

4. Nutrition

I am excited to start this chapter of the book as nutrition has the most influence and impact on your overall health and well-being. For thousands of years, people have consumed various types of food ranging from wild animals, plants, fruits, fats and so many other variations. Whether you realize it or not, the type of food you decide to eat has a direct correlation to how you feel and the longevity of your existence. Personally, I think most people are not adequately trained or educated on nutrition and its importance to your health. They rely on diets, fads, what their doctor tells them and what their friends and family recommend. After seeing thousands of patients and clients over the past 20 years, I can tell you first hand that you should be spending a great deal of time understanding your physiology and what works best for your body. The correlation between the types of micro and macro nutrients you consume and your physical and physiological health is almost perfectly linear. Children rely on their parents to provide guidance on their nutrition and grown adults must make the choice on what to ingest themselves. This section of the book will explain the various nutrient groups, how to combine your food, the five foods that cause the most inflammation in the body, how food affects the body, food sensitivities and food allergies and why you have been misguided on how to eat over the past 40 years.

Overview of Proteins, Fats and Carbohydrates

We will start with a brief overview of proteins, fats, carbohydrates, vitamins and minerals and the role that each play in the body. I don't want to spend too much time on this but a refresher is in order for what is to come later on. Proteins are a macronutrient that are vital to building, repairing and maintaining major tissues in the body like your muscles, skin and internal organs. They also play a major role in autoimmune conditions, your hormones and how they are transferred and your immune system. The building blocks of protein are called amino acids and there are 22 amino acids that contribute to your health and vitality of which 14 are non-essential (your body makes them) and eight are essential. The eight essential amino acids are usually acquired through food but high grade supplements are also

an option for some people. The foods that contain the eight essential amino acids are meat, various animal sources, eggs and cheese. Additional protein options are fish, chicken, nuts, seafood, beans, peas and many more. Your genetic makeup is comprised of proteins as discussed earlier in the book and proteins are extremely important for those looking to build lean muscle.

The second macronutrient is healthy fats. In my experience, people are so scared of the word fat and avoid it from a dietary perspective at all costs. I can understand this point of view because the medical community has incorrectly indoctrinated in people that eating healthy fats is what makes you gain weight and causes cardiovascular disease. As you will see shortly, this is the furthest thing from the truth. In working with depression and mental illness patients around the world, I find that most are deficient in healthy fats and most make significant improvement when they include them back into their diet. I will not decipher between monounsaturated fats or polyunsaturated fats rather I will discuss the one that gives my clients and patients the most health benefits so they can lead a happy and healthy life. So the question then becomes, what are some healthy fats? As described, many nutritionists and the medical community have vilified saturated fats but they have been completely inaccurate. The saturated fats like coconuts and coconut oil, olives and olive oil, butter made from raw, grass fed milk, organic pastured egg yolks, raw nuts like almonds, pecans, Brazil nuts and macadamia nuts, avocados, grass fed meats, almond butter, fish and fish oil are actually very healthy for you.

The next question I get is why are these fats good for you? What is the foundation of science and what are the benefits to the body? Let's use coconut oil as an example. What makes coconut oil unique is that it is mainly comprised of medium chained fatty acids (MCFA) and these have remarkable healing properties. Many medium chained fatty acids used in research and food products come from coconut oil. It is also used in a variety of baby formulas around the world. So the question is why is coconut oil and the MCFAs that are inherent in it so helpful? MCFAs are smaller, they require less energy and less enzymes to break them down for digestion. This means there is less strain on the digestive system and pancreas. This is very important for clients who have metabolic or digestive issues. The nutrients that coconut oil produce and the ability for the body to absorb them with minimal strain allows patients and even healthy people to receive the benefits in an efficient manner. Another

key benefit of coconut oil is the energy and vitality it provides. Because MCFAs are funnelled directly to the liver and converted into energy there, people get a boost of liveliness. This boost of energy transcends into the cells and then speeds up their metabolism as well. This has a pronounced effect on the entire body. When your metabolic rate is increased, you also get the corresponding benefits of healing. Athletes have been taking coconut oil to get a competitive advantage from injuries (speed healing) and the ability to increase their metabolism.

Aside from all of the aforementioned benefits, saturated fats or the healthy fats as I like to call them have many benefits to your physiology. This includes providing building blocks for cell membranes, hormones, and hormone-like substances. When I explain to my patients that your hormones such as testosterone, estrogen, DHEA (dehydroepiandrosterone), etc. come from fats and cholesterol to be more specific, they are completely surprised. Saturated fats are also good at assisting with mineral absorption, helping to lower bad LDL cholesterol levels, acting as carriers for important fat-soluble vitamins D, A, E, and K, acting as an antiviral agent (caprylic acid), modulating genetic regulation and providing fuel for the brain. As we will discuss later in the book, a ketogenic based diet is excellent for weight loss and brain function. From assisting with weight management to mental illness, healthy fats should be a major component of your daily nutrition plan.

The third and final macronutrient that we will discuss is carbohydrates. Most people consume upwards of 60 percent of carbohydrates in their total daily consumption. There are five main classifications of carbohydrates and they are monosaccharides, disaccharides, oligosaccharides, polysaccharides and nucleotides. It is not my intent to discuss the classifications but rather the main carbohydrates found in food and the terms most people are aware of. They are starches (complex carbohydrates), sugars and fiber.

Starches or complex carbohydrates consist of foods like peas, beans, corn, potatoes, lentils and various grains like oats, barley and rice. This group will contain the breads, pastas, crackers, etc. Another

subgroup of grains is whole grains versus refined grains. The second group which most people are familiar with is sugar which is absorbed into your body at a much quicker rate than the complex carbohydrates. This is where you will find naturally occurring sugar like those found in fruit (fructose) and milk (lactose) and also the processed sugars that are added to cookies, chocolate bars and other unhealthy foods. Fiber is the third and final group and it comes from plant based foods and is the indigestible part of plants like fruits, vegetables, whole grains, nuts and legumes. This is why fiber is so good at helping people with constipation. Some examples are black beans, kidney beans, berries, apples, bananas, strawberries, almonds, walnuts and so many more which we will discuss later.

Vitamins and Minerals

We can't forget about our micronutrients and they are vitamins and minerals. Vitamins are organic and can be broken down by air, heat or acid whereas minerals are inorganic and hold on to their chemical structure. There are two types of vitamins: fat-soluble and water-soluble. Fat-soluble vitamins are found mainly in fatty foods and animal products, such as vegetable oils, milk and dairy foods, eggs, liver, oily fish and butter. A great benefit is that your body stores these vitamins in your liver and fatty tissues for future use. Fat soluble vitamins are A, E, D and K. Water soluble vitamins are not stored in your body and they are found in a wide range of foods, including fruit, vegetables, potatoes, grains, milk and other dairy foods. Vitamin C and all the B vitamins are just a few examples of water soluble vitamins.

Minerals on the other hand are used for regulating body fluids both inside and outside of the cells, turning your food into energy and building strong bones and teeth. Minerals are found in many foods but three of my preferred choices are vegetables, fruit and nuts. There are too many minerals to list but some include magnesium, calcium, iron, zinc and potassium. These micronutrients are very important to your health and don't receive the attention they deserve. I run panels on my patients to check for nutrient imbalances as they can cause a host of symptoms that affect your daily vitality.

Combining Foods for Optimal Health

This section will be a little more advanced because we are now discussing combining your carbs, proteins and fats in the most optimal way for weight loss and energy. This is beneficial for competitors, athletes, people looking to shed a few pounds and for professionals looking to make it through a long day at the office. These are the clients and patients I see all day long in my practice and this is a general guideline for the average person. Please remember that each person is unique and we can run specialty labs to determine your best course of action. There is also metabolic typing assessment that can determine if fats, proteins or good carbs work best for you or a combination (mixed type) of the three. With that being said, most people who read this book won't be running serum and urine tests to figure out their optimal levels.

Let's start with some factual information. Insulin levels are high in the morning and most people grab cereals, bread or bagels which increases insulin even more leading to a midday crash. Even the healthy carbs like vegetables and fruits are best to have in moderation in the morning so you can level out your insulin levels and not have the highs and lows that come with blood sugar fluctuation. Traditional recommendations have been to start your day with lots of carbohydrates and then have more protein later in the day. I can surmise a general observation that diabetes and obesity have never been at higher rates than in the past five years and people are consuming energy drinks at an alarming rate. Take a look around your office or workplace and look at all the people grabbing a coffee or energy drink at 2 or 3 p.m. They are looking for excessive caffeine or sugar to prop up declining blood sugar levels or even hypoglycemia. You see when you have carbs like bagels, bread, cereal in the morning, your blood sugar levels rise, insulin is produced by the pancreas to carry the excess sugar to the cells. If the cells are full, the excess sugar is sent back to the liver (glycogen) for use later on and/or it is stored as fat. My recommendation is to start your day off with more protein and healthy fats. This will normalize your blood sugar and insulin levels in the body and give you sustained energy.

The second step is to have more healthy carbs in the afternoon to keep the sugar levels normalized and a steady balance within the body. Again, this goes against the conventional model you have been taught but it works at reducing fat and keeping your energy levels naturally high throughout the day. I would go with some lean meat and avocados, almond butter in the morning with one vegetable and some more vegetables and a couple of fruits in the afternoon augmented with some more meat/eggs and coconut, nut butter, etc. Try it out and see how it works. This is from a mentor of mine whom I respect in the health field. Dr. Sara Gottfried states: “Focus on protein and healthy fats in the morning and carbohydrates in the evening. We tend to be more insulin-resistant in the morning so if we eat carbohydrates at that time, like fruits and grains, we will store it as fat more quickly.” 14

Intermittent Fasting

People hear this term a great deal but most of my clients don't know what it means and why it may be useful for some people when trying to lose weight. Intermittent fasting is simply a temporary pattern in the timing of how you eat. It's a way of scheduling your meals so that you get the most out of them with the greatest benefit specifically for weight loss. I will recommend this to some of my clients if they want to change things up and avoid becoming stagnant. It is a way to get your body moving again. Here is a little background on how the body recognizes food. Your body is in a “fed state” when it is digesting or absorbing food. This typically lasts for three to six hours. Your insulin levels will be higher as insulin is being produced to deal with the influx of nutrients. Your body typically goes into a fasted state around 10 to 12 hours after your last meal and your insulin levels will be lower. The way in which I will describe or define intermittent fasting is eating your normal daily caloric intake of healthy fats, proteins and carbohydrates from 11 in the morning until 7 at night. That will leave 16 hours where you go without

food. People who are in good health with no underlying health issues can try this if they want to lose some weight and understand their body better. I would consult with your doctor as people with documented health issues should not try this. Some examples of people who should not try this are diabetics, people with autoimmune conditions, HPAA deficiencies, disease, and many more health concerns.

Five Foods That Cause Disruption in The Body

Grains/Wheat

There is no doubt that when it comes to affecting your physiology and creating a cascade of health problems for individuals, grains is the number one offender. Let's be clear that the grains and grain products like pizza, bread, bagels, cereal, etc. that are produced today are nowhere near what was harvested and consumed over 2000 years ago. There were two major events that changed the course and quality of wheat that you eat today. The first was the Industrial milling in the 1870s which was the advent of white flour and the birth of the processed food industry. You could now separate the component parts, allowing the purest and finest of white flour to be easily produced at low cost, so every class of person could afford the new flour. Beyond being cheap and wildly popular, this new type of flour shipped and stored better, allowing for a long distribution chain. In fact, it kept almost indefinitely. So how about nutrient value? This excerpt from Wikipedia says it well: "From a human nutrition standpoint, it is ironic that wheat milling methods to produce white flour eliminate those portions of the wheat kernel (bran, germ, shorts, and red dog mill streams) that are richest in proteins, vitamins, lipids and minerals." 15

The second major shift occurred in the 1960s and 1970s. Let's call it the Green Revolution. For 10,000 plus years, we cultivated wheat, stored it, milled it and consumed it. It was a very calculated and practical process. The system worked and it nourished civilization with beneficial sources of sustenance.

This all changed in the industrial era where we invented mechanical technologies to turn wheat into barren white flour. That was followed by introducing chemical and genetic technologies (GMO) to make it resistant to pests and drought while at the same time making it easier to harvest. The final negative intervention was figuring out how to increase glutes for better texture, appearance and to hold the wheat together. If you break the word gluten down, it stands for glue. From the modified seeds grown in poor soil, washed with chemicals and devoid of all nutrient value, the breads and grains we eat today are almost unrecognizable by the body. Your body was not meant to digest the grains and its variants that are sold today.

So what really is the problem with the breads, pastas, pizzas, bagels, cereals, etc? It is not just gluten, rather the opioids and amylopectin A. Let's define what gluten is and where it can be found. "Gluten is a general name for the proteins found in wheat (durum, emmer, spelt, farina, farro, KAMUT® khorasan wheat and einkorn), rye, barley and triticale. Gluten helps foods maintain their shape, acting as a glue that holds food together. " 16 Most people think that gluten is only a problem for people who suffer from Celiac Disease (Celiac disease is an immune disorder in which people cannot tolerate gluten because it damages the inner lining of their small intestine and prevents it from absorbing nutrients) or are gluten sensitive. Gluten sensitivity is harder to define but typically patients of mine experience symptoms such as brain fog, depression, mood disorders, abdominal pain, bloating, diarrhea and/or constipation, headaches, malaise, and chronic fatigue when they have gluten. The difference between gluten sensitivity and celiac disease is that gluten sensitive clients do not experience the small intestine damage or develop the auto-immune response where your body attacks your tissue (tissue transglutaminase (tTG) antibodies). Another issue with eating gluten containing products is that even people without celiac or a sensitivity do not digest gluten properly. The structure of the gluten protein is not easily broken down or absorbed by the human body.

The second issue with the pizzas, bagels, bread, etc. are the chemicals within them that bind to opioid receptors in the nervous system. The peptides found in wheat are so powerful and addictive that they have been compared to heroin and other drugs. Described below is the structure of two of the most prominent food opiates that have had their amino acid structure slightly altered over time. "These

"food opiates" are heavily concentrated in wheat and dairy products, especially cow's milk. Wheat contains the following opioid peptides, known as gluten exorphins, alongside which are listed their amino acid structure:

- Gluten exorphin A5: H-Gly-Tyr-Tyr-Pro-Thr-OH
- Gluten exorphin B4: H-Tyr-Gly-Gly-Trp-OH
- Gluten exorphin B5: H-Tyr-Gly-Gly-Trp-Leu-OH
- Gluten exorphin C: H-Tyr-Pro-Ile-Ser-Leu-OH
- Gliadorphin: Tyr-Pro-Gln-Pro-Gln-Pro-Phe

Cow's milk, depending on the milk variety (A1 or A2), contain a variety of combinations of the following casomorphin peptides:

- β -casomorphin 1-3: H-Tyr-Pro-Phe-OH
- Bovine β -casomorphin 1-4: H-Tyr-Pro-Phe-Pro-OH
- Bovine β -casomorphin 1-4, amide: H-Tyr-Pro-Phe-Pro-NH₂
- Bovine β -casomorphin 5: H-Tyr-Pro-Phe-Pro-Gly-OH
- Bovine β -casomorphin 7: H-Tyr-Pro-Phe-Pro-Gly-Pro-Ile-OH
- Bovine β -casomorphin 8: H-Tyr-Pro-Phe-Pro-Gly-Pro-Ile-Pro-OH" 17

Dr. William Davis who is also the best-selling author of *Wheat Belly* says "the peptides in gliadin, the enzyme in wheat, mimic an opiate in the brain. The same way a drug addict needs another hit, wheat stimulates the appetite in an insatiable manner. They tend to stimulate appetite for junk carbohydrates. All compounded by this gliadin opiate affect." 18 Another reference is made by gluten expert Dr. Tom

O'Bryan. "No one on the planet is eating the same wheat Jesus Christ ate. Modern wheat today has 42 chromosomes, Emmer wheat in the Bible had 28 chromosomes, Einkhorn wheat which preceded Emmer had 14 chromosomes. Before we ate the seeds of grasses tooth decay was virtually unknown. " 19 As you can see, the gluten and opioid effect on the human body is profound and a major reason why so many people feel the symptoms they do when consuming this food.

The third and final point when dealing with grains is the starch structure of wheat also called amylopectin A. This A structure is easily broken down by enzymes into glucose which elicits a higher glycemic index response. This spike in sugar in the blood is followed by insulin being released as described earlier in the book. The point I want to clearly articulate with grains is that they are not the beneficial food you have been led to believe they are. They will do much more harm to your body than good. In my experience, most people are simply unaware of the research and data that we have provided above.

Dairy

The second food/liquid that I see causing many problems for my patients and clients and that we touched on earlier is dairy. Dairy can come in many forms such as cheese, yogurt, milk, etc. Studies show it is the second most researched food just behind wheat and gluten. Just some information when using milk as an example: Lactose is the sugar found in milk, lactase is the enzyme that breaks down the sugar and casein is a protein found in milk (whey is another one). Most people stop producing the enzyme lactase around the age of five. This is important because as mentioned, it is used to break down the sugar lactose that is found in milk. Logically this tells me we don't need milk after the age of five. I have looked at various studies from reputable sources and almost all of them contradict what we have been told are the benefits from consuming milk. The first misconception is that milk is excellent for your bones and preventing fractures. Dairy has never been shown to reduce fracture risk and there are studies showing that it can actually increase fracture risk. Countries that have the lowest rate of dairy

and calcium consumption ironically also have the lowest rates of osteoporosis. I would advocate that vitamin D is more effective at helping with bones and joints than calcium products or supplements.

A growing trend I see with the general population is people complaining of constipation or diarrhea after consuming dairy. You may have heard the term lactose intolerance and the research is starting to validate many of the symptomatic and asymptomatic patient's description of their concerns. "About 75 percent of the world's population is genetically unable to properly digest milk and other dairy products - a problem called lactose intolerance. Our bodies just weren't made to digest milk on a regular basis. Instead, most scientists agree that it's better for us to get calcium, potassium, protein, and fats from other food sources, like whole plant foods -- vegetables, fruits, beans, nuts, seeds, and seaweed." 20

Corn

This next food will surprise many people but it is indeed a trigger food that can cause problems for people. Sweet corn that has not been modified is actually ok for you. It contains some fiber, C vitamins, B vitamins, magnesium and potassium. However, the issue is with field corn and the corn crop as they have been known to contain genetically modified organisms (GMOs). A major reason why farmers genetically modify the corn is so that it can withstand the herbicides and pesticides that they spray on them. Farmers spray them to kill the weeds and insects. However, these sprays can penetrate the corn or even other plants for that matter. Another component that is extracted from corn is called high fructose corn syrup (HFCS). It is found in many foods and drinks like bread, yogurt, cereal, pop, etc. and is a sweetener that has been shown to cause a whole host of health problems for people. I will leave the HFCS for another discussion but just make sure that if you are going to eat corn that you get it from organic, quality controlled sources.

Soy

This is a very sensitive topic as the paleo community will look at soy in a very different way as opposed to the vegetarian community. First off, soy is a protein derived from soybeans. As I have always stated, there are pros and cons to everything in life and you have to determine what works best for you. In my experience and from the literature that I have read, soy can create more adverse effects on the body than positive. It is a food that in my opinion is better to avoid than to consume. Science and researchers are also uncertain of the impact of soy and soy containing foods. Here are some of the arguments against soy. Soy can potentially cause thyroid issues in people who are iodine deficient and the actual soybeans contain phytoestrogens which mimic the body's natural hormones. This can lead to low testosterone in men and estrogen dominance in women. The higher levels of phytic acid in soy inhibit the body's ability to absorb important minerals, including zinc, calcium, copper, iron and magnesium. Remember that you want to have a balance in vitamins and minerals. Soy also contains protease inhibitors, which can block the enzymes that are necessary for the digestion of certain proteins. It also contains lectins and phytates which we have mentioned before and cause signaling/receptor problems in the body. Many countries like Germany, Israel and New Zealand have warned about the consumption of soy. The decision is always yours but the purpose of this section is to describe to you some of the foods I see cause problems for my patients and clients.

Eggs

The final food that makes my top five that can trigger symptoms in people is eggs. I remember years ago when bodybuilders used to only eat the egg whites and avoid the yolk for fear of raising cholesterol. That theory has finally been disproven and most people know that eating the entire egg is beneficial for your health. That is not the reason why eggs makes this list. Eggs cause concern for people with leaky gut because the specific protease in egg whites that people with autoimmune disease or severe allergies/leaky gut need to be concerned with is called lysozyme. Lysozyme has the ability to form strong bonds with other proteins. So, lysozyme from egg white typically passes through your digestive system in large complexes with other egg white proteins. Many of the proteins present in egg whites are protease inhibitors. This means that the lysozyme/egg whites protein complexes are resistant to digestion by your digestive enzymes. In layman's terms, the enzyme passes through the digestive system with the other egg proteins but because some egg proteins are protease inhibitors, these proteins are not broken down. Other proteins and bacterial proteins can bind to the lysozyme complex and when this happens, your immune system can mount a response against the foreign invader. This creates inflammation, symptoms, potentially leaky gut and autoimmune disease.

A quick story and this pertains to where I get my haircut. The wonderful lady who cuts my hair said Mike, I know what you do for a living and I have a question for you. I have allergies all the time, brain fog, sniffing, headaches and can't sleep very well. Can you help? I first ask about diet and said have you eliminated bread? She said yes. Have you eliminated dairy? She said yes. Have you eliminated corn and its constituents? She said yes. Have you eliminated soy? She was getting irritated but said yes. I said ok, have you eliminated eggs? She stopped cutting my hair and said I eat them twice a day. I said you have nothing to lose so try eliminating eggs from your diet and see what happens. She hesitantly agreed. I saw her a month later and she said you will not believe this Mike but all of my symptoms disappeared after removing eggs from my diet. She was very kind and she is very grateful that she asked me that one simple question. Does this sound familiar to you folks? I am just here to provide options and open your mind up to a new way of thinking when it comes to food.

Food Allergies, Food Sensitivities and Food Intolerance

Food Allergies

In this section, we want to differentiate between a food sensitivity, food allergy and food intolerance. I find that most people are not clear on the distinction. A food allergy is an immune reaction to a specific food. It will occur each and every time you eat that food, even if you only consume a small amount. A food allergy occurs when your immune system mistakenly believes a food or food element (like peanuts, lactose or gluten) is detrimental to your body so it produces specific immunoglobulin E (IgE) antibodies to neutralize that foreign invader. To bring your body back into balance and mitigate the perceived antigen, your body will release histamine as well as other chemicals into your bloodstream anytime you eat the offending food. Inflammation is then created and it's these chemicals that cause the entire range of allergic symptoms (rashes, runny nose, wheezing, diarrhea to the more severe anaphylactic shock). Only true food allergies can produce life-threatening anaphylaxis. This is why kids with peanut allergies have to carry an EpiPen. An EpiPen simply carries epinephrine which narrows blood vessels and allows the flow of oxygen. The reaction is usually immediate anywhere from minutes to hours. Allergies are not very common and are prevalent in less than 5 percent of the population. They may also be permanent. The most common food allergens are milk, eggs, fish, peanuts, soy and wheat.

Food Sensitivities

Food sensitivities are different than allergies in many ways. Delayed reactions manifest in many different ways as they can affect any organ system in the body and can take anywhere from 45 minutes to several days for symptoms to become apparent. They generate an immune response known as immunoglobulin G (IGG) and not necessarily to protein. This is why it is more difficult to determine if you have a sensitivity to a food. The delayed onset of symptoms and complex physiological mechanisms

involved in food sensitivities make them an especially difficult puzzle to solve. I have my patients keep a journal of what they eat for a week. If they experience any symptoms, I always ask what they had in the past 24 – 48 hours. Sensitivities are very common affecting between 25-50 percent of the population. They can be cured and the underlying cause is usually “leaky gut” or a compromised mucosal barrier. We will describe in a later chapter how you can test for food sensitivities.

Food Intolerances

The final reaction to food I want to discuss is food intolerances (**non-IgE mediated food hypersensitivity or non-allergic food hypersensitivity**). They are a digestive system response rather than an immune system response. It occurs when something in food irritates a person’s digestive system or when a person is unable to properly digest food. An example of this is an intolerance to lactose, which is found in milk and other dairy products as described above. Symptoms can be bloating, migraines, headaches, a cough, etc. Some causes of intolerances can be an absence of certain enzymes, specific chemicals, toxins, or some histamine in food. These are fairly common in people and an elimination diet is very helpful in curing these.

The Canada Food Guide

This will just be a quick overview of the Canada Food Guide and why it is seriously flawed based on what I have already described above and from my own clinical experience. Among other recommendations, it suggests five to 12 grain products a day and they include bread, cereal, bagels,

pitas, buns, pasta and rice. The section on grains and wheat clearly articulates why these foods will initiate a cascade of health problems from sensitivities, allergies, autoimmune diseases and even worse. The Canada Food Guide is outdated and our children should not be subjected to the kind of weight gain that comes from recommending these grains. I am an optimist and I hope the “nutritionists” and “consultants” who oversee this guide will change their approach and focus more on the healthy fats that I have described previously, quality organic vegetables/fruits and grass fed protein. They also need to take a serious look at the milk and dairy recommendations. I truly believe that people mean very well and they try their best to form a paradigm with the data they have at the time. That being said, research and education evolves and so should the dietary recommendations that are in our schools and medical offices. Unfortunately, society has never been more ill and overweight. That in itself should tell you something about how people have been eating over the past 40 years. Seek a qualified practitioner and really test them on their skill and knowledge base. See if they have evolved with the times and follow the current literature and research. It will allow you to lead a life of sustained health and vibrancy.

9. Natural Supplements That Help Balance the Body

This is a very important chapter of the book for me and it is where we recommend natural supplements for people where required. We run hundreds of labs each year and we get to see where people are deficient and where they need the most improvement. They could be low in vitamins and minerals, depleted in the steroidal hormones, have parasites or bacterial infections, liver issues, gut dysbiosis, etc. I just want to preface this next section by saying that I am all for acute care in terms of medications for some people as they can literally save lives. There are a small percentage of people who require medication (s) in order to survive. They could be type 1 diabetics who don't produce insulin or people who

use thyroid medication because they don't have a thyroid. Your primary physician's care is important and you should always follow their directive when it is life or death and there are no other alternatives. I have many friends who are medical doctors, surgeons, chiropractors, etc. and we love them dearly as they have spent their entire lives trying to help people. They have beautiful hearts with pure intentions. With that being said, I find that medication is prescribed too frequently these days especially when the patient's issues could be resolved by lifestyle or nutrition alterations. There are so many alternative approaches to give a patient for chronic care but most conventional models don't allow for this or don't have the expertise in this area. Dr. Mark Hyman talks about this a great deal when he lectures. He is a well respected medical doctor who leads the Functional Medicine Division at the Cleveland Medical Clinic.

Hormone Balancing Herbs and Botanicals

Before we list some supplements that may help you with your condition, please be sure to see a qualified practitioner who knows your specific case and has run some labs on you to see where you are out of balance. I never give out supplements or hormones unless I have seen the patient in my office and have run the required labs. Health is not a game and should be looked at with the utmost care. Below are simple recommendations that have worked for my patients who have shown these symptoms.

Energy and Stress

This is probably the one area almost everyone struggles with. People have so much stress in their lives from finances, children and personal issues to career considerations. I see executives, doctors, teachers, business owners and just about every profession all day long in my office to deal with these chronic concerns. They are sick and tired of feeling sick and tired. Two of the most common herbs for low energy are licorice root and ginseng. Licorice root contains compounds called flavonoids and the herb's key therapeutic benefit is found in glycyrrhizin. I have personally taken licorice root and I noticed an

increase in energy almost immediately. It has many beneficial effects on the body but it should be noted that it is not to be taken by individuals who have high blood pressure. Consult your physician or practitioner before taking it. Ginseng is also used to increase energy and it is plant based and comes in a variety of forms (American, Asian, Siberian, etc.). I typically give this to patients who need a boost but cannot tolerate the licorice root.

From a stress perspective, when my clients have high cortisol, we can use Rhodiola and low cortisol equals Licorice Root or ginseng as mentioned above. Rhodiola is known as Rhodiola rosea (other names include Arctic or Golden Root). It is generally classed as plants and fungi which are also named adaptogens. An adaptogen just means that it helps the body adapt to physical, chemical or environmental stress. Rhodiola rosea relieves stress by balancing the body's stress-response system. The Russians have also used it over the years for strength, endurance and to fight off depression. It is grown in the arctic areas of Europe and Asia.

PMS and Sex Drive

PMS is an issue for both women and men. Women experience the physical, physiological and emotional issues while the men just experience the emotional ones. I am being a little facetious but it is a serious concern for many people. Chasteberry and saffron are two excellent herbs at helping women deal with menstrual cycles. Chasteberry is indigenous to the Mediterranean region and it is a fruit that grows on flowering shrubs. You can get it in supplement form or from dried fruits. Saffron is another herb and it is also a very expensive spice. It is produced from the saffron crocus flower. A herbal saffron supplement can help induce menstruation as well as help relieve the pain that many females feel with periods. Another benefit is that saffron can also help to reduce chronic uterus bleeding. As always, do not use if you are pregnant and keep out of reach of children.

Sex Drive is very important and I see many patients who have lost their sex drive usually due to being stressed and the subsequent depleted hormones that follow chronic stress. Their libido is very low and they don't even want to be around their partner. This is heartbreaking as intimacy is very important in relationships. Maca is a plant that grows in Peru and Maca root contains many chemicals, including fatty acids and amino acids (protein) , natural sugars, potassium, iodine, iron, magnesium, fiber and calcium. It has been shown to increase libido and this is due to the high nutritional content of the root.

Sleep

This is a very loaded word and most people underestimate how important it is as described earlier in the book. You simply can't function optimally without it and it becomes a major problem for people as they age. I must get asked this question five times a day. How can I sleep better? What can I take to help me sleep? The answer from an herb or botanical point of view is Valerian Root or Ashwagandha. Valerian Root is a perennial plant and is native to Europe and Asia. The dried root part is most beneficial and it contains acetic acid, ascorbic acid, magnesium, calcium, manganese and quercetin. It has been used for over 2000 years in assisting with sleep. Ashwagandha is also very popular in the herbal community and is an adaptogenic herb popular in Ayurvedic medicine. It is plant based and its constituents consist of phenolic compounds, flavonoids, saponins and alkaloids. I recommend you look into these two supplements if you are looking for herbs to assist with sleep.

Sugar Cravings and Weight Loss

I would say these two go hand in hand. As mentioned earlier in the book, most people in 2016 are following a heavily weighted carbohydrate based diet. This means they are eating breads, pastas,

cereal, pizza and other wheat based carbs. Their brains now crave these kinds of food and they will get headaches, anxious, jittery and moody if they don't eat more carbohydrates. This is exactly the opposite of what you are supposed to do. I won't repeat what I said earlier but eating more protein and healthy fats as food is always my number one antidote to stopping the cravings. That said, there are two great supplements that you can take and they are L-glutamine and resveratrol. L-glutamine is an amino acid found in the body. It helps stabilize blood sugar and alleviates the need for sugar consumption. One of my favourite supplements is also resveratrol and from a food perspective it is found in the skin of red grapes. An amazing antioxidant as well but is also known for its ability to improve insulin sensitivity, which means that your body is better able to upload glucose into muscle tissue for storage energy.

I could write an entire chapter on supplements for weight loss and many people would buy all of them. I understand human psychology quite well and that most people want a quick fix for their health concerns. Unfortunately, it is not that easy. The previous chapters will guide you on how you can truly live an optimal life and balance your weight but I will provide you with a couple of the best herbs and botanicals that can move you in the right direction. Conjugated Linoleic Acid (CLA) is an Omega-3 fat derived primarily from organic grass-fed beef and dairy products. I prefer getting it from these sources but you can also get CLA in supplement form. I have seen patients do well with it as it has been known to reduce fat, increase muscle tissue and lean out the midsection. I have clinical experience with it and the benefits have been quite pronounced. The second supplement is Relora. Relora is a proprietary blend of two plant extracts (Phellodendron amurense and Magnolia officinali) and works on the central nervous system to relax you. In curbing stress and cravings, it will invariably help you lose weight. The therapeutic benefits are a big contributor to an optimal weight.

Toxicity

As mentioned in the lab section of the book, toxicity is very important to measure and also rectify when it comes to damage to your tissues and cells. Toxicity can block the cell's receptors and cause a whole host of problems. Some natural herbs and supplements to help with toxicity are CoQ10, green tea, rosemary and grape seed extract. CoQ10 is synthesized in the body and found in many foods as well. It is involved in many of the chemical reactions that occur within the body and generate energy within the cells. This is important as it is found in every major organ in the body. Another one of my favourites is green tea. It is loaded with polyphenols like flavonoids and catechins, which function as powerful antioxidants. It is a staple in our kitchen and is used on a regular basis.

Rosemary is another very powerful antioxidant that we will recommend for clients. It is a herb that is a member of the mint family. It is a good source of calcium, iron and vitamin B6. It helps boost the immune system and improve the circulation of blood and is great at removing free radicals. The fourth supplement that is great in helping with toxicity is grape seed extract. Grape seeds contain natural plant compounds called oligomeric proanthocyanidin complexes (OPCs) and come from grapes. These have been shown to help with chronic disease, have antiviral, antioxidant and antibacterial properties. Improvements in blood flow and circulation are also being studied as a potential benefit.

Autoimmune

We are seeing a growing number of these cases in our practice each and every year. As described earlier in the book, there is a complete protocol on how to heal the various conditions we experience but I will give you a general overview on some of the natural supplements that can help. The first one are the B vitamins (Vitamin B12 and B9). "Vitamin B12 works together with folate in the synthesis of DNA and red blood cells. It's also involved in the production of the myelin sheath around the nerves, and the conduction of nerve impulses. You can think of the brain and the nervous system as a big

tangle of wires. Myelin is the insulation that protects those wires and helps them to conduct messages. “ 27 Another one is Evening Primrose oil as it is also anti-inflammatory and will reduce the triggers for the immune system to attack. The third natural herb and supplement is N-acetyl cysteine (NAC) and it is used to support the liver. N-acetyl cysteine helps to support your liver’s production of the powerful antioxidant glutathione. Glutathione as we have mentioned helps to reduce inflammation in the body. The final recommendation I will provide in this book are Probiotics. They are used to support healthy digestive function and reduce gut inflammation. The proper strains of probiotics will enhance the beneficial bacteria in your gut and start to rejuvenate your microbiome.

Rheumatoid Arthritis (RA)

I selected this particular autoimmune condition for the book as I see it a great deal in our practice. RA is an autoimmune condition where your immune system mistakenly attacks your bones and joints. Getting plenty high-quality, animal-based omega-3 fats is ideal but you can also find high quality fish oil. Krill oil seems to be particularly helpful here as well and this is due to its anti-inflammatory properties. The master antioxidant glutathione is a primary line of defence against RA. “Glutathione helps regulate the immune system. It strengthens the underperforming areas of the immune system and calms the body’s overactive defense mechanisms. This leads to a balance in the immune response which helps prevent the progression of rheumatoid arthritis and helps ease the signs and symptoms of the disease.”²⁸ Vitamin D is the third and final supplement that is helpful. Most people are deficient in Vitamin D yet it plays a vital role in so many metabolic processes in the body. Vitamin D has been known to lower inflammatory cytokines (IL17 and IL23) and is also believed to inhibit the part of your immune system that is known to cause inflammation in arthritis. What this means is that less inflammation means fewer symptoms from RA. I typically recommend these to patients as a way of augmenting their personalized protocol that is created from their lab results.

Hormone Balancing with Bio-Identical Hormones

We just reviewed the herbs and botanicals you can use to help with chronic conditions and even acute bouts of stress. These have helped many people achieve the level of vitality and energy they deserve. That being said, sometimes we have to use bioidentical hormones to increase their depleted state. Their condition has typically been deteriorating for many years and their hormone levels are almost non-existent. As I will mention one more time, please consult your primary care provider before trying any or all of these recommendations. I only use bioidentical hormones when someone is my patient and I have run extensive lab work augmented with the way he or she is presenting. This is intended for reference only. When talking about hormones, they are typically classified as bioidentical and synthetic. So what is the major difference? “Simply put, a synthetic hormone is a hormone synthesized in a pharmaceutical laboratory from synthetic (man-made) chemical compounds. Bioidentical hormones are synthesized in a pharmaceutical laboratory from plant sources. Hence, the term natural versus synthetic.” 29

The one area of contention that I hear frequently is that there is no such thing as bioidentical hormones and they are all classified the same. Many people in the conventional model like to use this approach and it is simply not true. “The significant difference between synthetic hormones and bioidentical hormones, however, is how they act in the human body. Synthetic hormones, like Premarin, a synthetic estrogen, and Prempro, a synthetic progesterone, have a molecular bond which is not recognized by the human body. Therefore, they are not metabolized efficiently, and can, according to some researchers, release toxins into the body. Conversely, bioidentical hormones *are* recognized by the human body because their molecular structure is exactly like that of the hormones produced naturally in your body. Because the molecular structure of bioidentical hormones *is* recognized by the human body, they are more efficiently metabolized and have not been shown to increase carcinogens in the process. “ 30 Here was a study that was conducted in 2009 explaining the effects on the body and the corresponding results. “A thorough review of the medical literature supports the claim that bioidentical hormones have some distinctly different, often opposite, physiological effects to those of their synthetic counterparts.” 31 It also goes on to describe the long term side effects of taking

synthetic vs bio-identical hormones. I want to be very clear on this point as I don't feel the general population really knows the difference between the two and the harm they could be doing to their body by seeking targeted, Hormone Replacement Therapy (HRT). This doesn't help the body from a holistic standpoint as it just seeks to treat a specific lab marker or symptom.

Energy and Stress

Most of the patients who come and see me have an issue with stress and very low energy especially during the mid-afternoon. This is exacerbated by the stimulants they believe are helping them but are actually making the condition worse (energy drinks, excessive caffeine, etc.). Two hormones that are beneficial in helping with stress and low energy are pregnenolone and DHEA (dehydroepiandrosterone). Pregnenolone is the master steroidal hormone and filters down into DHEA and then testosterone and the estrogens. In most of my patients, their labs reveal that they are extremely low in DHEA, testosterone, the estrogens and pregnenolone. Depending on their lab results (low numbers) and clinical correlation, we may recommend they supplement for a short period of time with pregnenolone and DHEA. DHEA helps you recover from stressful situations. It is produced in the testes as well as the adrenal glands.

PMS

Pregnenolone plays a major role in PMS symptoms. Many of my patients suffer from irritating symptoms during their time of month and using pregnenolone has been helpful. This master steroidal hormone has been used for quite some time to deal with **PMS and menopause**. "Researchers conclude that pregnenolone plays a promising role in the pathophysiology of PMS, and according to my colleague and hormone expert Ray Sahelian, M.D., it can help alleviate PMS and menopause symptoms,

particularly hot flashes and loss of libido.” 32 Typically, females who are under a great deal of stress tend to shunt pregnenolone over to progesterone and cortisol while reducing the amount that is available for the estrogens and DHEA. This can leave them unbalanced and moody and this is due in large part to the changing bio-chemistry during their cycle.

Sex Drive

Another very important complaint from my patients when we review their questionnaire is sex drive. As discussed, most people just don't have the desire anymore and intimacy is more of an afterthought as opposed to desired. If their DHEA is low, we can add some sublingual drops and the same can be true for pregnenolone. I notice a sharp increase in libido when clients start healing their adrenals and sex hormones. This is another reason why couples struggle with infertility. They have so much stress in their lives causing their reproductive hormones and sex hormones to become depleted. It is almost impossible to feel alive when you are barely getting by in life. Most patients feel like every day is a struggle so any assistance we can provide is usually welcomed.

Sleep

We could write an entire book on sleep but we kept it at just a section earlier on. I can't tell you how many patients struggle with this. We could berate the point forever but people need help and the labs usually reveal just how much they're struggling. The typical salivary lab reading for melatonin is around

12 - 35 pg/ml with greater than 18 preferred. Patients that show a melatonin score under 18 typically have underlying gut issues as a great deal of melatonin is produced by the gut. Serotonin is also the precursor to melatonin so it is a concern when these levels are low for overall circadian rhythm and happiness. If the client/patient is presenting with many of the symptoms of fatigue/sleep concerns/wakefulness and their labs reveal a deficiency, then we may use sublingual melatonin pills for a short period of time to boost their levels and help them sleep. As with all hormones, they are only to be taken for a short period of time and always seek the advice of your primary care provider before starting any protocol.

Weight Loss

It is what people want initially when they see a health practitioner as aesthetics are very important to people. In my eyes, you will lose the weight and become healthy if you first correct the physiological imbalances within the body. This is my priority when seeing patients as the corresponding benefit of internal health is what you see in the mirror. I have always preached that you start from the inside out and weight loss is no different. DHEA is also excellent in helping people lose weight. This is especially true if your lab numbers agree with you. “The results of the study were gratifying indeed. They showed, first of all, that the 50-mg/day treatment increased the plasma DHEA levels in both the men and the women about 5-fold, restoring them to youthful levels. Concurrently, the plasma levels of estradiol (an estrogen) increased significantly in both the men and the women. By contrast, the women—but not the men—experienced significant increases in their plasma levels of testosterone (which is prosexual in women as well as in men). This finding may explain why DHEA is known to stimulate the libido in elderly

women (especially those over 70) but not in elderly men.” 33 Better health, improved libido and increased estrogen and testosterone levels are desired by many.

Conclusion

The genesis for writing this book was a desire to share the various components that contribute to your health and how you can enhance them. We wanted to take you step by step through each key area while also giving you a general understanding of the topic. When taking control of your life, you need to be able to effectively communicate with the people who you entrust with your health. I don't want you to just get by in life or to accept chronic conditions as the inevitability of getting older. Most clients and patients who we have helped in our practice were previously told there was nothing that could be done for their condition and they would have to live with their symptoms and that was just part of life. As you can tell by how thorough we were in each chapter, poor health or lack of direction and purpose is usually not caused by one problem. It is usually a combination of three or four concerns mentioned above or even more. Unfortunately, this is why other practitioners or doctors may miss the underlying problem. They may think it is a neurological issue when it may be an imbalance in the gut or the client may be dealing with pain from their past that doesn't allow them to move forward.

Our journey through life is filled with many milestones and celebrations that stay with us until our spiritual existence in this material world has come to an end. They bring us joy and happiness but sometimes also sadness. These are emotions that we will all feel as we evolve on our path to love, peace and tranquility. It is important to celebrate the major events but you must become more aware of the little nuances that present themselves each and every day. These could include time with your children, reading, driving, working out, making dinner and many of the activities we take for granted because they seem so routine. They are not and we must enjoy every minute of each day. Part of the process to living a life of abundance and prosperity involves appreciating the beauty and calm in small endeavours. I mention this because nothing is accidental in this world and everything and everyone has a role to play. What you encounter has something to teach you and guide you down your path.

We are very passionate about this book because we have seen this paradigm work with hundreds of patients and clients from all over the world. As we discussed in our first book “The Transformation From Within”, you need to uncover and determine why you have tendencies and character traits and then develop an approach to change them for the better or improve your current state. The one thing that makes people feel alive is progress. As we have said many times, if you are making even the slightest progress, you feel invigorated and capable of pressing forward. If you are not growing, you are dying. There is no common ground. Just existing is no way to live your life. You were destined for more than that. Our intent is that this book will open your eyes to your own life and some areas that you may be struggling with. I suggest you digest the content and then reread certain sections as we went in depth on purpose to help you grasp the complexity of the human body while also illustrating how everything is intrinsically linked. Our philosophy of treating the body as a holistic being is not new but rather forgotten. We all need to get back to the basic principles of health and that taking from one part will invariably affect another. The human body and life are about balance and flow. The more we can get in congruence with the environment, ourselves, other people and our spirit, the better off our lives will be.

Mike

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