

Introduction

Beyond Food: Other Causes of Obesity and Damaged Metabolism

Sometimes it is not diet alone that causes your weight struggles, but rather something that is hidden from plain sight.

To help you sort through all the causes of weight gain and obesity, I have created this special E-book. In it, I will address the eight major causes of weight loss resistance and what to do about them. I have also updated my popular guide on *How to Work with Your Doctor to Get What You Need* to include updated testing and resources. In this guide, I explain how to assess and test for all the other causes we cover in this ebook and more importantly, how to address them yourself or in partnership with your healthcare provider.

So, let's get started. The following pages explain the eight reasons why people may have resistance to weight loss despite eating right.

Reason #1: Nutritional Imbalances: Overfed and Undernourished

Americans on average consume about 152 pounds of sugar and 146 pounds of flour per person, per year, or about a pound each day for every man, woman, and child. These amounts are pharmacological doses that cause harm to our metabolism and our health. The percentage of fat in our diets has gone down since the war on fat began. In fact, there has been a 500-calorie increase in our diets since 1970, nearly all from sugar and carbs – most of which comes from high fructose corn syrup. Our nutrient-poor, calorie-dense, high-carb diet has led to many nutritional deficiencies - such as omega 3 fats, magnesium, zinc, and vitamin D - which affect our metabolism. Often nutrition based treatment can help reset your metabolism. However, while food and nutrition have significant effects on weight, metabolism, and overall health, there are other factors that come into play that we need to pay attention to.

Reason #2: Gut Microbiome Imbalances: Bad Bugs and Weight Gain

We have over 1000 species of bugs in our gut, and 10 times as many bacteria cells in us and on us as our own cells. We call this the microbiome – the place where all these bacteria live and work with and against us to maintain a healthy gut. We have 100 times as much bacterial DNA as our own DNA. That makes us only about 10 percent human. Our bodies contain about 3 pounds of poop, and it turns out to be one of the most important, complex, and active organs in your body. We have about the same number of genes as an earthworm. So how can we be so much more complex in our bodily functions if we have the same number of genes as a worm! It is because we borrow the genes of our gut bugs to do the work. Our bodies have become lazy and they use the genetic machinery of bugs to regulate many of our bodily functions, from creating vitamins, to controlling your immune system¹, your brain function² and of course, your metabolism and weight³. The bugs aren't just taking up space. They are critical to your long-term health.

Unfortunately we have done many things to damage our inner garden and promote the growth of bad bugs that cause weight gain, diabetes, cancer, heart disease, depression, and even autism⁴. First we have dramatically changed our diet from whole unprocessed, high fiber, low sugar foods to a high sugar, high processed food, low fiber, high omega 6 fat (soybean oil)⁵ diet that harms our gut bacteria. Some evidence indicates that certain GMO (genetically modified foods) damage our gut bacteria. We have also had a rise in Cesarean sections, which prevent the normal colonization of a baby's gut as it passes through the mother's birth canal⁶. And we have had a decrease in breastfeeding, necessary for the normal development of the gut and the gut immune system⁷. The

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overuse of gut busting drugs such as antibiotics, acid blockers, anti-inflammatories, birth control pills, hormones and steroids has led to changes in our gut flora and damaged the lining of our guts. This results in a leaky gut where bacterial products, toxins and food proteins “leak” into your bloodstream, interact with your immune system and create inflammation causing insulin resistance and weight gain. Some even hypothesize that our over hygienic culture, hand washing, dirt avoiding, sanitized world negatively affects the normal immune function that results when we live more closely with bugs. People who grow up on farms or live in developing countries have less asthma and allergies⁸.

Consider this astounding fact: We now can transplant the poop from a thin person to a diabetic person and the diabetic can lose weight and reverse their diabetes *without changing their diet*⁹.

From both an animal and human model, we know that the gut bacteria can have profound effects on weight and metabolism through multiple mechanisms. Taking the gut bacteria from a thin mouse and putting it into a fat mouse can cause the fat mouse to lose dramatic amounts of weight without changing its diet. Your gut flora can regulate your weight through all sorts of mechanisms. Some bacteria extract more energy from food, leading to weight gain, while other bacteria will extract less energy from your food, leading to weight loss. Some bacteria trigger inflammation leading to a leaky gut, while others are anti-inflammatory. Inflammation then triggers insulin resistance and diabetes, independent of your calorie intake.¹⁰ There is a well-described mechanism by which toxic gut bugs cause insulin resistance and diabetes called “metabolic endotoxemia”¹¹. The gut flora also can regulate hormones, as well as mitochondrial and energy production, and even alter gene expression. Scientists are even exploring the use of probiotics as a tool for weight loss and reversing diabetes.¹²

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Do High-Fat Diets Damage Gut Bacteria?

Some studies show that high-fat diets negatively affect your gut flora and promote inflammation and weight gain. Most of these studies are based on high levels of refined inflammatory omega 6 vegetable oils like soybean oil. Studies on high-fat diets containing omega 3 fats actually show the opposite - higher amounts of omega 3 fats promote healthier gut flora, lower levels of inflammation, and weight loss.¹³ Other studies showed that olive oil also had a beneficial effect on the gut flora.¹⁴ So, it really matters what fat you eat for many reasons, including how the different types of fat affect your gut bacteria.

Good fats like omega 3 fats or monounsaturated fats (such as olive oil, avocados, or almonds) improve the health of your gut flora, while inflammatory oils, like omega 6 vegetable oils, promote the growth of bad bugs that cause weight gain and disease. Other studies show that coconut oil or medium chain triglycerides or MCTs (derived from coconut oil) dramatically reduces inflammation in the gut and gets rid of bad bugs.¹⁵ It is the overall balance and composition of your diet that affects your gut flora – eating a high fiber, plant-rich diet full of good fats will likely offset any harm from other foods that have been shown to potentially cause harm, such as meat or saturated fat. Other things that influence our gut health are exercise and stress. Regular exercise while eating a high-fat diet can reduce any negative effects of fats on the gut flora.¹⁶ And believe it or not, your gut bacteria are listening to and influenced by your thoughts and feelings.¹⁷ Stress adversely affects your gut flora.¹⁸

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Cultivating Your Inner Garden

A recent trove of books has been written on how the gut influences your health and weight including *The Good Gut*, *Brain Maker*, *The Microbiome Solution*, and *The Gut Balance Revolution*. These books and others reveal the good news – there are plenty of ways to cultivate a good gut and grow a healthy inner garden. Here's what you can do:

- **Eat whole, unprocessed foods.** Eating whole foods goes a long way by cutting the sugar and refined carbs, while increasing the fiber needed for a healthy gut. Focus on making vegetables compose 75 percent of your plate. Plant-based foods feed the good bugs.
- **Eat good fats, like omega 3's and monounsaturated fats,** such as olive oil, and omit inflammatory omega 6 vegetable oils.
- **Add seeds and nuts and special fibers,** such as glucomannan and other prebiotics (food for the good bugs).
- **Add fermented foods** like sauerkraut and kimchi
- **Use resistant starch** (like potato starch) to promote a healthy gut flora and aide with weight loss.
- **Take probiotics.** They reduce inflammation and generally keep your gut healthy.

In Functional Medicine, we also have a program to restore your gut to health. We use herbs to get rid of bad bugs; enzymes to support your digestion; prebiotics, probiotics, and nutrients to heal the gut (including zinc, glutamine, quercetin, curcumin, and anti-inflammatory essential fatty acids such as EPA and DHA and gamma linolenic acid – or GLA).

Some people may even benefit from fecal transplants. The research on gut flora and the *microbiome* and weight highlights a very important fact. Your weight and metabolism are influenced by far more than calories. Did you know that you can reverse diabetes with fecal transplants, proving that you can gain or lose weight simply by changing your gut bacteria and without altering your caloric intake? The calories in/calories out theory can finally be put to rest. And gut bacteria are not the only factors that can regulate weight independent of calories.

Reason #3: Inflammation and Immune Function: Fueling the Fires of Fat Storage

Science now clearly identifies chronic disease and aging as a state of inflammation. And it's not just allergies, asthma, arthritis, or autoimmunity that are inflammatory. We now know that diabetes and obesity are inflammatory problems, as are heart disease, cancer, depression, autism and dementia. Your fat cells produce inflammatory molecules that perpetuate weight gain and disease. But other factors trigger inflammation that leads to weight gain independent of caloric intake. As discussed above, unhealthy gut flora plays a big role in triggering inflammation and weight gain. But there are many other triggers for inflammation that also promote weight gain including infections (such as viruses),¹⁹ mold toxins,²⁰ environmental toxins,²¹ food allergens (such as gluten²² and dairy), and our poor quality processed diet that is high in sugar, and omega 6 refined oils, and low in fiber. All of these triggers cause inflammation, which then creates insulin resistance and promotes weight gain.

My book, *Eat Fat, Get Thin*, is designed to be a powerful anti-inflammatory program. Learning to identify the various hidden sources of inflammation is often critical for those who are stuck in the viscous cycle. Functional Medicine assesses the root cause of the problem and treats the whole system to quiet the flames and cool the inflammation, leading to weight loss and good health.

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Reason #4: Environmental Toxins: Poisoning Your Metabolism

Many doctors look down on the whole idea of detoxification. But just ask them how bad things get if your kidneys or liver stop working, or if you get constipated for weeks. Detoxification is a natural process that occurs all the time in the body. Unfortunately, in our modern world, we are exposed to a huge burden of toxins in our environment and our diet. These toxins - including plastics, pesticides, phthalates, bisphenol A, flame retardants, mercury, lead, arsenic, or any one of the 80,000 chemicals introduced into our world since the industrial revolution - have been shown to interfere with metabolism and cause weight gain even in the absence of extra calories.²³ These environmental toxins are called *obesogens*.²⁴ The average newborn has 287 chemicals in their umbilical cord blood. Animal studies have found that toxic chemicals can cause weight gain independent of any change in caloric intake or exercise. There are many mechanisms by which toxins promote weight gain – affecting your metabolism, your hormones and your brain function.²⁵ Cutting your exposure to environmental toxins is possible and your body can eliminate these stored toxins naturally.

There is a lot you can do to reduce your exposure to toxins and help your body eliminate the ones you have.

- **Eat organic when you can.** Follow the [Environmental Working Group's](#) list of the “Dirty Dozen and Clean Fifteen” for help in identifying the most and the least contaminated fruits and vegetables
- **Stop eating mercury.** Avoid big fish with lots of mercury. See the [Natural Resource Defense Council's](#) guide for picking fish with the lowest mercury content
- **Eat clean, organic animal products** by choosing grass-fed or pasture-raised animals without hormones or antibiotics. These products cost more, but when you eat high-quality food, you often consume smaller amounts
- **Filter your water.** Use a carbon or reverse osmosis filter to get rid of hidden contaminants in water
- **Support your body's own detox system** by drinking 8 glasses of water a day,

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eating lots of fiber so you poop at least once a day, and sweating to excrete toxins (with exercise or saunas)

- **Increase foods that help your body detox.** Eat 1 to 2 cups a day of cruciferous vegetables such as broccoli, kale, and bok choy, as well as lots of garlic, onions and ginger and turmeric
- **Take supplements that support detoxification** including selenium, zinc, vitamin C, and B complex vitamins, as well as special glutathione boosting compounds such as n-acetyl-cysteine, alpha lipoic acid, and milk thistle.

Reason #5: Troubles with Your Energy Production System (Your Metabolism)

Each of us was born with trillions of little energy factories that provide the fuel to run everything in our body. These energy factories are called mitochondria. Each cell in our body has hundreds to thousands, and they convert the oxygen you breathe and the food you eat into energy (ATP) that is used by your body. It is like having trillions of little combustion engines in your body. When scientists talk about “metabolism”, we often are referring to mitochondria. If your mitochondria are effective, they are burning calories and you have a fast metabolism; conversely, if they are ineffective, they are not burning calories and you have a slow metabolism.

Some of this is genetically determined. If you have a parent or sibling who has type 2 diabetes, then your mitochondria are 50 percent less effective at burning calories than the average person - even if you are thin. This predisposes you to weight gain and eventually type 2 diabetes. The good news is that by boosting exercise, especially interval or burst training (where you go all out for 30 to 60 seconds followed by slowing down for a couple of minutes) and strength training, you can increase the number and function of the mitochondria. When you do strength training, you build muscle and create more mitochondria. And when you do interval training you improve their functioning and how fast they burn oxygen and calories.

There are also many things that affect the number and functioning of your mitochondria that you can control. The biggest damage to our energy system comes from our diet. When we eat lots of sugar, processed, inflammatory foods, or refined oils, or we simply consume too much food, we overload our energy factories and they get damaged. Environmental toxins like pesticides and mercury, hidden infections, and stress also harm our energy system. Even your gut microbiome can be a problem if the unhealthy inflammatory bugs outweigh the good bugs. These bad bugs release toxins called LPS or lipopolysaccharides that get absorbed and cause inflammation and damage to our mitochondria. Essentially, anything that causes inflammation (also known as oxidative stress) damages the mitochondria. Aging itself and most chronic diseases are related to mitochondrial dysfunction – including obesity, diabetes, heart disease, dementia, and more.

Luckily we know a lot about how to keep your mitochondria healthy. Here's a Functional Medicine approach to keeping your energy burning well and literally making you younger.

- **Eat food. Not too much. Mostly plants.** That is Michael Pollan's sage advice. Over-eating, eating processed food, and not eating enough powerful plant-based phytonutrients are all bad habits for healthy mitochondria.
- **Avoid sugar and flour.** High-glycemic, high-carb foods stress your mitochondria. The biggest driver of damage to your energy system is quickly absorbed carbs.
- **Move more and faster.** Interval training and strength training are best ways to make new and better mitochondria.
- **Reduce toxic exposures.** See tips above under Reason #4
- **Keep your gut healthy.** See tips above under Reason #3.
- **Take energy boosting nutrients** such as coenzyme Q10, alpha lipoic acid, n-acetyl-cysteine, B complex vitamins, omega 3 fats (EPA/DHA).

Reason #6: Bad Communication: Fixing the Body's Hormone Messengers

The biggest hormone that causes weight gain and disease is too much insulin. My book, *Eat Fat Get Thin*, is all about how to naturally regulate insulin to shift from fat storage to fat burning. But there are other hormones that are all dynamically interacting every minute that affect your weight and health. The three biggest hormones that affect your weight are thyroid, cortisol (the stress hormones), and your sex hormones. I have written a lot about these previously in *The Blood Sugar Solution*, but here's the reader's digest version of how to assess and treat imbalances in these hormones that affect weight and metabolism.

Low thyroid function affects one in five women and one in ten men. And it is not diagnosed in over half the cases. In my ebook, *The UltraThyroid Solution*, I explain how diet, nutrient deficiencies, stress, and environmental toxins impact your thyroid and how to fix these problems. One of the most common causes of hypothyroidism (or low thyroid function) is gluten. It accounts for up to 30 percent of the autoimmune disease that attacks the thyroid called Hashimoto's. Pesticides and heavy metals also interfere with thyroid function. And your thyroid needs specific nutrients to run optimally including selenium, zinc, iodine, and omega 3 fats. Most doctors don't test for thyroid function correctly. And once they find it, they don't treat it effectively by optimizing thyroid function through diet, supplements and the right thyroid hormone replacement therapy.

Boost Your Thyroid Function

Here's a quick guide on how to assess and treat your thyroid:

- **Do the right test:** Check TSH, free T3, and free T4, as well as thyroid antibodies including TPO (thyroid peroxidase) and anti-thyroglobulin antibodies. Some may need a special test called reverse T3 to learn if the thyroid hormone function is being blocked by something like heavy metals (mercury), pesticides, yeast, or nutritional deficiencies like selenium, vitamin D or zinc. Reverse T3 is the brake on your thyroid hormone. It is designed to stop your thyroid hormone from working at the right times, but it often gets started up again because of things like toxins and inflammation. If it is too high it may seem like your thyroid levels are normal, but in reality they are not working well.

- **Eat right for your thyroid.** Limit your intake of raw soybeans, kale, and cruciferous veggies, as they contain thyroid blocking compounds called goitrogens. Eat fish and seaweed for additional iodine. Enjoy pumpkins seeds and oysters for zinc and Brazil nuts for selenium. Eat mushrooms and fatty fish (and get some sun) for vitamin D, which is necessary to turn on thyroid function at the nucleus.
- **Supplement your thyroid.** You can take a good multivitamin (that contains the above nutrients), fish oil and vitamin D. Some may benefit from iodine supplements but careful not to overdose and be sure to get your iodine levels measured regularly.
- **Replace with the right thyroid hormones.** Most doctors will prescribe only T4 (like Synthroid), which is the inactive form of thyroid hormone your body must convert to T3, the active form. Most people do better on a bio-identical (like Armour) or a combination of T4 and T3. This must be personalized with a doctor who understands how to properly balance the thyroid.

Stress Makes You Fat, Relaxing Makes You Thin

Yes, you actually can think yourself fat or think yourself thin. The science is there. Stress, and stressful thoughts activate metabolic pathways that cause weight gain and insulin resistance. And form of meditation, yoga, or deep relaxation activates pathways that promote weight loss and health. Remember, stress is not real. It is a perception. Stress is defined as the perception of a real or imagined threat to your body or ego. So it could be someone putting a gun to your head, or a thought that your boss is mad at you (even if they aren't). The key take away here is that you shouldn't believe every stupid thought you have. And learn the skills of active relaxation and techniques to discharge stress from your body. Most of our stress is not real. It is a worry, a thought, a fear, our projection into the future of what might go wrong. There are real stressors we all experience but they are often short lived. The problem is we carry them with us for a long time and don't know how to reset. If you survived trauma it can live in your body, even after the original stressor is gone.

Stress causes a set of hormonal responses in the body that cause weight gain and insulin resistance. Cortisol is an adrenal hormone that helps you to run faster, see further, hear better and pump fuel into your bloodstream for quick energy. It also shuts down digestion and slows your metabolism. Unchecked, prolonged stress and high levels of cortisol cause high blood sugar, increased belly fat, high blood pressure, high cholesterol, and muscle loss.

Here are a few simple ideas to incorporate into your life to reset the stress response:

- **Fix your thinking.** This is the most powerful long-term way to be happy and reduce stress. We often get into habits of thinking, beliefs, and ideas that keep us stressed. One of the best things I have ever been taught (by a business coach) was rule number 6. Simply put - everything always works out. If you understand rule number 6, then rules 1 to 5 don't matter! Sometimes getting help from a life coach can be helpful. I have worked with the Handel Group (www.handelgroup.com) with great success for years – both with my patients and for me personally.
- **Practice active relaxation.** This can be as simple as learning deep breathing. I call it the *Take 5 Breathing Break*. Just inhale slowly through your nose, counting to five, and then exhale through your mouth – repeat five times. There are many other techniques I use including yoga and meditation.
- **Take a sauna or hot bath.** These elevate body temperature to help discharge stress from the body and have been shown to help reduce stress hormones.
- **Play.** Make time to be a Human Being, rather than a Human Doing. Love and connect. Take time with family and friends to love and be loved. It is powerful healing medicine.

Fix Your Sex Problems

For both men and women, sex hormone imbalances can cause weight problems. Too much estrogen causes weight gain in either gender. Do you know how they get steer fattened up before market? They implant estrogen pellets. For women and men, too much sugar, refined carbs, and alcohol spike estrogen. Keeping the gut healthy is also important for healthy hormone metabolism. Not enough fiber or too many antibiotics damage the gut, triggering estrogen spikes in the body because it can't be properly detoxified or excreted. Environmental toxins, like pesticides are also known as “xenoestrogens” because they act like estrogen in the body, even at low doses.

Symptoms of estrogen excess in women include breast tenderness, fluid retention, bad premenstrual syndrome, fibroids, and heavy menstrual bleeding. In men, excess estrogen can cause loss of body hair (including chest, legs, and arms), a beer belly, and “man boobs”. Men also can be impacted by low testosterone. Aging, lack of exercise, alcohol, stress, environmental toxins, or diseases such as diabetes or even pituitary problems all may cause low levels of testosterone. Low testosterone causes men to lose muscle and gain fat, and leads to sexual dysfunction, low sex drive, fatigue, and mental foginess - even bone loss that can lead to osteoporosis. Most people don't know that

their testosterone and other sex hormones are produced from cholesterol in their body. So, eating a low-fat diet and taking statin drugs that block cholesterol production (such as Lipitor) have negative consequences on their hormones.

It is important to get tested for hormonal imbalances. In my free ebook, *How to Work with Your Doctor To Get What You Need*, I explain exactly how to test for hormone imbalances and what to do to balance your hormones. Here are some of my tips:

- **Eat a hormone balancing diet.** The nutritional principles of Eat Fat, Get Thin - which is low in sugar, high in good fats, and high in fiber - all help to balance hormones.
- **Bulk up on fiber.** Ground flax seeds are great for men and women and are full of fiber and lignans which balance hormones. Add 2 tablespoons a day to a shake or a salad.
- **Poop daily** (at least once). Constipation is bad for your hormones. Take magnesium citrate, vitamin C, probiotics, and flax seeds daily to help maintain regularity. It's a foolproof combo for most.
- Consume broccoli. All the cruciferous vegetables contain glucosinolates and sulphorophanes and carbinols that help with hormone detoxification and balance. So enjoy plenty of kale, collard greens, Brussels sprouts, kohlrabi, bok choy, Chinese cabbage, and more every day.
- **Moderate alcohol.** Research shows that one drink a day may be good for your health, but two drinks or more is definitely bad. It causes low testosterone and man boobs in men. And in women, just 7 drinks a week (one a day) can cause breast cancer.
- **Get moving.** Exercise helps balance hormones, reducing estrogen and increasing testosterone, which helps you lose fat and build muscle.

Reason #7: Is It My Genes that Prevent Me from Fitting into My Jeans?

There are definitely genes that cause obesity but only in a few very rare conditions. Many of us, however, do have the genes that predispose us to obesity and type 2 diabetes. But predisposition does not mean pre-destiny. In a comprehensive study on genes and obesity, 32 different genes were identified that could contribute to obesity. Even if you had all 32 genes, it would account for only 22 pounds of extra weight. But there are a few caveats. If you have a family history of obesity or type 2 diabetes, or you are of Asian, East Indian, Native American, Pacific Islander or Middle Eastern heritage, you are much more likely to be carbohydrate intolerant. A little bit of sugar or starch will cause you to make way more insulin than the average person. This starts you on the viscous cycle of weight gain, hunger, and fatigue. The good news is that by eating well and exercising you can completely prevent obesity or type 2 diabetes. For example, eighty percent of the Pima Indians of Arizona, who switched from their traditional diets to ones consisting of flour, sugar, and Crisco, have type 2 diabetes. Their cousins in Mexico maintained their traditional diets and lifestyle and they continue to be thin and have no diabetes. The truth is that some of us are well designed to store excess food when it is available (this is called the “thrifty gene” hypothesis) and some of us are not.

There are also other genes that play a role in weight gain and loss. The brain has genes that code receptors for dopamine, a pleasure producing neurotransmitter. Some of these genes cause the dopamine receptors to not be as responsive to the pleasure signals provided by dopamine. Many drugs of abuse, including cocaine and heroin, trigger dopamine receptors. The most abundant drugs of abuse that are available freely and over the counter also trigger these dopamine receptors. These drugs are commonly known as “sugar” and “refined carbs”! When your dopamine receptors need more stimulation to feel pleasure, it predisposes you to cravings and addiction. We know that sugar acts just like cocaine and drives food addiction and causes overeating. I describe the research in detail in my book, *The Blood Sugar Solution 10-Day Detox Diet*, and provide a clear plan to break the sugar and carb addiction.

Other genetic factors also play a role. Just as different people have varying responses to carbs, they also have different responses to fats. This is new and emerging research, and more is being discovered every day. Some people do better with more omega 3 fats, while some do better with saturated fats, and still others do better with more omega 6 fats. Different people need different levels for balance. There can be a big difference in how your body responds to different fats and how they affect your blood sugar, cholesterol,

and even gut bacteria. The best consultant in the house is your very own body. Listen to that wise inner voice who gives you direct and immediate feedback about what works and what doesn't!

Most people do better with a higher fat, lower carb diet, but not everyone. Some need more carbs (good ones), or less fat. How you feel, what the scale shows, and what your lab tests say are all key to identifying what works best for you. If you are a type 2 diabetic trying to reverse your disease, you may need up to 60 or 70 percent fat and 5 to 10 percent carbs. That is an extreme diet but one that often is needed to reverse disease. Once disease is reversed, your body becomes more resilient and able to handle a wider variety of foods. Remember what Benjamin Franklin said, "An ounce of prevention is worth a pound of cure."

There are also some emerging genetic tests that look at your predispositions and responses to different types of food including carbs and fat. Some do better with lower fat (but not low fat), some with higher fat. In *Eat Fat, Get Thin*, I explain more of about these tests and how to get results from a simple swab of your cheek. The results can guide you in personalizing your diet and your approach to weight loss and overall health. To learn more, go to www.eatfatgetthin.com. Regardless of your genes, you can create an optimal weight and metabolism and reverse most chronic disease. Some have to work a bit harder...for some it's easier...but it is possible for almost everyone.

Reason #8: “Catching Obesity”: The Role of Our Social Networks in Weight and Health

There is one other very important, perhaps the most important factor in our obesity and chronic disease epidemic. It is our environment. This environment consists of our toxic nutritional landscape, as well as our social and cultural world that promotes eating too much of the wrong foods. Statistics show that we are 171 percent more likely to be overweight if our friends are overweight, but only 40 percent more likely to be overweight if our parents are overweight.²⁶ Simply put: Our social connections are more important than our genetic connections in determining our health because they influence our behavior. It's the power of peer pressure.

The way in which our environment and our social connections influence our health is what I call *sociogenomics*. The \$1 trillion food industry has created hundreds of thousands of processed food-like substances filled with disease- and obesity-causing ingredients. We have outsourced our cooking to corporations. They have designed the demise of home cooking by convincing us that we all need “convenience”. We have bought into the lie that purchasing, cooking, and eating real food are too hard, too time consuming and too expensive. None of that is true.

In order to fully address the obesity epidemic we need to address our food environment, and leverage the power of community - the power to support each other to make the changes we need to be healthy. First we need wide-scale policy changes. The food industry mantra is that the public can police themselves; that having the government tell us what to eat creates a “nanny state”. But what do nanny's do? They protect and take care of the children. That's a good thing, right? Food policy experts have identified a number of important policy changes that would have a significant impact on our weight and health. Some countries, like Mexico which has a massive obesity crisis and where one in ten children now has type 2 diabetes (what we used to call adult onset diabetes), have implemented these wide scale policies including:

- Levying a tax on all sugar and junk foods
- Restricting food marketing, including banning food marketing to kids
- Eliminating any foods that promote disease from all schools and public institutions

²⁶ Christakis NA, Fowler JH. The spread of obesity in a large social network over 32 years. N Engl J Med. 2007 Jul 26;357(4):370-9.

- Labeling foods and food warnings clearly. If a pack of cigarettes contains the warning “if you use this as directed, you will die”, then why shouldn’t a can of soda say the same thing. In a world where obesity has overtaken smoking as the number one cause of death, it’s a no brainer, right?

Other important and narrowly focused policies could help push the food industry into healthier practices of food production. The two most powerful are: Eliminating the use of antibiotics in all animal feed products and identifying GMO or genetically modified organisms on all labels. Getting rid of antibiotics would force changes to the CAFO’s (or confined animal feeding operations) that produce our modern industrial meat and incentivize better animal husbandry practices that produce meat that is better for the planet and for us. And labeling GMO’s would force awareness of how our food is produced and create transparency in our food supply. GMO labeling is now mandated in over 64 countries including China and Russia – it’s absurd that the United States has not created this policy.

We also need to use friend power, not willpower, to change our behavior and habits. With Rick Warren and Daniel Amen, I created The Daniel Plan, a faith-based wellness program that helped 15,000 people from Rick Warren’s Saddleback Church lose 250,000 pounds in 10 months by doing it together. Rick says, “everybody needs a buddy!” Together, we wrote the #1 best-selling book, *The Daniel Plan* that details a practical plan to get healthy together because we found that getting healthy is a team sport.

Using the power of peer pressure for good can make it easier to do the right thing. Even if I don’t say a word, when people eat out with me, they choose healthier foods because they know it matters to me. I don’t care what they eat and I don’t say a word, but their internal compass shifts. There is a bigger story here about how we need to take back our health as families and communities. I have written about the social and political changes that can help us move toward a healthier nation and world in *The Blood Sugar Solution and The Blood Sugar Solution 10-Day Detox Diet*. It will require a comprehensive effort from many fronts with all of us working together.

So, you see, this is a big fat problem but one that we can tackle – especially if we pay attention to what our bodies are telling us and sort through the science to get to the truth about fat so we can separate fat from fiction!

If you are ready to optimize your own personal health, I encourage you to consider getting the help of a Functional Medicine doctor or healthcare practitioner who is trained to help you sort it all out. There are a number of ways for you to begin the journey to take back your health, such as:

- Contacting the [Cleveland Clinic Center for Functional Medicine](#). In 2014 we started this Center to expand the availability of Functional Medicine, train doctors and health professionals, and conduct the much needed research in this field.
- Booking an appointment at [The UltraWellness Center](#) in Lenox, Massachusetts. Phone: 413-637-9991. I founded this Clinic ten years ago and we now represent a group of talented Functional Medicine practitioners who have helped thousands of people sort through the root cause of their health issues.
- Searching for a certified practitioner through the [Institute for Functional Medicine](#) (IFM). IFM has created a database of certified practitioners for you to access and search for a resource near you.
- Join [my online community](#) to help you stay accountable and connected to others who are taking back their health.