that we would conclude with a call to action. Well, here we are.

I am thrilled that you have read this book. But I want you to take it one step further. Whether your intention in reading was to tweak an existing and successful regime, or to completely overhaul a sedentary lifestyle, now is the time to do something.

I want you to follow the Primal Power Principles:

- Knowledge is power
- Avoid extremes
- Keep it simple
- Something is better than nothing
- Take action today and every day

Everyone knows they should eat more veggies and go for walks. So why aren't we a nation of fit people? Because knowledge without action does not create results... and so many of us fail to take action.

I want you to do one better. I want you to take action today, and every day. Ask yourself, what simple, realistic action steps can you take today to work towards your health goals?

Remember, the little things add up. Not putting an extra helping of sugar in your coffee. Going for a walk on your lunch break instead of drinking a cola. Deciding the night before what you will have for a healthy lunch the next day. What else?



The answer will depend on your level of commitment to your goals and your starting point. But here are four steps to start:

1. Eat the Primal Power Way

Basic: Choose at least five of the preceding “21 Food Rules to Live By” and use them, starting – you guessed it – today. Above all, eat more veggies and fewer refined carbs. Then, clean up your supplements. Visit my website and read the supplement descriptions in various categories to get more of a handle of what FDA investigator-vetted, non-counterfeit supplements look like.

Advanced: Purchase my meal guide and nutrition-related Primal Reports from my website to get even more in-depth knowledge about what may be keeping you from being healthy. Topics include what you need to know about artificial sweeteners, organic foods, the dangers of soy products, and the truth about genetically modified foods.

2. Master Primal Movement

Basic: Get moving! The bare bones approach: Go for two or three 10-minute walks every day – say, after each meal. It's not enough, but if your current fitness program involves watching sports from the comfort of your couch, it's an excellent start.

Advanced: Order my DVD's and a Workout Survival Kit of easy-to-store, use-anywhere exercise equipment and start a home-based fitness routine. Set a goal of at least three 30-minute workouts per week to start.

3. Get More Primal Power

Basic: Check out my blog www.GarysHealthTips.com. Remember, knowledge is power! It's also motivating. My blog has tons of use-it-today, totally free info. Then, “like” me on Facebook for more motivational tips in your daily feed.

Advanced: Buy and use my total how-to lifestyle overhaul: *Factor X: The Last Health Program You'll Ever Need*. Here's the scoop: It's not cheap and it's not easy. It took several years to develop and is demands serious commitment. But if you're “there” – physically unfit but with are laser-focused on rebooting every aspect of your wellbeing and deeply examining your current health habits – Factor X is what you are looking for.



4. Post the Primal Principles

Stick them on your fridge, your bathroom mirror, your keyboard, wherever you'll see them. Pay special attention to Principle #5, every day. You've got to get your mind focused to get results!

- Knowledge is power
- Avoid extremes
- Keep it simple
- Something is better than nothing
- Take action today and every day

Now that you have read the entirety of this book, I encourage you to pass your new knowledge along to someone else you know who wants to improve his or her health, energy and vitality – and maybe even lose some weight in the process! You can also share your success story on our website at **www.NewAmericanNutrition.com** and **www.GarysHealthTips.com** in the testimonials section. We'd love to hear from you.

Above all, always remember that you are the one in control of your choices, your body and your health. I wish you the best in your wellness and exercise future, and I look forward to hearing of your success with the Primal Power Method.



Sources

"1972: Survivors Found 10 Weeks After Plane Crash." BBCnews. 22 DEC 2005. Web. 17 NOV 2010.

21 CFR 101.9 Nutrition labeling of food.

A Calorie Counter. "10 Surprising Foods that Contain Trans Fat." *Acaloriecounter*. Web. 9 APRIL 2011.

"About Fiber." *Wheatfoods*. Web. 5 NOV 2010.

Adams, Mike. "One-Third of American Diet is Junk Food and Soft Drinks: We're Malnourished and Obese at the Same Time." *Naturalnews*. 2 JUNE 2004. Web. 4 NOV 2010.

All About Trans Fats. Washington DC: Weston A. Price Foundation, 2006.

Allbritton, Jen. "Zapping Sugar Cravings." *Wise Traditions* 11.4 (2011): 53-59.

Appleton, Nancy. *Lick the Sugar Habit* (New York: Avery Penguin Putnam, 1988).

Astrup, Arne, et al. "Atkins and other low-carbohydrate diets: hoax or an effective tool for weight loss?" *The Lancet* 364.9437 (2004) 897-899.

Atkins, R. C. Dr. *Atkins' New Diet Revolution* (New York: Avon Books, 2002).

Baba, Neal H., et al. "High protein vs high carbohydrate hypoenergetic diet for the treatment of obese hyperinsulinemic subjects." *International Journal of Obesity* 23 (1999):1202-1206.

Baily, Steven. *The Fasting Diet* (McGraw-Hill, 2001).

Bate, Roger and Amir Attaran. "Counterfeit drugs: a growing global threat." *The Lancet* 379 (2012): 685.

Berardi, John Ph.D. "The Importance of Post Workout Nutrition." *Johnberardi*. APR 2002. Web. 23 NOV 2011.

Bercardi, John, and Ryan Andrews. *Nutrition: The Complete Guide* (Carpinteria: International Sports Science Association, 2009).

Bernstein and Willet. "Trends in 24-h urinary sodium excretion in the United States, 1957-2003: a systematic review." *American Journal of Clinical Nutrition* 92.5 (2010): 1172-1180.

Biro, Frank, et al. "Pubertal Assessment Method and Baseline Characteristics in a Mixed Longitudinal Study of Girls." *Pediatrics* 126.3 (2010): 583-590.



Bistrian B.R., et al. "Nitrogen metabolism and insulin requirements in obese diabetic adults on a protein-sparing modified fast." *Diabetes* 25 (1976): 494-504.

"Biomedicine: The (Political) Science of Salt." *The American Association for the Advancement of Science* 281.5379 (Aug 1998): 898-907.

Booth, Frank W. "Reduced physical activity and risk of chronic disease: the biology behind the consequences." *European Journal of Applied Physiology* 102.4 (2008): 381-390.

Butter is Better. Washington DC: Weston A. Price Foundation, 2010.

Campbell-McBride, Natasha. *Put Your Heart in Your Mouth* (Medinform, 2007).

"Carbohydrates: Good Carbs Guide the Way." *Hsphharvard*. Web. 17 FEB 2011.

Carpenter, Kenneth. *Protein and Energy: A Study of Changing Ideas in Nutrition*. (New York: Cambridge University Press, 1994).

CDC. "2007 National Diabetes Fact Sheet." *Cdc*. 12 MARCH 2010. Web. 10 APRIL 2011.

Centers for Disease Control and Prevention (CDC). "State Indicator on Physical Activity, 2010." *CDC*. Web. 23 MARCH 2011.

Chek, Paul. *How to Eat Move and Be Healthy!* (San Diego, CA: C.H.E.K. Institute, 2009).

Chung, Yoon C., et al. "Protein digestion and absorption in human small intestine." *Gastroenterology* 76.6 (1979): 1415-1421.

Colby, Sarah E., et al. "Nutrition Marketing on Food Labels." *Journal of Nutrition Education and Behavior* 42.2 (2010): 92-98.

Collins, Anne. "How we Digest Carbohydrate." *Annecollins*. Web. 5 NOV 2010.

Collins, Gary. *Factor X: The Last Health Program You Will Ever Need* (Albuquerque: Second Nature Publishing, 2012).

Cordain, Loren, et al. "Origins and evolution of the Western diet: health implications for the 21st century." *American Journal of Clinical Nutrition* 81.2 (2005) 341-354.

Czapp, Katherine. "Against the Grain." *Westonaprice*. 16 JULY 2006. Web. 11 JAN 2011.

Davis, William MD. "Wheat: The Unhealthy Whole Grain." *Lef*. 1 OCT 2011. Web. 5 JULY 2012.

Di Pasquale, Mauro G. *Amino Acids and Proteins for the Athlete: The Anabolic Edge*. (Boca Raton: CRC Press, 2008).



"Diabetes Statistics." *American Diabetes Association*. Web. 31 AUG 2010.

"Diabetes to Double or Triple in U.S. by 2050." *Reuters*. Web. 22 OCT 2010.

"Dietary Supplements: Background Information." *Odsodnih*. National Institute of Health. Web. 9 NOV 2010.

Doheny, Kathleen. "Report: Protein Drinks have Unhealthy Metals." 3 JUNE 2010. Web. 9 NOV 2010.

Dolson, Laura. "What you Need to Know About Complex Carbohydrates." *Lowcarbdiets*. 14 MAR 2009. Web. 2 DEC 2010.

Dyer, Tommy. "Does Fat Make You Fat?" *Themovementdallas*. 16 APR 2009. Web 29 OCT 2010.

Eaton, S. Boyd. "The ancestral human diet: what was it and should it be a paradigm for contemporary nutrition?". *Proceedings of the Nutrition Society* 65.1 (2006): 1-6.

Elliott, Sharon, et al. "Fructose, weight gain, and the insulin resistance syndrome." *American Journal of Clinical Nutrition* 76.5 (2002): 911-922.

Emery, Peter. "Basic metabolism: protein." *Surgery* 27.5 (2009): 185-189.

Engredea News. "CRN consumer survey finds supplement use on the rise." *Newhope360*. 13 March 2012. Web. 19 APRIL 2012.

Enig, Mary G. "Cholesterol and Heart Disease: A Phony Issue." *Westonaprice*. 30 JUNE 2001. Web. 1 NOV 2010.

Enig, Mary G. *Know Your Fats* (Bethesda: Bethesda Press, 2011).

Enig, Mary G. "Saturated Fat and the Kidneys." *Wewstonaprice*. 30 SEP 2000. Web. 2 NOV 2010.

Enig, Mary, and Sally Fallon. "The Skinny on Fats." *Westonaprice*. 1 JAN 2000. Web. 9 APRIL 2011.

Erdmann, Robert. *Fats that can save your life: The critical role of fats and oils in health and disease* (Encinitas, CA: Progressive Health Publishing, 1995).

Fallon, Sally, and Mary Enig. "Be Kind to Your Grains....And Your Grains Will be Kind to You." *Westonaprice*. 1 JAN 2000. Web. 27 SEP 2010.

Fallon, Sally, and Mary Enig. *Nourishing Traditions* (Washington DC: New Trends, 2001).



Fallon, Sally. "The Salt of the Earth: Why Salt is Essential to Health and Happiness." *Wisetraditions* 12.2 (2011): 29-37.

Fallon, Sally. "USDA Dietary Guidelines." *Wise Traditions Volume* 11.2 (2010): 2.

FDA. "Trans Fat Now Listed with Saturated Fat and Cholesterol on Nutrition Facts Label." Fda. 5 April 2011. Web. 9 APRIL 2011.

Ferris, Timothy. *The 4 – Hour Body: An Uncommon Guide to Rapid Fat-Loss, Incredible Sex, and Becoming Superhuman* (New York: Random House, 2010).

Furnas, C.C., and S.M. Furnas. *Man Bread and Destiny: The Story of Man and His Food* (New York: New Home Library: 1937).

Gedgaudas, Nora T. *Primal Body Primal Mind* (Portland: Primal Body – Primal Mind, 2009).

Graudal, Niels A., et al. "Effects of Sodium Restriction on Blood Pressure, Renin, Aldosterone, Catecholamines, Cholesterols, and Triglyceride: A Meta-analysis." *The Journal of the American Medical Association* 279.17 (1998): 1383-1391.

Grey Neil, and David Kipnis. "Effect of diet composition on the hyperinsulinemia of obesity." *New England Journal of Medicine* 285.15 (1971): 827-831.

Gussow, Joan Dye, and Sharon Akabas. "Are we really fixing up the food supply?" *Journal of the American Dietetic Association* 93.11 (1993): 1300-1304.

Hackney, KJ, et al. "Timing Protein intake increases energy expenditure 24 h after resistance training." *Medicine and Science in Sports and Exercise* 42.5 (2010): 998-1003.

Hartke, Kimberly. "Critics Assail USDA Dietary Guidelines." *Westonaprice*. 13 JUL 2010. Web. 11 DEC 2010.

Hatfield, Frederick. *Fitness: The Complete Guide* (Carpinteria: International Sports Science Association, 2010).

Hite, Adele H., et al. "In the Face of Contradictory Evidence: Report of the Dietary Guidelines for Americans Committee." *Nutrition Journal* 26.10 (2010): 915-924.

Hobel, Bart. "Sugar on the brain: Study shows sugar dependence in rats." *Princetonedu*. 20 JUNE 2002. Web. 10 FEB 2011.

Hooper L., et al. "Systematic review of long term effects of advice to reduce dietary salt in adults." *British Medical Journal* 325.7365 (2002): 628.



Horne, Benjamin D., et al. "Usefulness of Routine Periodic Fasting to Lower Risk of Coronary Artery Disease in Patients Undergoing Coronary Angiography." *American Journal of Cardiology* 102.7 (2008): 814-819.

"Hunger and Satiety." *Zeroing in on health*. Web. 18 NOV 2010.

Jakicic, John M., et al. "Effect of Exercise on 24-Month Weight Loss Maintenance in Overweight Women." *Archives of Internal Medicine* 168.14 (2008): 1550-1559.

Jaminet, Paul Ph.D, Sou-Ching Jaminet, Ph.D. *Perfect Health Diet: Four Steps to Renewed Health, Youthful Vitality, and Long Life* (Cambridge: YinYang Press, 2010).

Jordan, Jo. "USA = Processed Food Nation The harmful Effects of Eating Processed Foods." *Puristat*. Web. 29 OCT 2010.

Kaneshiro, Neil. "Trans Fatty Acids." *Nlmmih*. 2 JULY 2009. Web. 26 OCT 2010.

Katzmarzyk, Peter, et al. "Sitting Time and Mortality from All Causes, Cardiovascular Disease, and Cancer." *Medicine & Science in Sports & Exercise* 41.5 (2009): 998-1005.

Kaufman, Peter B., et al. "A Comparative Survey of Leguminous Plants as Sources of the Isoflavones, Genistein and Daidzein: Implications for Human Nutrition and Health." *Journal of Alternative and Complimentary Medicine* 3.1 (1997): 7-12.

Kellock, Brian. *Fiber Man: The Life Story of Dr. Denis Burkitt* (Lion Publishing Corporation, 1985).

Kovacs, Betty. "Fiber." *Medicinenet*. Web. 5 NOV 2010.

Kummerow, Fred, et al. "Effects of trans fatty acids on calcium influx into human arterial endothelial cells." *American Journal of Clinical Nutrition* 70.5 (1999): 832-838.

Kubetin, Sally K. "Demand Swells for Sports Supplements." *Family Practice News* 32.4 (2002): 1.

Kwith, Lierre. *The Vegetarian Myth*. (Oakland: Flashpointpress, 2009).

Larkin, Marilynn. "Little agreement about how to slim down the USA." *The Lancet* 360.9343 (2002): 1400.

Lipinski, Lori. "Replacing Refined Sugars with Natural Sugars One Step at a Time." *Westonaprice*. 10 AUG 2002. Web. 27 SEP 2010.

Litonjua, Augusto A., and Gold, Diane R. "Asthma and obesity: Common early-life influences in the inception of disease." *The Journal of Allergy and Clinical Immunology* 121.5 (2008) 1075-1084.



- Keys, Ancel. "Coronary heart disease in seven countries." *Nutrition* 13.3 (1997): 249.
- Martin, William F. et al. "Dietary protein intake and renal function." *Nutrition and Metabolism* 2.25 (2005).
- Mast, Carlotta. "GAO: Supplements and drugs from China lack regulatory oversight." *Newhope360*. 8 NOV 2010. Web. 19 APRIL 2012.
- Masterjohn, Chris. "Essential Fatty Acids." *Wise Traditions* 11.3 (2010): 18-31.
- McGuff, Doug and John Little. *Science: A Research Based Program to Get the Results You Want in 12 Minutes a Week* (Northern River Productions, 2009).
- McWilliams, James. "China, America and melamine." *Nytimes*. 16 OCT. 2008. Web. 26 JUNE 2012.
- Mercola, Joseph D.O. "Add This Seasoning to your Food Daily – Despite What your Doctor Says." 20 SEP 2011. Web. 23 SEP 2011.
- Mercola, Joseph D.O. "Is this Simple Sugar a Major Factor in the Failure of the War on Cancer." *Mercola*. 29 SEP 2011. Web. 1 OCT 2011.
- Mercola, Joseph D.O. "Lower Your Carb and Lower Your Insulin Levels." *Rheumatic*. Web. 27 SEP 2010.
- Mercola, Joseph D.O. "Simple Tip to Radically Increase Your Cellular Energy Production." *Mercola*. 30 SEP 2011. Web. 1 OCT 2011.
- Mercola, Joseph D.O. "This One Thing is the Highest Risk for Diabetes." *Mercola*. 16 SEP 2011. Web. 29 SEP 2011.
- Mercola, Joseph D.O. "Our Ancestors Didn't Die of Cancer." *Mercola*. 23 SEP 2011. Web. 29 SEP 2011.
- Milton, Katharine. "Hunter-gatherer diets—a different perspective." *American Journal of Clinical Nutrition* 71.3 (2000): 665-667.
- Mikus Catherine R., et al. "Lowering Physical Activity Impairs Glycemic Control in Healthy Volunteers." *Medicine & Science in Sports & Exercise*, 2011; DOI: 10.1249/MSS.0b013e31822ac0c0.
- Monastyrsky, Konstantin. *Fiber Menace* (Ageless Press, 2005).
- Moyer, Melinda. "It's Time to End the War on Salt." *Scientific American*. 8 JUL 2011. Web. 23 SEP 2011.



Myths & Truths About Cholesterol. Washington DC: Weston A. Price Foundation, 2010.

Natural Products Insider. "Supplement Sales Surge in Recession." *Naturalproductsinsider*. 13 JAN 2011. Web. 19 APRIL 2012.

Nestle, Marion. *Safe Food the Politics of Food Safety* (Berkley: University of California Press, 2010).

Nestle, Marion. *What to Eat* (New York: North Point Press, 2007).

Newton, Paul, et al. "Counterfeit anti-infective drugs." *The Lancet*. 6.9 (2006): 602-613.

Nienhiser, Jill C. "How to Avoid Genetically Modified Foods." *Westonaprice*. Spring 2008. Web. NOV 2010.

Nihira, Mikio. "Weight Loss: How to Read Food Labels." *Webmd*. 7 MARCH 2010. Web. 6 APRIL 2011.

Norman, James. "Diabetes: What is Insulin." *Endocrineweb*. 13 OCT 2010. Web. 27 OCT 2010.

Nutrition Business Journal. "NBJ Supplement Business Report." *Newhope360*. 1 SEP 2011. Web. 19 APRIL 2012.

"Nutrient Data Laboratory." *Usdagov*. Web. 10 DEC 2010.

O'Keefe, James H., et al. "Achieving Hunter-gatherer Fitness in the 21st Century: Back to the Future." *The American Journal of Medicine* 123.12 (2010): 1082-1086.

Ollberding, Nicholas J, et al. "Food Label Use and Its Relation to Dietary Intake among US Adults." *Journal of the American Dietetic Association*. 110.8 (2010): 1233-1237.

"Omega-3 Fatty Acids: Fact Sheet." *Webmd*. Web. 25 OCT 2010.

"Omega-6 Fatty Acids." *Omega6*. Web. 25 OCT 2010.

Pennington, A.W. "Treatment of Obesity with Calorically Unrestricted Diets." *American Journal of Clinical Nutrition* 1 (1953): 343-348.

Pennington Biomedical Research Center. "Obesity and the Heart." *Newsletter #63* (2009).

Peptide Guide. "Amino Acids." *Peptideguide*. Web. 8 MARCH 2011.

Perkins, Cynthia. "The Hidden Dangers of Sugar Addiction." *Holistichelp*. Web. 27 SEP 2010.



Peterson, Dan. "The Sugar Generation and Dental Health." *Dentalgentlecare*. Web. 27 SEP 2010.

Phillips, Bill. *Sports Supplement Review* (Golden: Mile High, 1997).

"Physical Activity and Cancer." *Macmillan*. Web. 14 AUG 2011.

Pollan, Michael. *Food Rules* (England: Penguin, 2009).

Pollan, Michael. *In Defense of Food* (England: Penguin, 2008).

Pollan, Michael. *Omnivore's Dilemma* (England: Penguin, 2007).

Powell, Michael. "Assessing the Benefit of Protein Supplementation." *Journal of the American Medical Directors Association* 12.3 (2011): B6.

Pressfield, Steven. *The War of Art* (New York: Warner Books, 2003).

Price, Weston A. *Nutrition and Physical Degeneration* (Price-Pottenger Nutrition Foundation, 2009).

Principles of Healthy Diets. Washington DC: Weston A. Price Foundation, 1999.

"Proposed Dietary Guidelines for Americans Sharply Debated." *Metabolismsociety*. Web. 6 SEP 2010.

"Psychological Benefits of Exercise." *Appliedsportspsych*. Web. 1 NOV 2010.

Quinn, Diane. "The Side Effects of Eating too Much Fiber." *Helium*. Web. 5 NOV 2010.

Rankin, Janet W. "Role of Protein in Exercise." *Clinics in Sports Medicine* 18.3 (1999): 499-511.

Richetto, David. "Advanced security prevents counterfeit products." *Edn*. 3 NOV 2011. Web. 19 APRIL 2012.

Rodin, J. "Insulin levels, hunger, and food intake: an example of feedback loops in body weight regulation." *Journal of Health Psychology* 4.1 (1985): 1-24.

Rosch, Paul. "The Emperor's New Clothes: Aggressive New Guidelines for Prehypertension." *Westonaprice*. 10 DEC 2003. Web. 24 FEB 2011.

Rosedale, Ron. *The Rosedale Diet* (New York: Harper Collins, 2004).

Salatin, Joel. *Folks This Ain't Normal* (New York: Hachette Book Group, 2011).



Salto E, Davis C, et al. "Using Food Labels To Follow the Dietary Guidelines for Americans: A Reference - Agriculture Information Bulletin Number 704." *Usda*. 1994. Web. 8 APRIL 2011

Sanuth, Sarah. "The Danger of White Flour." *Helium*. Web. 27 SEP 2010.

Schlosser, Eric, et al. *Food Inc.* (New York: PublicAffairs, 2009).

Schwarzenegger, Arnold. *The New Encyclopedia of Modern Body Building* (New York: Simon&Schuster, 1998).

Selinger, Susan. "Is Fasting Healthy." *Webmd*. 1 FEB 2007. Web. 10 APRIL 2011.

Simon GE, Ludman EJ, Linde JA et al. "Association between obesity and depression in middle-aged women." *Gen Hosp Psychiatry*. 30.1 (2008): 32-39.

Simonsick, E., et al. "Just Get Out the Door! Importance of Walking Outside the Home for Maintaining Mobility: Findings from the Women's Health and Aging Study" *Journal of the American Geriatrics Society* 53 (2005): 198-203.

Singer, Natasha. "Ingredients of Shady Origins, Posing as Supplements." *Nytimes*. 27 AUG 2011. Web. 9 APRIL 2012.

Staff, Weston A. Price Foundation. *Healthy 4 Life – Dietary Guidelines* (Washington DC: Weston A. Price, 2010).

Stein, Karen. High-Protein, Low-Carbohydrate Diets: Do They Work? *Journal of the American Dietetic Association* 100.7 (2000): 760-761.

Strandberg, Timo E. "A further look at obesity." *The Lancet* 376.9747 (2010): 1144.

"Study Finds Traces of Drugs in Drinking Water in 24 Major U.S. Regions." *Foxnews*. 10 MAR 2008. Web. 7 NOV 2010.

Sturman, Max. *No Sugar No Flour Will Give Me The Power* (San Diego: Do It Naturally Foundation, 2005).

"Super Market Facts: Industry Overview 2006." *Food Marketing Institute*. Web. 6 SEP 2010.

Taubes, Gary. *Good Calories Bad Calories* (New York: Random House, 2007).

Taubes, Gary. *Why We Get Fat and What to do about it.* (Toronto: Random House, 2011).

"The Farmingham Heart Study." *Farmingham*, Web. 12 FEB 2011.

"Three Screen Report Q1 2010." *Nielsen*. Web. 21 DEC 2010.



Tipton et al. "Timing of amino acid-carbohydrate ingestion alters anabolic response of muscle to resistance exercise." *American Journal of Physiology Endocrinology and Metabolism* 281.2 (2001): 197-206.

"Understanding the Importance of Hydration." *Extremenutrition*. Web. 10 OCT 2010.

United States Department of Agriculture "Food Guide Pyramid." *Usda*. Web. 17 FEB 2011.

U.S. Department of Agriculture. "Is Total Fat Consumption Really Decreasing." *Nutritional Insights* (1998): 1-2.

United States Department of Agriculture and United States Department of Health and Human Services. "Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010." *Cnppusda* 15 JUNE 2010. Web. 23 NOV 2010.

United States Food and Drug Administration. "Dietary Supplements." *Fda*. 1 MAY 2012. Web. 28 MAY 2012.

United States Food and Drug Administration. "Generally Recognized as Safe (GRAS)." *Fda*. 10 JUNE 2011. Web. 10 SEPT 2011.

United States Food and Drug Administration. "How to Understand and Use the Nutritional Facts Label." *Fda*. NOV 2004. Web. 7 APRIL 2011.

United States Food and Drug Administration. "Melamine Pet Food Recall of 2007." *Fda*. 29 NOV 2010. Web. 19 APRIL 2012.

United States Food and Drug Administration. "Overview of Dietary Supplements." *Fda*. 16 OCT 2009. Web. 26 JUNE 2012.

Walrand, Stéphane S., et al. "Insulin regulates protein synthesis rate in leukocytes from young and elderly healthy humans." *Clinical Nutrition* 24.6 (2005): 1089-1098.

Wedro, Benjamin. "Lowering Your Cholesterol." *Medicinenet*. Web. 27 OCT 2010.

Wen, Chi Pang, et al. "Minimum amount of physical activity for reduced mortality and extended life expectancy: a prospective cohort study." *The Lancet* 372.9648 (2008): 1473-1483.

"What is Vegetarian?" *Theveggietable*. Web. 19 NOV 2010.

William, Connor. "The Imortance of Overweight." *Archives of Internal Medicine* 100.1 (1957): 174.

William, Lynne. "What is Olestra." *Wisegeek*. Web. 4 APRIL 2011.



"What is insulin." *Medicalnewstoday*. Web 10 FEB 2011.

Zelman, Kathleen M. "The Dukan Diet Review." *Webmd*. 30 JUNE 2010. Web. 24 FEB 2011.

Zhao G, Ford ES, Li C et al. "Waist circumference, abdominal obesity, and depression among overweight and obese U.S. adults: National Health and Nutrition Examination Survey 2005-2006." *BMC Psychiatry*. 11.1 (2011): 130.



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