

THE



ANTI-

DIET

BOOK

Disclaimer

The exercise and nutritional programs in this book are intended to supplement, not replace, any exercise or dietary regimen prescribed by your health care professional. As with all exercise and dietary programs, you should get your doctor's approval before beginning.

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Chapter #1: The Personal Trainer Who Helped a Grandmother Lose 84 Pounds

A few years ago a 68-year-old grandmother of 14 surprised her friends and family when she lost 84 pounds. It was widely known that this grandmother had tried for years to lose weight, but nothing had worked. Naturally everyone wanted to know how she did it. What did she do different?

The bigger surprise everyone found hard to believe is that this grandmother lost 84 pounds:

- Without long, boring workouts;
- Without strict low carb diets;
- Without starving;
- Without surgery, diet pills or expensive diet food delivery services.

After years of struggle, she seemed to do everything wrong and get fantastic results. This wasn't a diet, it was too unusual and "odd" ...

... and "Anti-Diet"

If you read this book you're going to be surprised how simple changes you'd never suspect can dramatically increase your ability to burn fat, trim off inches, reduce junk food cravings, boost your metabolism and fight off sickness. The advice in this book can even show you how to turn the clock backward on your body.

This book will show you why today's foods we take for granted make us fatter even if we don't eat much. The 100 calorie snack packs and any other "diet" drink or processed food is silently tricking your body into storing more fat instead of eliminating it. The Anti-Diet Book will show you ways to fight off infections, regulate your hormones, reduce the inflammation in your joints, and help improve your mood and sense of well-being, ***all while losing weight.***

Most Americans today eat processed foods defined as any food with more than two or three ***known*** ingredients. Almost all foods that are pre-made, made for you, or designed to be very convenient are processed. Foods with a "paragraph of ingredients" are processed. Even (especially?) restaurant food: it is all created for taste and repeat purchase.

Ever notice what people that travel a lot look like? Many have weight and health problems because travelers tend to be one group of people most forced to eat ultra-processed foods from airports, restaurants and vending machines. If you try you can spot people that travel a lot by the way they look. You might not classify them as "fat" or "obese" but they tend to have a skin color, skin texture, posture, mood or other, possibly subtle but telltale signs that their bodies lack nutritious food. Next time you're in an airport see if you can spot this.

Many of us over the age of 30 grew up eating healthy foods, especially if you grew up outside a city. But most of us have fallen prey to the perils of eating fast "fake" processed foods. When

we're stressed, overworked or overwhelmed, processed foods are far too tempting and convenient.

The food most people eat today is lacking important life sustaining, nourishing nutrients that the human body needs. Just 20 years ago, the levels of vitamins, minerals and enzymes found in our food supply was close to **triple** the amount they are now (Scheer & Moss, 2011).

Today's food has created a "war" in our bodies between healthy "**gut bacteria**" and toxic obesity-causing **belly bugs** (bacteria) that are wreaking havoc on our ability to burn fat. These toxic belly bugs are so powerful, they can dominate your thoughts, moods, cravings, and your body's ability to process calories, even if you exercise and diet.

That's why you tend to get moody when you go on a weight loss diet. Cravings for junk foods immediately skyrocket almost out of control until you can't fight off the cravings any longer. This book will reveal the Anti-Diet secrets that allowed a 68 year-old grandmother to lose 84 pounds of the most stubborn fat that she'd had for decades, while avoiding many of the negative effects of "traditional" dieting.

People have followed the program in The Anti-Diet Book with amazing success. Cindy wrote to say:

*"A life tragedy forced me into a deep depression. I gained 15 pounds fast. No matter how hard I dieted and exercised I always gained the weight back. I found **The Anti-Diet Book** and followed it's advice. I'm now back to my normal weight **plus** I was able to lose an extra seven pounds at age 59."*

And Joe who states:

*"Being a traveling salesman makes it hard to eat right and exercise. I packed on pounds fast ballooning up to the heaviest I've ever been. After following the simple program in **The Anti-Diet Book** I was able to drop 24 pounds of fat in only 8 weeks. Thanks!"*

Beware: much of what you read in this book flies in the face of conventional wisdom. Ideas like "don't run to lose weight," and "caffeine can make you **gain** weight" are described and supported by research throughout the book. Even so you may wonder why you are doing the activities suggested, and how in the world they can be working. But they do work, and they're **backed by solid, recent research** that the diet book authors and weight-loss gurus in the past didn't have. We created this program through many "man-years" of studying the latest findings in diet and exercise research. This book you hold in your hands makes all diet programs from the past invalid.

Imagine what it will feel like to wake up in the morning with a jolt of clean, crisp energy that you haven't experience in months or years? How will it feel to watch your most stubborn body fat melt away? ***Imagine how it will feel to fit into your old "slim clothes" again?***

Beyond Weight Loss

The advice in this book goes beyond weight loss advice. Following the ideas in this book will protect your body from the perils of aging and disease, reduce high blood pressure, lower high "bad" cholesterol and protect against developing Alzheimer's, diabetes, heart disease and possibly even cancer. In fact, most people that have gone through The Anti-Diet Book program report feeling 10-15 years younger in just a few weeks.

Following the advice in this book you can expect to lose some weight quickly. But like most diets you've tried you'll likely "hit a plateau" if you don't follow all the steps to the end of the book. You'll know you've hit this plateau if you stop following this book's advice in later chapters and your weight loss slows or stops.

Beginners are advised to start with many elements of a "traditional diet" such as checking with your doctor before starting, starting off slow, walking, and identifying and planning lower calorie **healthy** diet choices. However you'll need to move to "Anti-Diet" tactics quickly. Traditional dieting causes the body to shift into a survival mode where it uses food you eat differently **because** you are dieting. Counting calories stops working at this point.

Your body doesn't care about your appearance, it only cares about surviving. Traditional "starvation" diets – and these include diets that contain **any** processed "fake" foods (because these are starving you as well) – cause the body to eventually rebel and "hoard" calories. Dieting makes the body react as if it is dying. Few diets address this issue causing most not to work over the long term to make and keep you thin. The Anti-Diet Book not only shows you why this happens but offers a perfect **and very enjoyable** way to resolve it! This secret alone is worth reading this book.

The Anti-Diet Book will show you ways you can actually eat **more** calories yet burn **more** fat than any diet you've ever tried. These concepts work because they embrace the latest research revealing what didn't work or what we didn't know even a few years ago about losing weight. Findings about **"gut bacteria"** or what we'll call in this book **"gut bugs"** were only discovered in the last few years. These recent studies demonstrate that most people's weight gain, weight loss and ability to maintain a healthy weight is attributed to different types of gut bacteria found inside of the body. You'll learn about this research – and you'll find out how "bad" gut bugs extract calories from complex sugars and deposit them as fat. You'll learn how processed foods help bad gut bugs grow to decrease your ability to fight off sickness. You'll learn how "good" gut bugs improve your digestion and mood, increase motivation to be active, and assist digestion to enhance weight loss.

Do you believe you're eating somewhat healthy, you're exercising but you cannot lose weight? Have you dropped a few pounds but they are never from the right "area" of the body? This can happen eating processed and fast foods. Processed foods **create** toxic belly bugs designed to hoard any calories eaten and turn them into fat. Fake **man-made** diet drinks, low calorie snacks, grocery store aisles piled with boxed up food products all with a paragraph of ingredients ...

these are fake foods. If they didn't exist 100 years ago, eating them makes your body gain and hang on to fat. You'll also learn the research that shows how processed foods cause the body to lose skeletal muscle, become weaker and look older.

For the first time, the techniques and advice in this book will show you how to:

- Lose all the weight you want *without having to perform long boring workouts*;
- Clear any skin conditions;
- Never feel hungry while losing weight;
- Reduce or eliminate cravings for sugar and junk foods;
- Eat more food than ever ***while losing weight***;
- Increase your energy and improve your mood;
- Increase your brain size and concentration ability;
- Stop counting calories and yo-yo dieting;
- Become more immune to sickness and disease;
- Remove the need for will power;
- Reverse effects of aging.

Few of us have spent the time to study nutrition and how to eat correctly. We've learned how and what to eat by listening to ads from large corporations who's only ambition is profits. These corporations do not care about your health. That is why you can't pronounce half or more of the ingredients in their fake, processed, man-made foods. The Anti-Diet Book will actually teach you how to eat – and exercise – correctly. If a grandmother can break the cycle at 68 years old and lose 84 pounds, ***you can too!***

Chapter #2: Good Bacteria vs. Bad Bacteria in Foods

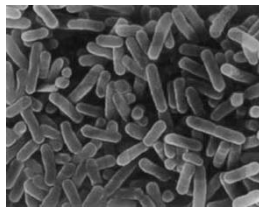
How Bacteria Affects Weight Loss in Our Bodies

The world is filled with trillions of invisible tiny living “organisms” called bacteria. Picture bacteria as tiny bugs. These tiny bugs are so small our eyes can’t see them. 1,000 of them would fit on the head of a pin. They can be as small as a single cell but they are everywhere around us all the time – in the air, in the soil – even inside us.

Our bodies are “containers” of cells mixed with these tiny living bugs. Human skin, nose, mouths, stomachs and bowels all have trillions of these microscopic living bugs. It may seem a little scary and strange but it’s true: your body has trillions of these tiny bugs living inside you this very minute. Your body needs them to survive.

Some of these invisible tiny bugs are good and some are bad (DeVault, 2015). Good bugs inside our bodies help us breath, think, digest food and they can even affect things we choose to do. Bad bacteria (bad bugs) can make us sick, damage parts of our bodies and a few can even kill us.

Our stomach and “guts” are what is scientifically called the Human Gastrointestinal Tract. The gut is the part of our bodies that digests food and has hundreds of species and types of tiny “gut bugs” that keep us healthy. Some people have more and some have less. Everyone has different kinds of gut bugs.



We all have a different **amount** of bacteria or “bugs” living inside us



We all have different **kinds** of bacteria or “bugs” living inside us

Think of the amount and type of bugs you have living in your gut as your own gut bug “city.” There are complex articles about this that call it “flora,” “microbiome,” or your gut “ecosystem,” but thinking of it as city that is a different size, shape and has different types of bugs in each person is easier to picture and is still correct. Scientists are just now beginning to understand that this “city” inside people can affect their health because there are so many gut bugs. (Wallis, 2014) The difference in a real world city and your “gut bug city” is that your city has from 10 to 100 trillion bugs that live in it. (Million, 2013) 100 trillion gut bugs weighs as much as three pounds. (Mercola-1, 2013) They’re all alive in every one of us, lining body parts – in your “gut” – the part just below the stomach.

Good gut bugs help your body digest food, destroy other disease-causing bugs, and provide vitamins. Some gut bugs increase the body’s ability to stay healthy. Almost all (80%) of your body’s ability to not get sick and stay healthy is because of good bugs living in your gut. Good gut bugs also help protect us from bad gut bugs by changing the environment where the bad gut

bugs live so they leave the body or by releasing toxins that harm the bad gut bugs (Calder, Field, & Harsharnjit, 2004). Good gut bugs are also used to make healthy foods like cheese and yogurt.

Most species (85%) of “bacteria” or what we’re calling “bugs” work either help your body or just live inside you. 15% of the gut bugs that are left are bad and work against your health through your immune and digestive systems (Reynes, 2006). These gut bugs are called “pathogenic” which means “causing or capable of causing disease.”

Although outnumbered by good gut bugs there are gut bugs so bad they can make you sick or even kill you (Hayes, 2013). Bugs like *E. coli*, *Campylobacter*, *Listeria*, *Streptococcus*, *Staphylococcus* and many others multiply in your body very fast, and disburse toxins which can damage tissue and make you sick (Rettner, 2015). *Salmonella* in particular is one of the bad gut bugs many people have heard about because it makes 1.2 million people sick and kills 450 every year (CDC, 2015).

The 15% of other “bad gut bugs” that don’t make you sick or kill you have other harmful effects on your body, like affecting weight gain and weight loss. Scientists recently discovered that certain types of gut bugs cause people to lose weight. Without any other change, just having the right gut bugs living in the “city” with all the other gut bugs caused weight loss (Park, 2012).

Scientists proved this using mice (Saey, 2015). In one study fat mice were given operations called “gastric bypass surgery.” This surgery shrinks the size of the stomach and lowers the body’s ability to absorb food. Overweight people have this surgery to lose weight.

After having this surgery both mice and people end up with a very different “gut bug city.” The gut is very complex, and having this kind of surgery makes people less hungry and changes the way the body digests food automatically. The amount and types of gut bugs that make up the city turns into a completely different mixture very quickly after having this surgery.

The scientists then took gut bugs from the fat mice they had operated on and gave them to other fat mice that didn’t have the operation. Remember the fat mice that had the operation also had gut bugs that had quickly changed after surgery. The fat mice that were given these changed gut bugs but that had no operation lost weight. The only reason they lost weight was because of the changed gut bugs.

Scientists studying this in overweight people made a mixture from gut bugs they found in thin people. They found that giving a mixture of gut bugs from thin people to overweight people caused weight loss in two ways:

1. The special mixture (blend of bacteria or “gut bugs”) caused weight loss by increasing the body’s ability to digest food, decreasing the body’s ability to hold on to fat and changing the chemical makeup (glucose level) of the blood which affects hunger (Wallis, 2014);
2. Adding this special mixture of good gut bugs caused people to have fewer cravings for fattening foods. The mixture of good gut bugs sent chemical hormones to the brain

(known as “ghrelin”) that stopped fattening food cravings and helped people make better choices about food (Wallis, 2014).

In other words, gut bug “cities” in overweight people have a mixture of chemicals that send food craving messages to their brains.

Adding good gut bugs to the living gut bug “city” of overweight people has recently been proven to cause weight loss both from just being in the body and from lowered cravings. That a mixture of good gut bugs can cause someone to lose weight without any other change is a new topic scientists are studying more and more. In one study scientists took gut bugs from overweight people and injected them into mice. The mice got fat. In another scientists took gut bugs from thin people and injected them into fat mice. Without anything else changing in the mouse’s diet the mice lost weight (Wallis, 2014). These results of studies that have been done so far show that losing weight is about more than just counting calories.

With trillions of gut bugs living inside us, we can do certain things to increase good gut bugs and lower bad gut bugs just by choosing what we eat. Your great-great-grandfather was likely not fat. People that lived then did not eat anything except “whole foods,” foods that grew in the ground, on trees or as animals. Human beings ate this way for centuries: it is only in the last 100 years or so that we have created what are known as “processed foods.” Processed foods feed bad gut bugs that stop digestion and cause cravings while they kill good gut bugs that cause food to digest well and lower cravings. Aside from containing calories that don’t do anything to help your body (it has no nutrition), sugar in particular feeds bad gut bugs (Mercola-1, 2013). The same is true for foods high in refined carbohydrates like bread. Foods with a lot of refined sugar or carbohydrates simply weren’t made when your great-great-grandfather lived, so bad gut bugs tended to not grow in people and good gut bugs thrived. This is the way human beings lived for thousands of years.

Today most of us eat processed foods with refined sugar and refined (what are called “simple”) carbohydrates. These processed foods cause weight gain because:

- They tend to make it easy to eat more calories than get burned (Patz, 2014);
- They slow digestion – some bad gut bugs make the body actually absorb more calories from food (Mercola-2, 2012);
- They increase cravings – bad gut bugs lower amounts of hormones that control appetite (Curtin, 2011).

All three of these effects have much more power to create weight gain than just eating fewer calories than get burned.

We Are All One Big Experiment

Think of a candy bar. Now imagine you lived in the 1600s. That candy bar picture in your mind would have been impossible to think of then. Yet people lived full lives and had children and the human race grew in the 1600s...

Now picture you if you lived 100 years ago. Candy bars were not widely available. There were few companies that made them. A few types of sweet foods were sold, but candy bars did not become widely available until after the 1920s (Begley, 2014). People still ate food that wasn't candy and the population of people still grew.

That's over 300 years just described of time without candy bars. Of course, candy bars did not exist any time before 1920 so that's ... THOUSANDS ... of years humans were alive on earth without candy bars. Grocery stores today are filled with aisles and piles of candy in every conceivable form, mixture and choice. This is the essence of what a processed food is – a food that simply was not here 100 or more years ago.

Think of a processed food as a “made up” food, just as your mind “makes up” pictures that aren't real when you dream at night. Processed or “made up” foods are everywhere today for the first time ever. Made up foods have only been available for about than 60 years. People have lived on earth thousands (actually millions) of years. Think about what that means ...

People have lived on earth millions of years ...

People have been eating made up foods for about 60 years ...

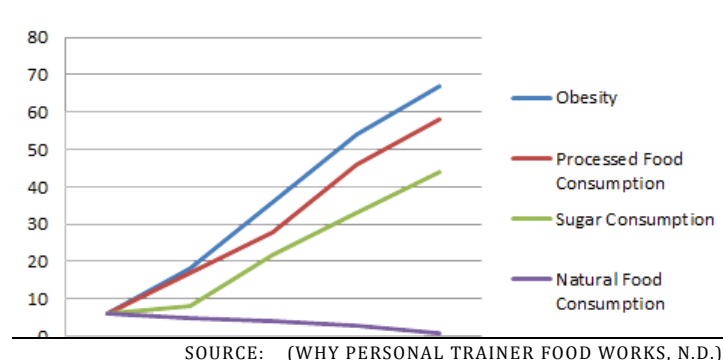
Made up foods are any foods that are not one single ingredient. It's easy to spot a made up food because it always has a paragraph or long list of items that have been mixed together. The list is usually printed in tiny letters on the box, package or on a menu in a restaurant.

What is the reason companies “make up” these foods? Is it because they want to help us and make people healthier?

Companies make up foods like candy bars for only one reason: money. Companies that create processed “made up” foods realized there are plenty of people that will buy over and over if the food:

- Tastes much better than other choices;
- Is easy to get and eat: it takes little or no work to prepare;
- Costs the same or less than a healthier choice costs.

Thousands of companies make hundreds of thousands of products with a paragraph of ingredients for the sole purpose of making money. Large national chain restaurants hire chefs to cook in huge kitchens – some as big as football fields – to test and develop complex recipes for processed foods that are difficult for other companies to copy (Bloomberg, 2013). Recipes are tested over and over until the most addictive, most intense tasting recipe has been “made up.” Much of this food is completely “made up” – none of the ingredients exist in nature. Processed “made up” foods are almost anything in a package, sealed in plastic or packaged in a box with labelling and a list of ingredients.



“Made up” foods have only been around for a few decades, and science isn't keeping up with researching the long term effects of eating processed foods. We are

just now beginning to discover the long term effects of fast foods with the release of movies like “Super Size Me (Spurlock, 2004).” If you haven’t seen this documentary the information in it will shock you. It will motivate you to stay away from processed fast foods even if you don’t need to lose weight because it shows fast foods’ surprising effects on the human body.

The movie is the story of a filmmaker that went on a “diet” of nothing but McDonalds® fast food for just one month. It proves the point that processed food can totally kill you. Some nutritionists and health experts believe humans should never eat processed fast food in their lifetimes – not even one single time!

In another study a researcher’s gut microbes (gut bugs) were “devastated” - 40% of his bacteria species were lost - after ten days eating only McDonalds’ fast food. Processed “made up” foods fertilize bad gut bugs – actually helping them grow – and grow fast. (Mercola-3, 2015).

All **processed** foods – not just the “made up” food from fast food restaurants like McDonalds - cause problems in the balance of good and bad gut bugs. Any food that comes from a company or restaurant or fast food chain that makes up processed foods in test kitchens should be avoided. Why? Because all major restaurants have the same motivations and goals that McDonalds® has: to make as much money as possible creating fake made up foods without regard to anything else. All corporations are this way.

Don’t believe it? There is another movie that should convince you. It is also a documentary called “The Corporation” (Achbar & Abbott, 2003). This award winning film talks about much more than processed foods, but reveals motivations behind every corporation. One of the strong points it makes is that even when a corporation is extremely successful, having all the money and power that should satisfy any person or company, most corporations continue to do things that hurt people’s health to make even more money that they don’t need. In other words, there is never, ever enough money to satisfy a corporation. Corporations are behind the most profitable fast food chains and national restaurants in the world. When you eat in a national fast food restaurant, you are eating the product of a company that only wants to figure out ways to keep you paying them. It’s sort of the opposite of your mother’s home cooking, don’t you think?

We don’t yet know what will happen to humans as they pass habits of eating “made up” food to their children, and then their children’s children. In this way we are sort of an experiment – 100 years from now if people keep eating this way – a body size and shape that’s considered normal may look completely different than it does today. There is no information yet showing what happens to people that ate processed foods over their entire lifetimes along with the effects on their children because – once again – made up foods haven’t been in the world very long.

The Effects of Processed Foods on Good and Bad Gut Bugs

Let’s back up and highlight “gut bugs” and review what they mean. “Good gut bug” and “bad gut bug” may sound simplified, but these phrases correctly describe what happens when we eat these processed “made up” foods. **Bacteria** (gut bugs) that make the body absorb calories, **bacteria** that increases hormones that give us cravings and **bacteria** that kills other good bacteria known to improve digestion and maintain weight are all “**bad gut bugs**.” Not the bad

gut bugs than can make you sick or kill you, but bad because they cause and support weight gain.

Even though science isn't keeping up with the needed research much progress has been made. While "made up" or processed foods have only been around 60 or so years many people today eat them for most of their daily diet. It's easy to do because made up processed foods are everywhere around us.

Early research on the effects "made up" foods have on gut bugs clearly shows the gut bug "city" in overweight people is not active (Mercola-4, 2013). This means their digestion is slow and they crave even more fattening "made up" foods because of the processed foods they've already eaten. It can be a vicious circle (Holder, 2013).

Right now 100 trillion gut bugs divided into 1,000 species are inside you trying to gain control (Dorey, 2010). Most are good and some are bad. People decide the balance of good gut bugs too bad by what they eat, and food companies offering processed "made up" foods keep their products advertised so it's more likely we'll eat them. It's easier to find a "Big Mac" than it is to find a whole foods cooked meal with broccoli, potato and lean fish.

The problem with made up foods is have little to no nutritional value (Hill, 2015) for good gut bugs to breed, grow and live. This lets bad gut bugs grow, breed and damage the body. Over time eating processed foods creates a massive city of 100 trillion with many bad bugs. (Wallis, 2014) As the number of bad gut bugs grow and good gut bugs decline:

- The bad gut bugs stop the special "no craving" hormone called "ghrelin" from being made. Ghrelin is a hormone that communicates with circuits in the brain about appetite and food intake (Huster, n.d.). Cravings for fattening food grow even though the person is already overweight (Wallis, 2014);
- The bad gut bugs cause the body to absorb more calories from the foods that are eaten. That means an overweight person can eat the same food as a thin person, but the overweight person will gain more weight from it even though the amount of food eaten was exactly the same. This is a new finding further proving the effects of good gut bugs and bad gut bugs on the human body (Mercola-2, 2012);
- The bad gut bugs slow down digestion which is the body's process of breaking down food and converting it to be absorbed into or eliminated from the body. Slower digestion makes it harder to lose weight (Mercola-2, 2012).

Declining Nutrition and its Effects on Gut Bugs

Levels of nutrition have been declining for the last few decades in two ways:

1. We are eating "made up" foods that have few if any vitamins, minerals and enzymes our bodies need, and;
2. Fruits and vegetables just two decades ago were much richer in vitamins and minerals than fruits and vegetables most of us eat today (Scheer & Moss, 2011).

Scientists from the University of Texas that studied U.S. Department of Agriculture nutritional data from 1950 and 1999 for 43 fruits and vegetables found the amount of protein, calcium, phosphorus, iron, riboflavin (vitamin B2) and vitamin C has decreased over the past half century. Another study found that eight of today's oranges has the same amount of Vitamin A as our grandparents would have gotten from one (Scheer & Moss, 2011).

This means nutrition decline can easily affect people trying to eat "healthy," and definitely affects those that eat mostly processed "made up" foods. Fruits and vegetables have much less nutrition than they used to. The mass-production of pre-packaged "made up" foods all contain chemicals and ingredients that destroy good gut bugs. Our ability to maintain healthy gut bacteria is decreasing and strains of "toxic" gut bugs are damaging us and causing weight gain more and more as time goes on.

Chapter #3: Good Foods vs Bad Foods

Foods That Make You Fat and Bloating

The decline in the quality of our foods is caused by antibiotics and pesticides being used on fruits and vegetables to control insects while they're growing. An **antibiotic** or **pesticide** is a chemical that kills **all bacteria** – both good and bad bugs. Pesticides are used on the non-organic (not labeled “organic”) produce section of a grocery store. Pesticides are chemicals sprayed on plants before and during growth to keep insects under control and influence other aspects of the way the plant is grown. Herbicides (chemicals) found in popular pesticides lower the growth of beneficial gut bugs. This causes extreme growth of bad gut bugs (Ji, 2013). Eating fruits and vegetables that have had antibiotics (FOX News, 2013) or pesticides used on them can slow weight loss more than their organic versions. Non-organic or “bulk” fruits and vegetables can also have damaging long term health effects (Cummins, 2004).

However it is better to eat non-organic “bulk” fruits and vegetables than to eat processed “made up” foods. Chemicals used on non-organic fruits and vegetables can kill good gut bugs, but they still have more nutrition and living good gut bugs than processed “made up” foods (Watson, 2012). Processed foods – again foods in packages with a list of ingredients – usually have no nutrition at all. Processed foods cause bad gut bugs to breed and grow. The best way to make your gut health better is to not try to kill bad gut bugs but to add good ones. Remember there is always a struggle happening in your gut between good and bad gut bugs (Underwood, 2012). You can affect which gut bugs win, and therefore affect how sick you get, how thin you are, how much energy you have, how well you can think, your mood and how long you'll live.

FOOD CHOICE LEVELS

①

Organic Fruits and Vegetables

②

Bulk (non-organic) Fruits
and Vegetables

③

Processed “Made Up” Foods

It's best to eat organic fruits and vegetables if you can. If that is not possible at least don't eat processed “made up” foods. Processed “fake” foods are by far worse to eat of the three types shown. The body has a tendency to immediately store processed “made up” foods as fat because:

- They are foreign to the body because of their processing which kills good gut bugs and slows digestion;
- They block hormones that stop cravings;
- They tend to have **many times** more calories than whole foods.

Look at the comparison of 100 grams of baked potato and 100 grams of potato chips below:



Single Ingredient Foods

(food value naturally adapted to the human body)

Nutrition Facts	
Serving Size 100 grams	
Amount Per Serving	
Calories 93	Calories from Fat 1
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat	
Cholesterol 0mg	0%
Sodium 241mg	10%
Total Carbohydrate 22g	7%
Dietary Fiber 1g	6%
Sugars 2g	
Protein 2g	
Vitamin A 0%	Vitamin C 21%
Calcium 1%	Iron 2%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	



Processed “Made Up” Food

(food value processed out - calories increased)

Nutrition Facts	
Serving Size 100 grams	
Amount Per Serving	
Calories 547	Calories from Fat 330
% Daily Value*	
Total Fat 37g	58%
Saturated Fat 11g	55%
Trans Fat	
Cholesterol 0mg	0%
Sodium 525mg	22%
Total Carbohydrate 50g	17%
Dietary Fiber 4g	18%
Sugars 0g	
Protein 7g	
Vitamin A 0%	Vitamin C 31%
Calcium 2%	Iron 9%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

According to this you can eat almost six times more potatoes for the same amount of calories in the potato chips!¹ If you eat processed foods you will get bloated and fat much faster than if you eat whole foods because the processing adds so many calories in the same amount of food. All processed food is this way: bite for bite it has far more calories and far less nutrition.

Processed “made up” foods make it very easy to gain weight in two ways:

1. They have more calories – often many more calories – than whole, natural foods, and;
2. They are almost always made to have an intense, extremely likeable taste.

Processed foods are often so different in their taste that it is difficult to think about eating organic whole foods **with** processed foods. Imagine eating an apple after eating ice cream. Or worse, eating celery after a candy bar. When you think about the vast taste differences this way it is easy to see why processed “made up” foods have so many more calories. Companies that made them dumped sugar and fattening ingredients in them to make them more appealing than whole foods and improve the chances we’ll buy the products again (and again).

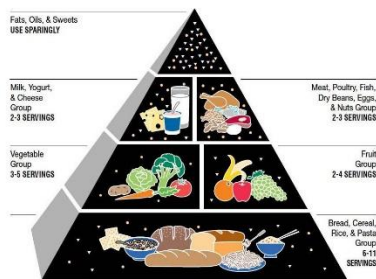
The Food Pyramid Will Make You Fat!

Our government is of little help. For years the U.S. tried to “teach” people how to eat to be healthy by using a way to put foods in order. They called it the “Food Pyramid” and it’s been around for decades.

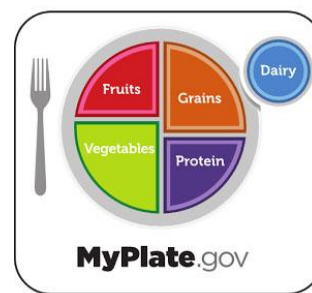
¹ 547 calories in 100 grams potato chips divided by 93 calories in 100 grams baked potato equals 5.88

This food pyramid was **incorrect!** It showed that whole wheat, brown rice, and other whole grains are healthier than refined grains, and that breads, cereals and pastas were important to get in large quantities (see the bottom of the pyramid). It also passed over the health benefits of plant oils, putting them in the small section of foods that should be avoided at the top of the pyramid. Breads, cereals and products made with refined, processed grains cause weight gain and do not add good bugs to your gut. Also the Food Pyramid grouped together proteins that caused both good and bad gut bugs. The Food Pyramid recommended eating a lot of dairy foods, also known to be unhealthy.

In 2005 the government changed the food pyramid into something called “MyPyramid” (or “MyPlate”) (Mercola-5, 2013). Instead of fixing the food pyramid, the drawing was simplified and information was removed. Although simpler in design (see below, right) “MyPlate” requires some study to understand.



Old Food Pyramid
(pre-2005)



Revised Food “Pyramid”
(re-phrased as “MyPlate”)

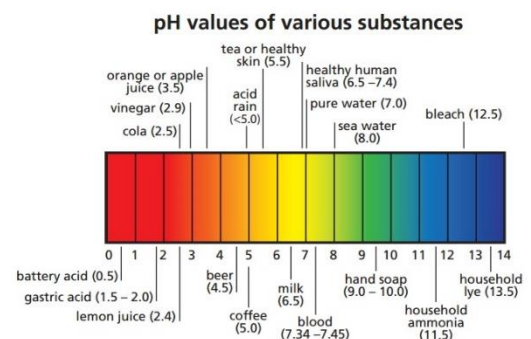
There are also dieticians and nutritionists that still say the government has the information wrong and that the MyPlate eating guidelines will tend to keep you more overweight and less healthy than other eating plans (Mercola-5, 2013).

How Acidic Foods Affect Our Bodies

pH Levels and How They Affect Our Health & Weight

Processed “made up” foods can cause acid pH imbalance, making the body’s cells less able to produce energy, less able to repair and making weight loss impossible. When the body has an acid imbalance, the person feels tired, gets sick easier, may even experience pain and is far less able to shed unwanted pounds (Turner, 2011).

pH is the abbreviation for potential hydrogen. Our body must maintain a certain level of “hydrogen ions” for good health (Hydrogen Ion Concentration, 2014). Hydrogen ions in our bodies are measured using something called a “pH” scale. A 0-14 scale shows the amount of acid or alkaline in a substance.



There is a simple pee-test you can take to find your pH level using inexpensive pH “test strips.” Testing your pH is very easy – the hardest part may be finding and buying test strips.²

A higher pH means the body has sufficient alkaline and therefore oxygen. Lower pH means the body is more acidic and has less oxygen. The human body works best in a slightly alkaline state where the pH level is from 7.35 - 7.55 (Hedberg, 2008-2009).

Processed foods with fats, sugars, and simple starches, along with foods containing large amounts of protein and fat add acid to the body’s pH balance. People eating these foods experience acid ash deposits the body can’t easily get rid of, and acid ash causes enzymes to not be able to do their job. Enzymes aid greatly in digesting food. ***A high acid pH reading can therefore stop weight loss*** (Turner, 2011).

On the other hand, alkaline-forming elements are found in whole foods like fruits and vegetables. Whole fruits and vegetables create more alkaline in the body, which improves the function of gut bugs and digestion.

It’s easy to see how two people eating the ***exact same number of calories*** but on extremely different diets can end up with very different weight and health levels.

Low Carb, Low Fat, Gluten Free Diets

What are the Differences?

Low Carb Diets:

There are many definitions of low carbohydrate (carb) diets, the most general possibly (Low-carb diet: Can it help you lose weight?, n.d.):

Low-carb diets reduce carbohydrates and increase fats and proteins. Grains, starchy vegetables and fruit are reduced or eliminated while foods high in protein and fat are increased.

Problems with low carb diets include:

- **Thinking and Fatigue Problems.** Your body and especially your brain needs blood to function. Certain neurons in the brain can’t burn anything but glucose (Gunnars, n.d.) . The brain uses 20% of all the body’s energy – more than any other organ (Swaminathan, 2008). Carbohydrates carry oxygen to the blood, and if you go too low in carbohydrate consumption you oxygen-starve your blood, you can become confused, disoriented and too tired to function.
- **Increased risk of cancer and heart disease.** Low carb diets impair blood flow contributing to heart disease risk (Greger, 2015). Low carb diets also have significantly less fiber because plant-based foods are reduced or eliminated. Also lowering fruits,

² As of this writing, links to online sources of pH test strips: Walmart, Amazon.com, CVS, and many other sources. Google “pH test strips.”

vegetables and grains in the diet decreases nutrients, antioxidants, vitamin C and potassium which increases cancer disease risk (Ashton, 2010);

- Processed “made up” foods claiming to support low carb diets often have dangerous artificial sweeteners, too many calories and do not generate good gut bug health;
- Long term low carb dieting stresses the liver. This produces toxic chemicals which decrease good gut bug production, lowers the body’s ability to fight disease and increases risk of infection.

Forcing your diet down to zero grams of carbohydrates would make you dizzy, sick or even unconscious. You would find it difficult to think or physically move. Your blood oxygen drops and you would feel extremely sluggish and tired. At some point of carbohydrate denial you can pass out.

There are popular low carb diets that do work. They’re often effective because removing carbohydrates means removing processed “made up” foods that help bad gut bugs and stop weight loss for reasons already mentioned. Just be aware of the dangers of low carb diets and that there are much safer and **healthier** ways to lose weight.

Low Fat Diets:

There are also many definitions for low fat diets, which is defined as:

A diet containing a minimal proportion of fat. Fats are limited to various levels depending on the diet.

Low-fat diets reduce fats while encouraging or ignoring the role of carbohydrates and proteins. In the late 1990s dieters were fooled into believing low fat in food meant their body will lose fat. Hundreds of processed products claiming to be low in fat flooded the market, many high in calories, sugar and refined carbohydrates. Diets these products supported were eventually shown to not be effective (Bazzano, MD, PhD, MPH*, et al., 2014).

Low fat diets with whole, single ingredient natural foods are actually among the healthiest. Benefits of a **whole foods** low fat diet include:

- Lower HDL cholesterol;
- Less risk of heart disease because of cholesterol reduction (Hussar, 2012);
- Eating less bad fat (refined vegetable oil) positively effects the body’s response to arthritis, CA, ADHD, DM, HTN, obesity, and strokes (Low Fat Diet Definitions, n.d.).

However beware, many low fat diets are not healthy. Again, if the diet includes “made up” processed foods it should not be followed. Don’t think as many did in the 1990s that any food low in fat is okay. Sugar, refined flour and other “low fat” processed foods stop weight loss – even if they’re low fat – because of what they do to the gut bug balance in your system.

Low fat diets can be dangerous, depending on the diet ingredients allowed (Haan, n.d.):

- Eliminating healthy fats like omega-3 fatty acids increases heart disease, stroke and cancer risks (Mercola-6, n.d.);
- Mental health, mood and behavior problems also associated with lower healthy fats in low fat diets. Both omega-3 fatty acids and omega-6 fatty acids affect brain health (Mercola-6, n.d.);
- Vitamin absorption problems which can lead to many health issues. Healthy fats improve the body's ability to absorb important vitamins and minerals (Haan, n.d.).

Low fat diets tend to include foods that are much less filling. For that reason low fat diets encourage overeating, and there are many high-calorie, low fat foods available.

Instead of cutting out all fat, focus on the type of fat, not the amount. Keep in mind that too many calories from both fat and carbohydrates cause weight gain, and weight gain increases health risks.

Gluten-free Diets

A gluten-free diet is defined as:

“ ... a diet that excludes the protein gluten. Gluten is found in grains such as wheat, barley, rye, and a cross between wheat and rye called triticale. (Nutrition and healthy eating, 2014)”

30 percent of Americans say they're trying to cut back on gluten, yet only about 1% needs to be because of celiac disease. This is the disease creating a need to avoid gluten. Most people do not have and will never have celiac disease and so shouldn't worry about gluten (Michaels, n.d.).

But the gluten-free products industry is growing. Confusion is everywhere about gluten, and many processed food companies are taking advantage. The problem with eliminating gluten from your diet is you have to replace that part of your diet with something. So processed “made up” food companies offer products made with fattening non-gluten ingredients like unhealthy oils, butter and whole eggs – ingredients that tend to be higher in fat, calories and sugar and lower in vitamins and minerals (Neporent, 2013). Gluten-free foods are not necessarily better for your health and do not assist in weight loss. In fact the opposite can be true. Gluten-free bread can have 20 to 30 more calories than whole wheat bread per serving. Going on a gluten-free diet could easily make you **gain** weight (Schweigert, 2015).

Many doctors claim their patients “lost weight without trying” by eliminating gluten. It is likely these are actual patients that were sensitive to gluten, or that should not eat gluten for other reasons. Again 99% of all Americans do not have digestive problems with gluten. Regardless gluten-free diets are not relevant to a discussion about weight loss because it is so easy to gain weight on them.

Chapter #4: How Your Body's Metabolism Works to Burn Calories

The Thermic Effect of Foods

Protein, not fats or carbohydrates, speed up metabolism through the “thermic effect.” Protein stimulates your ability to digest (metabolism) which can help you to get leaner than if you focus on processed fats and carbohydrates (Cloe, n.d.). The thermic effect of foods means your body has to burn off some of its own calories to perform the work of digesting, storing, absorbing and eliminating food, and the foods that are the most thermically efficient are whole, natural proteins. Processed fats are the least able to digest well, then carbohydrates, then proteins. Whenever possible, choose whole, single ingredient protein-rich foods to enhance this thermic effect to help you become thin.

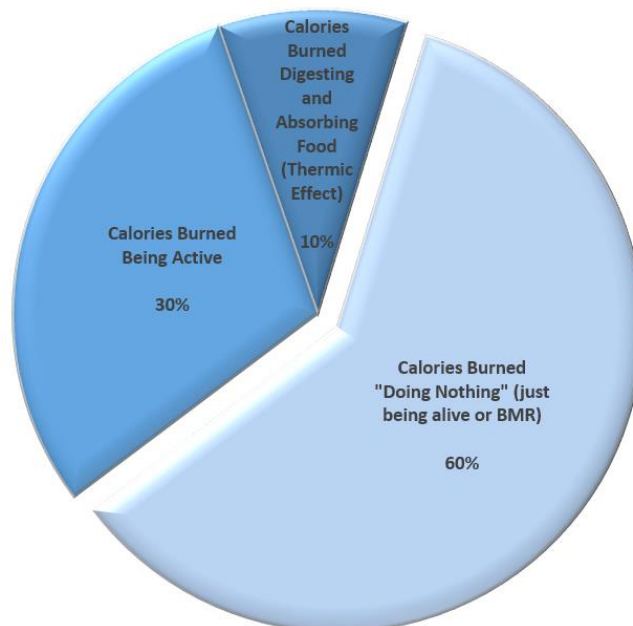
Regardless of the calories and fat listed on the ‘Nutrition Facts’ label, foods that have many ingredients (unlike an apple or a potato) will slow weight loss because they increase bad gut bug production and slow digestion. To lose weight you want your digestion to be fast, and foods that slow digestion are the main ingredients in processed foods: refined (simple) carbohydrates, sugars, fats and chemicals along with pesticides from non-organic fruits and vegetables.

The Role of the Thyroid

The human body burns most of its calories just being alive. About 60%+ of the calories your body burns without you doing anything through breathing, blood circulation, body temperature regulation, cell growth, brain and nerves working and muscle contraction (Faires, 2013). The rate at which your body burns calories without you trying is called your Basal Metabolic Rate or BMR. This BMR rate is a number expressed in calories per day and they're the “free” amount of calories a person can eat without gaining weight because the body will burn them no matter what.

The thyroid is a gland in the lower front of the neck that secretes “thyroid hormone.” Thyroid hormone has several functions in the body, one of which is to “regulate metabolism” (Thyroid and Weight, 2012). If the thyroid is “overactive” the amount of calories burned “doing nothing” will increase, if the thyroid is underactive this number – the BMR – goes down. Remember BMR refers to the “free calories” our body's burn no matter what so the more efficient the thyroid is working, the easier it is to control weight.

How Calories Are Burned



Adrenal Fatigue and the Thyroid

Continuous stimulant use reduces the ability of the thyroid to function and causes “adrenal fatigue” which also has a harmful effect on the thyroid (Myers, n.d.). This is why stimulants don’t work long term for weight loss. The net effect on the thyroid is negative: the thyroid spends more time in an underactive (weight gaining) state than in the temporary overactive (weight loss) state stimulants produce.

Your adrenal glands are thought to work with the thyroid to produce hormones needed for many bodily functions. Symptoms of the thyroid not functioning well are similar to symptoms of adrenal fatigue so the two conditions get confused.

However, there is controversy that adrenal fatigue even exists. There’s no test for adrenal fatigue and the only way to treat it is the same way you treat an underactive thyroid. Most treatments for adrenal fatigue in particular are performed by alternative medicine doctors (Orenstein, 2015).

Stimulants increase thyroid activity, burning more of the calories burned “doing nothing” (see the biggest slice in pie chart above). The increase is temporary and when stimulants wear off the thyroid rebounds and operates less efficiently over a longer period. This means an underactive thyroid that releases less thyroid hormone and operates less efficiently, promoting the possibility of weight gain. Stimulants may help in terms of increasing intensity **during** workouts, but don’t count on them to increase the calories burned “doing nothing” (your BMR) over a long term.

Many processed foods act as stimulants, decreasing the activity of the thyroid. The thyroid is best supported by eating whole foods and taking vitamins supplements (Pick, n.d.).

Chapter #5: How Eating a Good Diet Can Help You Avoid Diseases

Benefits of Healthy Foods That Contain Good Bacteria (Gut Bugs)

We've mentioned it before but it's worth emphasizing: Venket Rao, PhD, emeritus professor of nutritional sciences at the University of Toronto Foods says,

*"The intestines are a **war zone**, where beneficial and harmful bacteria [gut bugs] are fighting to establish predominance" (Underwood, 2012).*

That means eating low nutrition, processed foods is like giving guns to bad guys: it arms the bad gut bugs to reproduce, thrive and win the "war" in the gut which weakens the immune system (Reynes, 2006) diminishing health over time.

This section will discuss the advantages of healthy foods that add to good gut bug health, then discuss healthy gut-bug-friendly foods.

Bad gut bugs – which technically are known as "**pathogenic bacteria**" – grow or weaken in number and strength depending on the diet. Processed foods in our diet may lead to:

- Increased inflammation;
- Reduced control of infection;
- Increased rates of cancer;
- Increased risk for allergic and auto-inflammatory disease (Myles, 2014).

As we know trillions of gut bug "bacteria" and other organisms (Million, 2013) divided into about 500 species (Dorey, 2010) live in our bodies normally. "Friendly" bacteria (good gut bugs) help digestion, nutrient absorption, and ability to resist disease organisms (bad gut bugs). Friendly bacteria – good gut bugs - can be **eaten in foods or as vitamin supplements**. These friendly bacteria that can be eaten are called **probiotics**. Eating probiotic foods or supplements promotes good gut bug health.

The common definition of "probiotics" is:

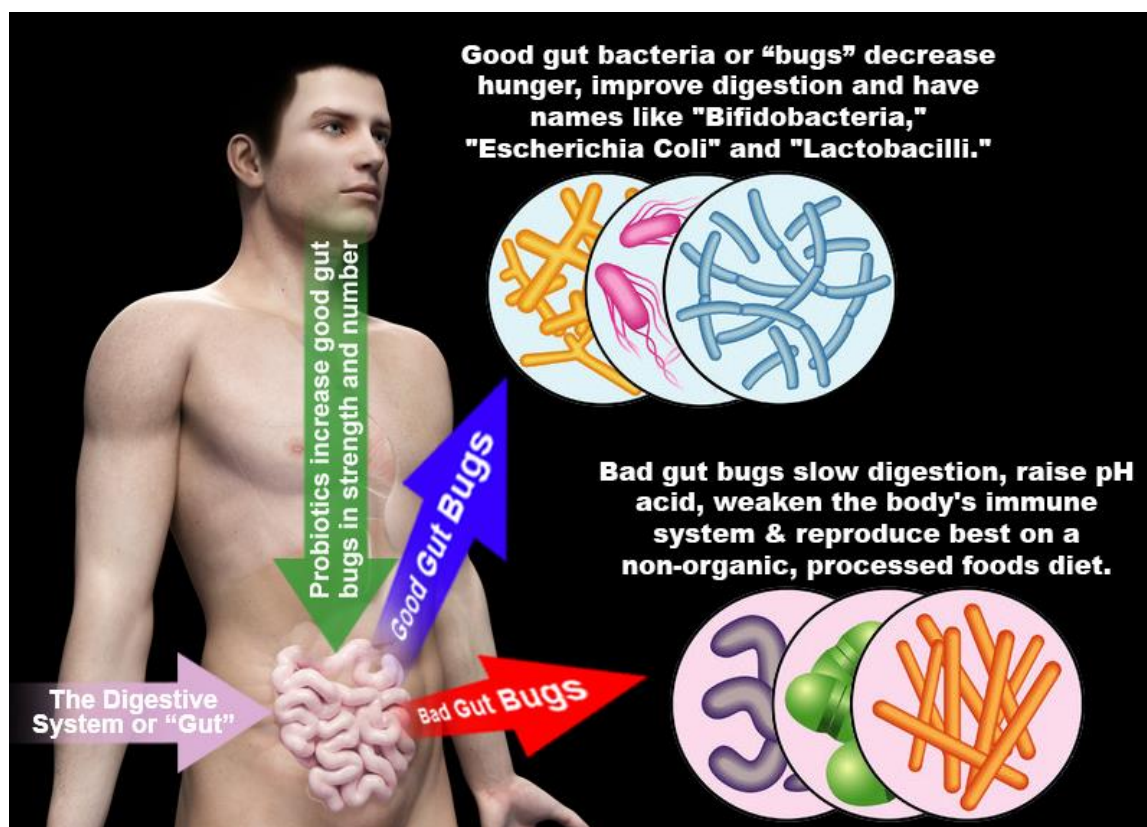
"living micro-organisms that, when ingested or locally applied in sufficient numbers, can fill one or more specified demonstrated functional or health benefits" (Reynes, 2006).

Probiotic **foods** are defined as:

“... a usually dairy food or a dietary supplement containing live bacteria that replace or add to the beneficial bacteria normally present in the gastrointestinal tract” or “a bacterium in such a food or dietary supplement” (Random House Unabridged Dictionary).

Interesting facts about probiotics:

- Adding foods or supplement pills high in just a few species of “probiotics” increases the strength and number of good gut bacteria;
- There are relatively **few** foods that have probiotics in them;
- **Research is needed** as of this writing as the field of gut bacteria benefits and application is new and growing, but research results so far have been answering a lot of questions.



Foods That Contain Probiotics for Good Gut Bug Health

Consider printing this section or copying it where you keep your grocery shopping list on your smartphone. Some or many of these foods may be unfamiliar to you and therefore more challenging to remember to try when buying groceries.

The following table shows the top five websites for the term “probiotic foods.” Each website can be accessed by clicking the “SITE #X” link on the top row. All five websites listed a total of

22 probiotic foods. There are many more but this study was to get a sense of which foods are most known for their probiotic effects given the field of study is so new.

Top Probiotic Foods

From the Top 5 Website Results for the Term "Probiotic Foods"

FOOD	COUNT	SITE #1	SITE #2	SITE #3	SITE #4	SITE #5
Kefir	5	■	■	■	■	■
Kombucha Tea	5	■	■	■	■	■
Tempeh	5	■	■	■	■	■
Sauerkraut	5	■	■	■	■	■
Pickles	5	■	■	■	■	■
Yogurt	5	■	■	■	■	■
Miso Soup	4	■		■	■	■
Kimchi	4	■	■	■	■	■
Soft Cheeses	3	■		■	■	
Dark Chocolate	2				■	■
Milk with Probiotics	1	■				
Sourdough Bread	1	■				
Pickled fruits and vegetables	1		■			
Cultured condiments	1		■			
Fermented meat, fish, and eggs	1		■			
Buttermilk	1			■		
Fermented Cod Liver Oil	1			■		
Apple Cider Vinegar	1			■		
Green Peas	1				■	
Natto	1				■	
Umeboshi Plums	1				■	
Microalgae	1					■

Prebiotics vs. Probiotics

There is another class of foods known as **PRE**biotic foods. These foods don't contain live bacteria the way probiotic foods do. However prebiotic foods feed the good gut bugs. Prebiotic

foods improve your immune system and aid digestion on their own but when eaten with probiotic foods **both** are much more effective (Derrer, 2014).

A survey of the top five sites for the term “prebiotic foods” revealed red wine, honey, maple syrup, legumes (beans), acacia gum, apples, artichoke, bananas, cabbage, garlic, leeks, oatmeal, onion, raw asparagus, raw chicory root, raw dandelion greens and root vegetables as foods high in prebiotic characteristics.

Whole Foods, Probiotics and Diabetes

As the seventh-leading cause of death in the country, diabetes has been diagnosed in more than 29 million people in the US (Whiteman, 2015). Many more could be living with it or on the border of having it and not know (pre-diabetic).

Much of what is known today about the effects of probiotics have been results from the study of rats, and extrapolating such results to be meaningful to humans is loosely valid. But the rat studies have been promising especially in the pursuit of a diabetes cure. Rat test results help formulate and promote strong theories to pursue research in humans. This can validate further research to duplicate rat study results, and justify research funding.

When the body’s blood sugar rises higher than normal, it is not using insulin properly. This is the diagnosis for Type 2 diabetes, the most common kind. The pancreas initially overreacts making extra insulin but eventually cannot keep up to maintain normal blood sugar levels (Type 2 Diabetes, n.d.).

Whole Foods Cure? Those obese individuals that are diagnosed with diabetes are generally instructed to change their diet. Diabetes is more likely eating an animal-derived, high-fat diet. Diets low in saturated fats include vegan and possibly some vegetarian menus, as long and processed vegan or vegetarian foods are avoided.

Research on the effect of a vegan diet has shown that following this type of diet can help prevent and manage diabetes. If followed strictly, restricting calories and carbohydrates was not necessary for test subjects to lose weight without any further changes (Whiteman, 2015).

Vegan diets are high in fiber and thought to improve a feeling of fullness longer. The whole foods in vegan diets promote and support the creation of good gut bugs which both helps digestion and regulates appetite. Even better, diabetic research participants lowered their blood glucose levels when switching to vegan food (American Diabetes Association, 2014).

Probiotics. There are many strains but two main classes of probiotics that we can ingest in food or supplements (DiLonardo, n.d.):

Lactobacillus is a probiotic often used to prevent and treat diarrhea, as well as irritable bowel syndrome (IBS), Crohn's disease and some skin disorders.

Bifidobacterium is found in some dairy products. It eases the symptoms of irritable bowel syndrome (IBS).

There are thousands of strains in these general classes that have specific effects when present or not present in the body.

Researchers at Cornell University recently discovered compelling evidence that the right probiotics can reduce diabetes by lowering blood glucose (blood sugar). After a 90 day study rats fed modified probiotic displayed blood sugar levels 30% lower than rats not fed the probiotic (Whiteman, 2015). The findings are so encouraging in fact that these researchers are now working with a biopharmaceutical company to develop a pill for human use.

Whole Foods and Alzheimer's Disease

Vladimir Hachinski, MD, DSc, Dept. of Clinical Neurological Sciences, University of Western Ontario predicts, "One in 3 of us will have a stroke, dementia, or both, unless we improve prevention (Hachinski, 2011)."

He also says "strokes and Alzheimer disease occur together and pose risks for each other, and clinical, pathological, and experimental studies suggest that they may also interact."

What you eat has a significant influence on your chances of having a stroke, Alzheimer's disease or some form of dementia. Research is increasingly showing a connection between diet and brain aging (Craft, 2011).

Research called the "VA Puget Sound Study on Diet & Alzheimer's/Dementia" in 2011 studied a group of 49 people, 29 with a "precursor" to Alzheimer's called "aMCI" and 20 people without such precursor and controlled their diet for four weeks.

They mixed the "pre-Alzheimer's" people equally and created two groups. One was fed a low-fat, low-glycemic diet and the other group a high-fat, high-glycemic diet.

They found that a diet low in especially saturated fat and low glycemic can change the levels of the substances associated with the development of Alzheimer's. This diet not only improved many of the symptom indicators for Alzheimer's, but it also improved memory.

On the other hand those on the high-fat, high-glycemic (high sugar) diet saw either no improvement or negative consequences for the brain. They concluded that this type of diet over a long period of time increases chances of developing Alzheimer's disease (Craft, 2011).

Whole Natural Foods' Effect on Cholesterol

Cholesterol is a fat in your blood needed to help brain, skin, and other organs function. The body uses some cholesterol to make hormones, vitamin D, and substances that help digest foods. The body makes all the cholesterol it needs but it is also found in some foods (NIH, 2012).

There are two types of cholesterol, HDL (“good”) cholesterol levels and LDL (“bad”) cholesterol. HDL carries cholesterol to the liver for processing whereas LDL can build up and clog arteries (Weil, 2012). A high LDL level tends to cause cholesterol to build up which puts the heart and other aspects of health at risk (Jaret, 2006).

Trans fatty acids (trans-fats) raise LDL cholesterol, and processed foods tend to have high amounts. When eaten, the body breaks down processed food carbohydrates into simple sugars creating a bodily response not much different than if you had consumed cotton candy (Jacobs Dr, 1998). To lower cholesterol eat meals low in saturated fat (low in trans-fats) and high in whole, natural fruits and vegetables. Certain natural foods like nuts, avocados, beans, blueberries and oats specifically have been shown to lower LDL cholesterol levels (Jaret, 2006). Once you start eating more natural whole, single-ingredient fruits and vegetables, you won’t have as much room for processed or refined “fake” foods (Jacobs Dr, 1998). Whole foods lower hunger through hormone optimization and decrease desire promoting a healthy diet that avoids overeating, obesity and heart disease.

Eating Whole Foods and Acid Reflux

Heartburn or “acid reflux” is a painful condition whereby stomach acid flows backward into the esophagus. The flow of acid is intended to go only one way, but when it backflows it is known as “acid reflux,” “gastroesophageal reflux disease” or GERD (WholeFoods, 2011).

Acid reflux should not be ignored or considered harmless. The esophagus’s constant exposure to acids causes the muscular cells to age faster and become unable to function properly (Snyder, n.d.). According to “*Persistent Acid Reflux and Cancer*,” in the Nutrition Health Review: The Consumer’s Medical Journal, 2009, Issue 100:

GERD cells can change into tougher cells similar to those found in the stomach or intestines, or take cells from other places, such as from the bone marrow, to make up for the destroyed cells.

GERD can decrease quality of life (because it’s painful and tends to last) and can even be life threatening. GERD can cause esophageal ulcers and possibly cancer if left untreated.

30-40% of U.S. adults suffer from acid reflux, and the rates of esophageal cancer in the U.S. have increased 500% since the 1970s. The 1970s was about the time when fast and processed foods started to become the normal U.S. diet (Killoran, n.d.).

The problem could easily be that the GERD sufferer has highly acidic pH, which can be remedied by adding whole fruits and vegetables into the diet as mentioned in “How Acidic Foods Affect Our Bodies” beginning on page 17.

Many factors contribute to GERD including eating large meals, eating foods known to irritate the stomach such as acidic or spicy foods, constipation or poor elimination, being overweight by itself and most important for our discussion here is eating a high fat diet, processed foods diet (Snyder, n.d.).

One cure is to add or increase whole, single ingredient foods into the diet like natural, organic fruits and vegetables. Plants are alkaline, which can help slow or stop acids from building up. Plants are easy to digest, so the stomach doesn't need to work as hard or produce acid as it would with other foods.

Animal products are also known to increase GERD as they are very difficult to digest. Animal food products create acid and support conditions in which acid reflux can occur and increase (Snyder, n.d.).

Processed foods, acid-forming beverages like coffee, soda, and processed energy drinks, all irritate the stomach lining. The carbonation in soda also contributes to GERD symptoms. Switch to herbal tea, pure water, or most non-acidic drinks that are derived from whole foods. Avoid hard to digest gluten grains and minimize super fatty foods which both aggravate GERD.

Other natural cures include:

- Licorice root tea, Deglycyrrhizinated licorice, or DGL;
- Fresh basil leaf;
- Slippery elm lozenges;
- Digestive enzymes;
- Raw honey is said to neutralize pH in the stomach but has weight loss implications;
- Chamomile tea has a soothing effect on the stomach and esophagus;
- Chewing gum may increase saliva production, which is a natural acid neutralizer;
- Drinking a room temperature water to flush your system out and carry away acid;
- Aloe juice may help to eliminate acid-producing gut bugs and absorb acid-producing proteins;
- Apple cider vinegar may help to neutralize stomach acid;
- Bananas contain natural antacids (Snyder, n.d.) and (Killoran, n.d.).

Other non-dietary suggestions include keeping the body upright for at least an hour after eating. Remain standing or sitting for an hour so that the stomach acid remains where it's supposed to: in your stomach. Also try elevating the body when sleeping. By raising your upper body you can keep stomach acids where they belong. Avoid antacids because they cause the stomach to produce more acid to overcome the alkalinity they create. If you've taken an antacid like Tums, have you noticed that it only works for a few minutes until symptoms return? This is because adding an antacid causes the stomach to defend against the alkalinity by producing even more acid once the alkaline-based antacid wears off (Snyder, n.d.).

Chapter #6: Cheat Meals

How to Strategically “Cheat” on a Diet Plan and Burn More Fat

The Role of leptin in Weight Loss

Be careful: an increasing number of supplements are being sold claiming to increase leptin levels in the body. Lack of leptin is only present in an extremely small part of the population. Leptin doesn’t work in a straightforward way such that simply increasing levels will cause weight loss. Many obese people have an abundance of leptin. **What’s going on?**

Leptin is the “starvation hormone.” It is a **regulator** that tells the brain when you do and do not have sufficient energy to engage in demanding activities like exercise (Gunnars-2, n.d.).

Leptin forms in fat cells meaning the more weight a person gains the more leptin they have in their body. Leptin then travels to the brain through the bloodstream passing through the “vagus nerve,” a nerve connecting the brain and the abdomen. Recent research increasingly has focused on the role of this nerve in guy-brain communication.

There is a “meter” in your brain that monitors the level of leptin in your body. There is also a leptin boundary that signals your energy reserves are sufficient to work, walk, exercise, eat and function normally.

The boundary or “threshold” is different for everyone (Kam, 2010). A healthy diet is required to create enough leptin to cross this boundary at which time the person may feel heightened motivation to exercise and be active. A diet of “fake” processed foods decreases the body’s ability to create leptin, the leptin boundary or “threshold” is not reached, and the person is much less inclined to be physically active (Kam, 2010).

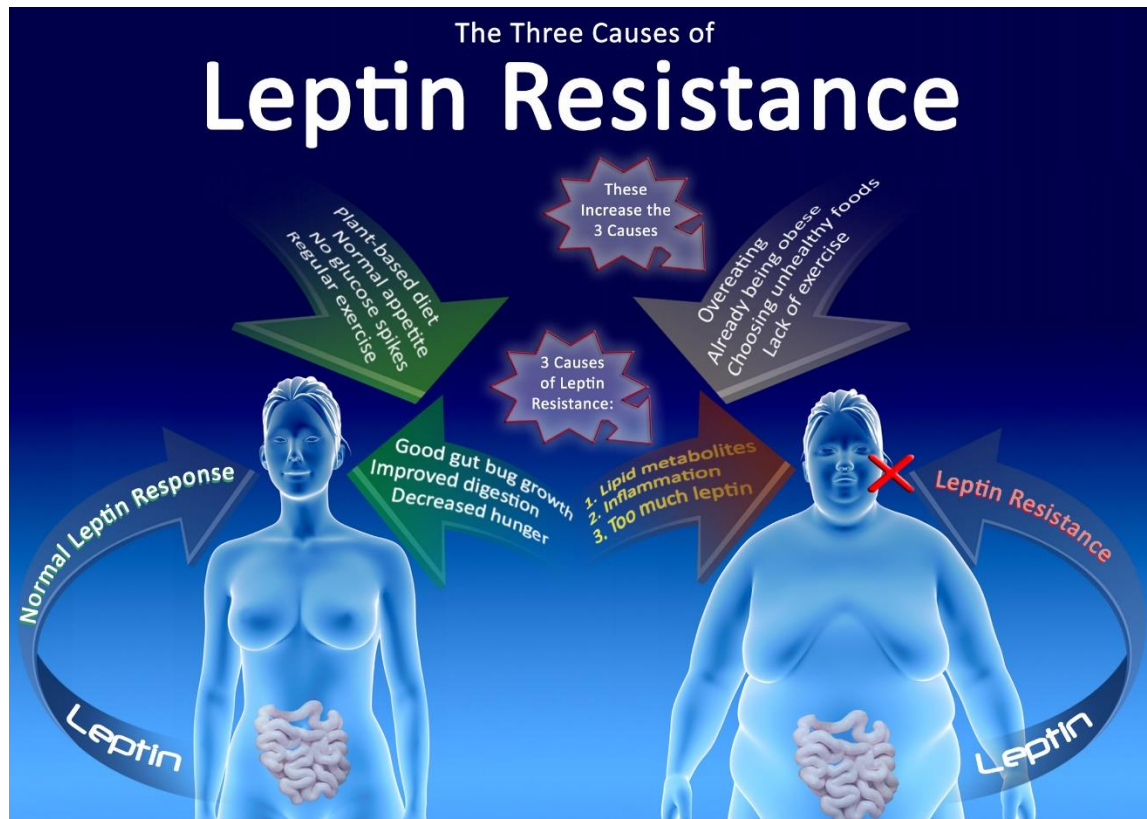
But as stated, obese people have a lot of leptin in their bodies because it is created in fat cells. How then can they have high levels of leptin and still be fat? This happens because leptin travelling through the vagus nerve gets blocked. Without leptin to tell the brain to stop eating, overeating occurs, and overeating causes additional events that tend to not produce the needed leptin.

This blocking activity is known as “leptin resistance.” Even if leptin levels increase a person experiencing leptin resistance will get fatter.

“In leptin resistance, your leptin is high, which means you're fat, but your brain can't see it. In other words, your brain is starved, while your body is obese (Kam, 2010).”

Even though obese people can have an overabundance of leptin, the hormone acts in a very balanced way in our bodies. Leptin resistance is a condition whereby the body doesn’t respond

correctly to leptin, ***much the way insulin resistance works***. Leptin resistance is created from a combination of three rather technical causes: ***lipid metabolite increases, inflammation and an over-abundance of leptin***. That's right, if there is too much leptin as in the case of an obese person creating too much, leptin resistance is created at the cellular level (Guyenet, 2014). The discussion gets very technical as to why but research shows that ***overeating, already being obese and choosing unhealthy (processed or "fake") foods and lack of exercise increase the three causes of leptin resistance***.



When a plant-based diet is followed, ***regardless of calories***, leptin response tends to return to normal, leptin resistance is inhibited, the person feels more active ***while*** they feel less hungry ***and also while*** their body is in a state to burn calories more efficiently. Leptin response returns to normal and weight returns to normal, ***and this can be done without dieting*** simply by carefully selecting the items that go in your body.

So taking any supplement that claims to have leptin in it is a mistake. Simply following a whole, natural foods diet and avoiding processed foods can be enough to lose weight. If a person desires to lose weight quickly following this thinking the best way to proceed would be to strictly only eat vegan foods. If done correctly this is not difficult, does not require starvation or will power.

Why Eating Cheat Meals Can Help You Burn Fat

Your body is a survival organism. It reacts to forces in the environment that might cause sickness or death – anything that would get in the way of its survival. Reducing calories is understood by your body as an assault meant to decrease its ability to survive. Taking away

fattening foods causes the body to decrease leptin production and alters other hormone levels causing the metabolism to slow down and conserve energy (Smith, n.d.).

Dieting or restricting food (and therefore calorie) intake has an expense, and over time the cost can outweigh the benefit at some point of metabolism deceleration. Long term calorie deficit diets lower energy leaving the dieter sluggish and weak. This condition stifles motivation to be active causing a further slowdown in weight loss as the body goes into a survival mode. Giving the body a “break” from the lack of calories and carbohydrate quickly returns hormone levels reversing the diet’s negative effects on metabolism, hunger and energy availability. The increased calories also return thyroid and body hormone levels to normal which quickly boosts metabolism (Segura, 2015).

What Is a “Cheat Meal?”

For our purposes we define cheat meal as:

“A meal with significantly higher calorie and carbohydrate volume than a typical diet plan meal.”

The concept is simple: a meal that exceeds calorie and carbohydrate boundary levels on a diet plan you are following.

Cheat Meal Effects

Decreasing calories and carbohydrates also decreases the hormone called “leptin.” With less leptin the brain acts less to curb appetite and decrease hunger (Kam, 2010). This is why it is important to not skip meals when dieting: skipping meals or “starving” accelerates leptin loss but also makes the remaining leptin less able to communicate with the part of the hypothalamus that regulates appetite so the brain is less likely to communicate a sense of fullness causing a tendency to overeat (Anaya, n.d.).

Cheat meals reset metabolism and insulin regulation hormones, replenish blood for increased energy, and keep calorie-burning systems functioning more efficiently. A cheat meal is like a swimmer coming up for air. It’s like the rest between sets of exercise where the body gets a little “fooled” that the diet is over. Excess carbohydrates, glucose and calories enter the body providing energy for exercise and the cheat meal provides psychological encouragement that continuing on this diet is possible to continue.

Cheat meals are not cheat “days.” Cheat meals should be planned, and your reaction to them should be monitored so over time you learn the optimum number of “diet” meals you should eat before eating a cheat meal. For some people with certain leptin boundaries and metabolism speed it will be 20 meals to one cheat meal. Other people may find they need to have a cheat meal every ten days instead of every week, and still others may benefit from two cheat meals per week if the dieter eats 5-6 smaller meals per day the way bodybuilders do.

The increase in metabolism that a cheat meal provides lasts for days if done correctly. After your body digests a cheat meal, hormone levels quickly normalize and it takes several diet meals

for your body to get the message that the extra calories and carbohydrates from the cheat meal have stopped (Segura, 2015). This is more evidence in the value of this practice.

Cheat Meal Recommendations

Much has been written about cheating interruptions of a diet, if it works and situations and unique individuals for which it may not. Current thinking often fails to focus on the content of the cheat meal as much as frequency and quantity.

Creating a cheat meal made up of whole, natural foods in a situation where the dieter has been strictly following a calorie-restricted is optimum. Adding calories of “fake” processed foods makes no sense when trying to restore hormone levels. Many bodybuilders have in the past written about cheat meals where they would cheat with fast foods. This undermines the purpose: to restore leptin and other hormone levels so the dieter is more physically successful and psychologically inclined to continue.

Instead of processed foods, find a whole foods or vegan restaurant and plan a cheat meal of the highest calorie, highest carbohydrate food on their menu. It will promote the development of good gut bugs, increase hormone levels the most efficiently and add a much stronger sense of “satiety” or feeling of satisfaction and fullness to the meal. Remember: ***a calorie is not a calorie*** when comparing whole foods and processed foods. The effect on the human body is profoundly different. Processed foods make it easy to overeat, improve bad gut bug volume and size impairing digestion, and increase cravings. Whole foods satisfy, have a higher thermic effect because the body works harder to digest them and add to good gut bacteria improving digestion. When planning your cheat meals, cheat with whole, natural foods.

Chapter #7: Exercises That Can help Burn Fat

Why Cardio Does Not Always Work for Fat Loss

People spend countless hours per week running, on treadmills, bikes and stair climber machines trying to lose weight. Here's a bold statement that may sound incorrect but it's true: ***few people that focus on cardio to lose weight drop pounds that stay off*** (Dicenso, 2015). Cardiovascular exercise alone won't allow a person to become and remain thin. Regardless of what you've heard or believe about the long term effects of cardio this is true.

We're All Fat

Think about it: a 180 pound thin man with 10% bodyfat ***still has 18 pounds of fat in his body***. Picture what 18 pounds of fat might look like opposed to this person's visually thin appearance.

Fat is also known as "adipose tissue," defined as:

"Connective tissue made of fat cells in a meshwork of areolar tissue (Farlex, n.d.)."

Each pound of fat equals 3,500 calories. A 180 pound man with a fairly thin appearance at 15% bodyfat means he has approximately 94,500 calories in his body. This person could survive about a month without food and still remain alive as long as he had sufficient water (Fruhbeck, 2001).

"Subcutaneous adipose fat" can be described as "deep reserve fat" that the overweight body can store in unsightly places. Everyone has deep reserve fat. Thin people have it in their internal body fat and overweight people have this fat typically around the midsection and a variety of other places from under the arm to under the chin (Kelso, n.d.). Deep reserve fat can be difficult to lose because of the way the human body uses fat. Stored subcutaneous adipose or "deep reserve fat" is only used by the body in extreme conditions such as starving, or more positively, intense exercise.

For most daily activities including exercise, the body creates enough fat and stores it in muscle and in the blood. This fat along with liver glycogen and blood glucose is all the fat most people use in a typical day, even with exercise (Kelso, n.d.). Even athletes tend to have sufficient fat for their daily activities without the body accessing deep reserve fat.

Without the body somehow being stressed enough to access the deepest reserves of fat storage, the body will always appear to be soft and even overweight looking in some areas. This is why some, even long distance runners can have a smooth appearance.

Most beginners start running or perform some form of cardio or aerobic activity to try to lose weight. The motivated overweight person makes up their mind to lose the weight, laces up their running shoes, and takes off for a long run, certain they'll lose weight if they continue.

What is Cardio or “Aerobic Activity?”

One definition of aerobic activity is:

“Aerobic activities constitute any form of exercise that is repetitive, long, and hard enough to challenge the heart and lungs” (Robson, 2015).

The definition for “cardio” or cardiovascular activities is not much different:

“... any activity that increases heart rate and respiration while using large muscle groups repetitively and rhythmically (Kreger, 2013).”

Those wanting to lose weight are almost always told to engage in aerobic activity that should take 30 minutes to an hour, otherwise known as “steady state” cardio.

“Steady state” cardio is aerobic activity that keeps the body working in the low-effort, steady state mode for long periods of time. Steady state cardio **does not** draw any energy from “deep reserve fat” but merely from the glycogen, circulating blood glucose and muscular fat the body produces for everyday activity. This burns calories but it also **significantly increases hunger** and again, the calories burned aren’t from the “spare tire” you can pinch. Increased cardio increases hunger the more you do. The unaware beginner can get so hungry as to easily eat twice the calories burned, possibly **causing** weight gain.

What About Walking?

A few weeks of walking is definitely advised for beginners. It is dangerous to launch into a long steady state aerobic workout regimen if your body has not been exercising. But walking is not effective for more than a few weeks. The beginner should start off by walking, then gradually increase their speed to slow jogging, faster jogging, then running. Walking is considered one of the least effective methods to lose weight because of its low intensity (Robson, 2015).

The “Anti-Cardio” Workout

There are two “schools of thought” or general opinions about cardio:

1. **At least 30 minutes of cardio should be performed every day.** This advice refers to “steady state” cardio. “The Centers for Disease Control and the American College of Sports Medicine recommend performing a minimum of 30 minutes of moderate-intensity cardio activity on most, if not all, days of the week (Kreger, 2013).” This is by far the most popular opinion but it is simply not true!
2. **Cardio is slow death.** Cardio has psychological as well as physically damaging effects. It kills motivation (because it’s long, hard and doesn’t work), it can injure joints, it damages internal organs and harms good gut bugs to lower the effectiveness of your

immune system. Running (not sprinting, which is anaerobic) is effective but it is unnecessarily high impact and damaging: cardio and respiratory fitness can be achieved with other forms of aerobic activity (Robson, 2015). It also can decrease skeletal muscle, making the body “wither” and weaker overall.

The body quickly adapts to steady state cardio because it is, in essence, endurance training. Endurance training is performed by long-distance runners in the case of preparing for a marathon. Why do you think marathon runners train before competitions? They train to make their bodies more efficient at moving across distances as calorie and energy efficient as possible.

Steady state cardio:

- ***Causes the body to burn fewer calories over time;***
- Causes intense hunger;
- Decreases the body’s muscle mass which drastically lowers the body’s ability to burn calories.

The overweight person trying to lose fat decreases her body’s ability to do so sticking to steady state cardio (Cosgrove, 2014). The solution to “steady state” cardio workout shortcomings is a type of exercise called ***“interval training.”***

Interval training is alternating high intensity exercise with short rest periods (Bode, 2003).

There are hundreds (thousands?) of interval training workout models, but the simplest is to consider a typical 30 minute run.

Most “joggers” or runners will run for some time period at the same pace and then stop. They’ll pace themselves according to available energy to last the entire pre-allotted time. Switching this to an interval workout, the runner would jog for say 4.5 minutes, then sprint as fast as possible for 30 seconds, then start the next “interval” by jogging another 4.5 minutes with another 30 second sprint. The workout would have six “intervals” to equal the same time as the steady state workout, ***but interval training is much more effective and can be done in less time*** (Kelso, n.d.).

Interval training has dramatic advantages. Whereas steady state cardio will keep the metabolism in a calorie-burning mode for about two hours after exercise, ***cardio performed using an interval training model keeps the metabolism burning calories up to 24 hours.*** Not only that, but the calories burned reach down to the “deep reserve fat” level. Interval training pressures the body in “spikes” causing sufficient stress for the body to burn calories beyond what are normally produced for daily activity.

Since interval training can be performed in a shorter time it often doesn’t cause muscle loss the way long steady state workouts can so the body retains more skeletal muscle. ***Muscle burns fat:***

a body with more muscle will naturally have less fat and will burn it off faster. Interval training is important to preserve skeletal muscle so the body burns calories longer after workouts.

HGH and Interval Training

Although there is controversy surrounding the substance, HGH is secreted naturally by the Pituitary Gland and is important in the discussion about weight loss. HGH encourages muscle growth, cell production and regeneration in the human body by stimulating protein formation. According to Dr. John Ratey author of “Spark: The Revolutionary New Science of Exercise and the Brain:

“HGH is the body’s master craftsman, burning belly fat, layering on muscle fiber, and pumping up brain volume (Ratey, 2008).”

In the book, Ratey describes research that shows HGH can reverse brain volume loss that naturally occurs with aging. Interval training athletes such as Olympic sprinters and football players are essentially spiking their levels of HGH when they do interval training, doping the natural way. The result is a buildup of fast-twitch muscle fibers, which adds power to their movements, which further improves their training ability. Also, recruiting new muscle fibers enhances your metabolism overall, and your body retains the improved ability to burn fat and carbohydrates after interval training.

We’ve established that interval training is more effective than traditional “steady state” workouts, but there is a further increase in effectiveness for the overweight person looking to become and remain thin. ***Studies show weight lifting creates a body with even lower fat mass than aerobic exercise can produce*** (Dicenso, 2015).

More Effective Weight Loss than Interval Training

There are many myths about lifting weights that are simply not true. One of them is that especially women worry about getting “bulked up.” Let’s clear this up once and for all: ***getting “bulked up” is difficult.*** You have to force eat food, eat bodybuilding supplements, and lift like a power lifter with the heaviest weights possible in very complicated long routines to get bulked up. If it were easy to get bulked up you would see a lot of pumped up people, and that’s not the case. Lifting weights will not cause you to bulk up unless you model your entire lifestyle to be a bodybuilder. Now that’s settled.

According to many sources, ***the way to lose weight is to lift weights.*** Skeletal muscle, not belly fat, increases your ***resting metabolism*** the way nothing else can. Increase your resting metabolism and create an internal environment that burns more calories while you rest by lifting weights.

Increasing skeletal muscle means to tone the muscle you have under your skin to a barely if at all visible point. This will increase your metabolism and get rid of even the most stubborn body fat. No amount of cardio alone can increase the metabolism like weight training can, even if it’s cardio using an interval training model. Weight training is often not considered by overweight people looking to lose weight because:

- People don't believe weight training can cause weight loss;
- Weight lifting often has to be performed in a gym where too many in-shape people are;
- Many have an image of weight lifting as becoming bulked up, which isn't true.

Muscle reshapes the body. There are examples of people that do successfully lose weight without much exercise, but they end up with unattractive bodies. This can occur in situations where a person with an amount of belly fat that is unsightly but not enough to classify them as obese goes on a gluten free diet for medical reasons. They can lose weight in the hips and shoulders and keep the unsightly belly fat because the body isn't being shaped through building muscle. Even people that perform only cardio – either steady state or interval – can end up with an unattractive body.

Non-aerobic weight lifting can tighten, firm, tone, and target body areas that will be unaffected with dieting alone. Aside from the “whole foods cure” mentioned in the section “Whole Foods, Probiotics and Diabetes” beginning on page 26, muscle also fights the onset of diabetes, and adds to your efforts to lower LDL cholesterol and increase HDL to fight heart disease (Dicenso, 2015).

Resistance training preserves and builds skeletal muscle. Stressing muscle tissue by weight training forces the body to tap into stored deep reserve fat for recovery unlike cardio (Kelso, n.d.). If you want to truly lose weight and keep it off, lift weights!

[The World's Most Efficient Workout](#)

There is one workout that is better than either interval cardio training or weight training. If you combine lifting weights with interval training, you can receive the benefits of both. **Interval weight training** is in its simplest forms weight training with a stopwatch. Many interval weight training plans exist and once you become advanced enough you can even create your own to target certain body parts.

How do you do interval weight training? Sometimes called “circuit training,” the interval weight training dieter goes through a timed series of weight lifting movements without stopping. The movements chosen and the amount of time spent doing each can be changed as desired, as can rest periods. One should follow a known-to-be-effective interval weight training program at first to make sure sufficient stress is applied to the body to reach deep fat reserves.

[A Simple Interval Weight Training Example](#)

By their very nature interval weight training programs or “recipes” are more complicated than steady state or interval training aerobics. You have to know how to correctly perform the movement, find a suitable “timing scheme” for each interval and the beginner must do some light weight practice to make the routine gradually effective.

One simple example is to identify three weight training movements you know. They may or may not be related to the same muscle. “Related” would be performing two movements like a bench press and tricep dip that both affect the triceps back-to-back. Not related would be like doing a bench press and leg squats back-to-back.

Perform each movement for 45 seconds resting 15 seconds in between. You'll need some form of timing device for interval weight training. Dozens of smartphone apps exist that can make this easy.

The effectiveness of interval weight training goes beyond any other type of exercise activity for losing weight. Interval weight training:

- Builds muscle that burns more fat at rest;
- Has no impact on joints;
- Pushes metabolism to the “deep reserve level;”
- Has been shown over time to be the most effective and absolute fastest way to lose weight (Stoppani, n.d.);
- Improves internal organs;
- Supports good “gut bug” growth and immune system functioning;
- Has brain improvement properties (Ratey, 2008);
- Has anti-aging properties as opposed to cardio which can do the opposite;
- Can be more effective in a shorter amount of time;
- Maintains psychological health and motivation to continue;
- Improves well-being.

... and there are likely other benefits not listed. Interval weight training comprise the body of exercises that are the absolute most effective at helping burn fat.

Chapter #8: Summary and Conclusion

This eBook has revealed the research behind ways to diet and lose weight that are not intuitive especially to beginners. It has dispelled myths and revealed aspects about the human body that we are just now beginning to understand in relation to weight loss.

Bibliography

- Achbar, M., & Abbott, J. (Directors). (2003). *The Corporation* [Motion Picture].
- American Diabetes Association. (2014, May 14). *Is it Safe for Someone With Diabetes to Follow a Vegetarian Diet?* Retrieved from American Diabetes Association: Is it Safe for Someone With Diabetes to Follow a Vegetarian Diet? - See more at: <http://www.diabetes.org/food-and-fitness/food/planning-meals/meal-planning-for-vegetarians/#sthash.NSz7oYeR.dpuf>
- Anaya, C. (n.d.). *Lose Weight And Get Ripped With Cheat Meals*. Retrieved from Muscle and Fitness: <http://www.muscleandfitness.com/nutrition/lose-fat/lose-weight-and-get-ripped-cheat-meals>
- Ashton, J. (2010, September 7). *Study: Some Low-Carb Diets Up Cancer, Death Risk*. Retrieved from <http://www.cbsnews.com/news/study-some-low-carb-diets-up-cancer-death-risk/>
- Bazzano, MD, PhD, MPH*, L., Tian, MD, MS*, H., Reynolds, PhD, K., Yao, MD, MS, L., Bunol, MS, RD, LDN, C., Liu, MS, Y., . . . He, MD, PhD, J. (2014, September 2). *Effects of Low-Carbohydrate and Low-Fat Diets: A Randomized Trial*. Retrieved from Annals of Internal Medicine: <http://annals.org/article.aspx?articleid=1900694>
- Begley, S. (2014, February 18). *The 13 Most Influential Candy Bars of All Time*. Retrieved from Time Magazine: <http://time.com/8195/13-most-influential-candy-bars-of-all-time/>
- Bloomberg (Director). (2013). *McDonald's Test Kitchen: Where Fast Food Is Born* [Motion Picture].
- Bode, L. (2003). *Spice Up Your Workouts With Interval Training*. Retrieved from Topend Sports: <http://www.topendsports.com/fitness/methods-intervals.htm>
- Calder, P. C., Field, C. J., & Harsharnjit, G. S. (2004). *Nutrition and Immune Function (Frontiers in Nutritional Science, No. 1)*. Retrieved from The American Journal of Clinical Nutrition: <http://ajcn.nutrition.org/content/79/3/525.1.full>
- CDC. (2015, March 9). *What is Salmonellosis?* Retrieved from Centers for Disease Control and Prevention: <http://www.cdc.gov/salmonella/general/index.html>
- Cloe, A. (n.d.). *Can Eating More Protein Speed Metabolism?* Retrieved from SFGate.com: <http://healthyeating.sfgate.com/can-eating-protein-speed-metabolism-8352.html>
- Cosgrove, R. (2014, April 7). *The Death of Steady State Cardio*. Retrieved from T-Nation.com: <https://www.t-nation.com/training/death-of-steady-state-cardio>
- Craft, S. (2011). Diet Intervention and Cerebrospinal Fluid Biomarkers in Amnesic Mild Cognitive Impairment. *Archives of Neurology*, pp. 743-752.
- Cummins, R. (2004, May 11). *Pesticide Residues from Non-Organic Foods Building Up in Our Bodies*. Retrieved from Organic Consumers Association: https://www.organicconsumers.org/old_articles/foodsafety/residues052404.php
- Curtin, J. (2011, July 6). *Understanding and Overcoming Food Addictions*. Retrieved from The Weston A. Price Foundation: <http://www.westonaprice.org/health-topics/why-we-crave/>
- Derrer, D. T. (2014, December 21). *The Truth About Probiotics and Your Gut*. Retrieved from WebMD: <http://www.webmd.com/digestive-disorders/probiotics-15/slideshow-probiotics>
- DeVault, N. (2015, January 28). *What Is the Difference Between Good Bacteria & Bad Bacteria?* Retrieved from Livestrong.com: <http://www.livestrong.com/article/337181-what-is-the-difference-between-good-bacteria-bad-bacteria/>

Dicenso, R. (2015, April 16). *Why Cardio Exercise Alone Does Not Work for Burning Fat*. Retrieved from ShapeFit, LLC: <http://www.shapefit.com/fat-loss/why-cardio-alone-does-not-work.html>

DiLorenzo, M. J. (n.d.). *What Are Probiotics?* Retrieved from WebMD: <http://www.webmd.com/digestive-disorders/features/what-are-probiotics>

Dorey, E. (2010, March 22). Gut metagenome may lead to new therapies. *Chemistry and Industry*, pp. 148-158.

Faires, M. (2013, January 13). *Understanding Metabolism: What Determines Your BMR?* Retrieved from FitDay.com: <http://www.fitday.com/fitness-articles/nutrition/understanding-metabolism-what-determines-your-bmr.html>

Farlex. (n.d.). *adipose tissue*. Retrieved from The Medical Free Dictionary: <http://medical-dictionary.thefreedictionary.com/Fat+cells>

FOX News, N. (2013, November 21). *Why bacteria keep you healthy*. Retrieved from <http://www.foxnews.com/health/2013/11/21/why-bacteria-keep-healthy/>

Fruhbeck, G. (2001). The Adipocyte: A Model for Integration of Endocrine and Metabolic Signaling in Energy Metabolism Regulation. *American Journal of Physiology*, pp. 827-847.

Greger, M. (2015, May 19). *Low Carb Diets Found to Feed Heart Disease*. Retrieved from NutritionFacts.org: <http://nutritionfacts.org/2015/05/19/low-carb-diets-and-coronary-blood-flow/>

Gunnars, K. (n.d.). *10 Things Dietitians Say About Low-Carb Diets That Don't Make Sense*. Retrieved from <http://authoritynutrition.com/10-things-dietitians-say-about-low-carb-diets/>:
<http://authoritynutrition.com/10-things-dietitians-say-about-low-carb-diets/>

Gunnars-2, K. (n.d.). *Leptin and Leptin Resistance: Everything You Need to Know*. Retrieved from Authority Nutrition: <http://authoritynutrition.com/leptin-101/>

Guyenet, S. (2014). *What Causes Leptin Resistance?* www.ancestralhealth.org/ahs14-program: Ancestral Health Symposium.

Haan, S. (n.d.). *6 Risks of Eating a Low-Fat Diet*. Retrieved from sparkpeople.com: http://www.sparkpeople.com/resource/nutrition_articles.asp?id=60

Hachinski, V. (2011). Stroke and Alzheimer Disease. Fellow Travelers or Partners in Crime? *Archives of Neurology*, pp. 797-798.

Hayes, M. (2013, November 28). *Sorting good germs from bad, in the bacterial world*. Retrieved from Phys.org: <http://phys.org/news/2013-11-good-germs-bad-bacterial-world.html>

Hedberg, N. (2008-2009). *The Joy of Food: The Alkaline Way Guide*. Sterling, VA: Health Studies Collegium.

Hill, C. (2015, July 13). *The Effect of Food Processing on Vitamins and Minerals*. Retrieved from LiveStrong.com: <http://www.livestrong.com/article/469958-the-effect-of-food-processing-on-vitamins-minerals/>

Holder, A. (2013, December 9). *The microbes in your gut may be making you fat or keeping you thin*. Retrieved from The Washington Post: http://www.washingtonpost.com/national/health-science/the-microbes-in-your-gut-may-be-making-you-fat-or-keeping-you-thin/2013/12/06/6f186da2-488b-11e3-a196-3544a03c2351_story.html

Hussar, A. D. (2012, May 15). *5 Signs That You Don't Have Enough Fat in Your Diet*. Retrieved from Self Magazine: <http://www.self.com/flash/diet-blog/2012/05/4-signs-that-you-dont-have-eno/>

Huster, P. D. (n.d.). *Peripheral Membrane Proteins: Ghrelin*. Retrieved from Universitat Leipzig: Institute for Medical Physics and Biophysics: <http://www.uni-leipzig.de/~biophys/cms/index.php?id=266>

- Hydrogen Ion Concentration*. (2014, April 1). Retrieved from Encyclopaedia Britannica:
<http://www.britannica.com/science/pH>
- Jacobs Dr, M. L. (1998). Whole grain intake and cancer, an expanded review and meta-analysis. *Nutrition and Cancer*, pp. 85-90.
- Jaret, P. (2006, March). *7 Super Foods to Improve Cholesterol*. Retrieved from EatingWell.com:
http://www.eatingwell.com/nutrition_health/cholesterol/7_super_foods_to_improve_cholesterol
- Ji, S. (2013, March 28). *How GMO Farming and Food Is Making Our Gut Flora UNFRIENDLY*. Retrieved from GreenMedInfo.com: <http://www.greenmedinfo.com/blog/how-gmo-farming-and-food-making-our-gut-flora-unfriendly>
- Kam, K. (2010, March 11). *The Facts on Leptin*. Retrieved from WebMD, LLC.:
<http://www.webmd.com/diet/obesity/the-facts-on-leptin-faq>
- Kelso, T. (n.d.). *Why Steady State Cardio for Fat Loss Is a Bad Decision*. Retrieved from Breaking Muscle Manifesto:
<http://breakingmuscle.com/strength-conditioning/why-steady-state-cardio-for-fat-loss-is-a-bad-decision>
- Killoran, E. (n.d.). *The Acid Reflux Diet*. Retrieved from Pritikin Longevity Center: <https://www.pritikin.com/acid-reflux-diet>
- Kreger, A. (2013, September 27). *Definition of Cardio Exercise*. Retrieved from LiveStrong.com:
<http://www.livestrong.com/article/114986-definition-cardio-exercise/>
- Low Fat Diet Definitions*. (n.d.). Retrieved from The Free Dictionary: <http://medical-dictionary.thefreedictionary.com/low-fat+diet>
- Low-carb diet: Can it help you lose weight?* (n.d.). Retrieved from Mayo Clinic: <http://www.mayoclinic.org/healthy-lifestyle/weight-loss/in-depth/low-carb-diet/art-20045831>
- Mercola-1, J. (2013, 10 18). *100 Trillion Bacteria in Your Gut: Learn How to Keep the Good Kind There*. Retrieved from Mercola.com: <http://articles.mercola.com/sites/articles/archive/2003/10/18/bacteria-gut.aspx>
- Mercola-2, J. (2012, October 1). *Gut Bacteria Can Affect Fat Absorption, and Act in Accordance to "Social Structures"*. Retrieved from Mercola.com: <http://articles.mercola.com/sites/articles/archive/2012/10/01/gut-bacteria-on-fat-absorption.aspx>
- Mercola-3, J. (2015, May 27). *Here's What Eating Nothing But McDonalds for 10 Days Does to Your Gut Bacteria*. Retrieved from Mercola.com: <http://articles.mercola.com/sites/articles/archive/2015/05/27/processed-foods-gut-microbes.aspx>
- Mercola-4, J. (2013, April 10). *How Gut Bacteria Affects Your Weight, and Why CAFO Meats Promote Antibiotic-Resistant Disease*. Retrieved from Mercola.com:
<http://articles.mercola.com/sites/articles/archive/2013/04/10/gut-bacteria.aspx>
- Mercola-5, J. (2013, June 20). *What a Food Pyramid Based on Nutritional Science Looks Like*. Retrieved from Mercola.com: <http://articles.mercola.com/sites/articles/archive/2013/06/22/food-pyramid-guide.aspx>
- Mercola-6, J. (n.d.). *Low-Fat Diet and Avoidance of Vitamin D - Two Health Recommendations You're Best Off Rejecting*. Retrieved from Mercola.com:
<http://articles.mercola.com/sites/articles/archive/2013/03/11/misleading-health-recommendation.aspx>
- Michaels, J. (n.d.). *MYTH: If You Want To Slim Down, Go Gluten-Free*. Retrieved from JillianMichaels.com:
<http://www.jillianmichaels.com/fit/lose-weight/myth-gluten-free>
- Million, M. L. (2013). Gut bacterial microbiota and obesity. *Clinical Microbiology and Infection*, 305-313.
- Myers, W. (n.d.). *Thyroid Conditions*. Retrieved from Live to 110: <https://liveto110.com/thyroid-conditions/>

- Myles, I. (2014, June 17). Fast food fever: reviewing the impacts of the Western diet on immunity. *Nutrition Journal*.
- Neporent, L. (2013, June 25). *Gluten-Free Diets No Help in Losing Weight*. Retrieved from ABC News: <http://abcnews.go.com/Health/gluten-free-lead-weight-loss/story?id=19476263>
- NIH. (2012, September 19). *What Is Cholesterol?* Retrieved from National Heart, Lung and Blood Institute: <http://www.nhlbi.nih.gov/health/health-topics/topics/hbc>
- Nutrition and healthy eating*. (2014, November 25). Retrieved from Mayo Clinic: <http://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/gluten-free-diet/art-20048530>
- Orenstein, B. (2015, March 4). *The Link Between Hypothyroidism and Adrenal Fatigue*. Retrieved from Everyday Health: <http://www.everydayhealth.com/hs/healthy-living-with-hypothyroidism/adrenal-fatigue/>
- Park, A. (2012, June 14). The Good Bugs: How the Germs in Your Body Keep You Healthy. *Time Magazine*, pp. <http://healthland.time.com/2012/06/14/the-good-bugs-how-the-germs-in-your-body-keep-you-healthy/>.
- Patz, A. (2014, October 7). *Your Gut Can Make You Slim*. Retrieved from Health.com: <http://www.health.com/health/article/0,,20859953,00.html>
- Pick, M. (n.d.). *Simple Dietary Changes That Can Help Your Thyroid Naturally*. Retrieved from Women to Women: <https://www.womentowomen.com/thyroid-health/simple-dietary-changes-that-can-help-your-thyroid-naturally/3/>
- Random House Unabridged Dictionary*. (n.d.). Random House.
- Ratey, J. (2008). *Spark: The Revolutionary New Science of Exercise and the Brain*. Little, Brown and Company.
- Rettner, R. (2015, February 25). *Deadly Gut Bacteria Cause Half a Million Infections Yearly*. Retrieved from Live Science: <http://www.livescience.com/49951-difficile-infections-united-states.html>
- Reynes, C. M. (2006). The Science of Probiotics. *Nutrition Digest, American Nutrition Association*, Volume 37, No. 3.
- Robson, D. (2015, March 27). *Which Cardio Methods Melt Fat The Fastest?* Retrieved from BodyBuilding.com: <http://www.bodybuilding.com/fun/drobson178.htm>
- Saey, T. H. (2015, August 5). *Gastric bypass surgery changes gut microbes*. Retrieved from Science News: <https://www.sciencenews.org/blog/science-ticker/gastric-bypass-surgery-changes-gut-microbes>
- Scheer, R., & Moss, D. (2011, April 27). *Dirt Poor: Have Fruits and Vegetables Become Less Nutritious?* Retrieved from Scientific American: <http://www.scientificamerican.com/article/soil-depletion-and-nutrition-loss/>
- Schweigert, M. B. (2015, January 5). *When the Gluten-Free Diet Packs on the Pounds*. Retrieved from Gluten-Free Living: <http://www.glutenfreeliving.com/gluten-free-foods/diet/gluten-free-weight-loss/>
- Segura, B. (2015, May 27). *5 Ways Cheat Meals Can Improve Your Body!* Retrieved from BodyBuilding.com: <http://www.bodybuilding.com/fun/5-ways-cheat-meals-can-improve-your-body.html>
- Smith, C. (n.d.). *Cheat & Win: 10 Cheat Meal Strategies For Weight Loss*. Retrieved from Eat This, Not That!: <http://www.eatthis.com/10-cheat-meal-strategies-weight-loss>
- Snyder, K. (n.d.). *Quick And Easy Tips To Prevent Acid Reflux And Heart Burn*. Retrieved from KimberlySnyder.com: <http://kimberlysnyder.com/blog/2012/04/19/quick-and-easy-tips-to-prevent-acid-reflux-and-heart-burn/>
- Spurlock, M. (Director). (2004). *Super Size Me* [Motion Picture].
- Stoppani, J. (n.d.). *HIIT 100S: Carve Up Your Physique In 6 Weeks*. Retrieved from Muscle and Fitness: <http://www.muscleandfitness.com/workouts/workout-routines/hiit-6-week-full-body-workout>
- Swaminathan, N. (2008, April 29). *Why Does the Brain Need So Much Power?* Retrieved from Scientific American: <http://www.scientificamerican.com/article/why-does-the-brain-need-s/>

- Thyroid and Weight*. (2012, June 4). Retrieved from American Thyroid Association: <http://www.thyroid.org/weight-loss-and-thyroid/>
- Turner, N. (2011, March). *How to balance your pH and find out if you're too acidic*. Retrieved from Rogers Media: <http://www.chatelaine.com/health/diet/tired-overweight-you-might-be-too-acidic/>
- Type 2 Diabetes*. (n.d.). Retrieved from American Diabetes Association: <http://www.diabetes.org/diabetes-basics/type-2/?loc=db-slabnav>
- Underwood, A. (2012, December 18). Have You Had Your Probiotics Today? *Prevention Magazine*. Retrieved from Prevention Magazine: <http://www.prevention.com/food/healthy-eating-tips/how-probiotics-and-prebiotics-can-help-your-health>
- Wallis, C. (2014, June 1). *How Gut Bacteria Help Make Us Fat and Thin*. . Retrieved from Scientific American Volume 310, Issue 6 - The Science of Health: <http://www.scientificamerican.com/article/how-gut-bacteria-help-make-us-fat-and-thin/>
- Watson, S. (2012, September 5). *Organic food no more nutritious than conventionally grown food*. Retrieved from Harvard University: <http://www.health.harvard.edu/blog/organic-food-no-more-nutritious-than-conventionally-grown-food-201209055264>
- Weil, A. (2012, December 17). *High Cholesterol*. Retrieved from DrWeil.com: <http://www.drweil.com/drw/u/ART03028/High-Cholesterol.html>
- Whiteman, H. (2015, February 2). Could a probiotic pill cure diabetes? *Medical News Today*.
- WholeFoods. (2011, March). Acid Reflux Remedied: What Are the Best Options? *WholeFoods Magazine*.
- Why Personal Trainer Food Works*. (n.d.). Retrieved from PureBody Nutrition: www.purebodynutrition.net