

Nature's Intent – A Nutritional Philosophy

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The Necessary Frame

I believe that nature has specific intentions for us when it comes to our health, and it's important to remember that our lack of understanding of these intentions doesn't mean that nature is wrong. Instead, it means that we may not fully understand these intentions yet, and this is where we must start.

For many years, proper nutrition has been a mystery to humanity. Unfortunately, the recommendations provided by gurus and supposed experts often do not help or even worsen our health conditions. The abundance of limited or overly technical information has only added to the confusion. Complicating the issue are complex studies that are sometimes ambiguous, inaccessible, hard to implement, or missing key variables.

New diets or recommendations often promise fantastic results, but they are often expensive and disappointing because they are hard to follow, unsustainable, uncomfortable, and sometimes even dangerous. So, what are we missing?

I believe we are missing something significant but also something relatively simple. I do not think that nature would set us up for failure. Maybe we have overlooked a critical piece of the puzzle in our attempts to control our environment and bodies. Or, perhaps we have not fully understood the bigger picture due to various types of bias passed down through generations and devious marketing schemes

that keep many people living in fear. Maybe we should examine nature's design and follow nature's instructions instead. I believe the solution could be that simple. However, there are many misconceptions and confusion that we need to sort through to find these instructions.

This entry is for consumers and health practitioners who recognize that our current understanding and guidance on health and nutrition may be flawed. It is also for anyone who desires different options and perspectives presented in a format that is easier to understand. This entry is not a claim of absolutes or a specific recommendation. Instead, it is an attempt to contribute to the pool of knowledge and understanding by presenting a set of contrasting positions and ideas that may not have been previously considered. Therefore, readers should view this as more of an exploration of specific variables that may demonstrate a larger truth. It results from hundreds of studies, anecdotal evidence, personal experience, and years of education, contemplation, and critical reflection.

The following definitions are necessary to frame this philosophy.

Nature

- humankind's original or natural condition
- the physical constitution or drives of an organism
- the genetically controlled qualities of an organism

Intent

- a usually clearly formulated or planned intention
- purpose

Nutrition

- the sum of the processes by which an animal or plant takes in and utilizes food substances

Philosophy

- a theory underlying or regarding a sphere of activity or thought
- pursuit of wisdom

Introduction – Setting the Stage

Please note that I am not a physician, nutritionist, or dietitian, and the information provided here is not medical advice. It is for educational and anecdotal purposes only and is not a substitute for medical or professional care. You should not use this information in place of a visit, call, consultation, or the advice of your physician or other healthcare providers. I am not liable or responsible for any advice, course of treatment, diagnosis, or additional information, services, or products you obtain or utilize.

There are two ways to approach health: the old-school way, which is rooted in outdated and sometimes flawed or incomplete understandings, and an approach that appeals to our physiology. The old-school way often leads to the outcomes we have come to expect: rising rates of behavior-related diseases, increasing numbers of chronic ailments and autoimmune issues, and increasing pharmaceutical dependence. However, these outcomes should not be surprising given the lack of knowledge and perspective of those providing the recommendations. On the other hand, if we approach our health with

the understanding that nature has designed our bodies to function in a certain way, we may see dramatic improvements in our health outcomes and goals. However, this requires overcoming misconceptions rooted in outdated understandings and appreciating nature for what it is.

This is not a research paper filled with links, resources, and citations. Instead, it is an attempt to have a frank conversation about health and present an idea for you to consider based on what we often ignore. Please note that this idea results from significant research over many years, but I am just a guy on the internet, and you may not know me. You should not blindly trust me and should always weigh the information and decide what is right for you. You should also conduct balanced and objective research on your own and consider whether the information you find is rooted in newer or older understandings and whether the researchers considered all necessary variables in their conclusions. This entry is my nutritional philosophy and should be viewed as such. It could be wrong, situational, or correct, and a model to follow.

If you're like some of my readers and family, you might be wondering why I'm giving this information away. Sure, I could publish this in paper form and sell it. But I can no longer stand by and do nothing while so many people seek answers for their chronic conditions, especially when the solution seems so simple.

Keep in mind that I, too, was once a victim of programming and conditioning based on outdated understandings. As a result, my overall health was held captive by many misunderstandings and misconceptions. We must recognize that these misconceptions can be dangerous, especially when media and governments suggest that eating certain healthy foods is somehow self-destructive behavior. What follows will show how misguided, ignorant, and dangerous such statements really are.

Please note that this is not a political statement. I always seek accuracy because it's what will give us the best results. Just be warned: if you're looking to reinforce your confirmation bias, this isn't the entry for you. I'm not taking sides and will surely challenge something in your understanding.

Let me be clear: our nation is sick. To heal the sick, we need results-oriented accuracy rooted in a healthy understanding of cause and effect. Political or emotional nonsense mixed with misconceptions won't solve our problems.

We don't need to be health experts to get this right, and we don't necessarily need to know the ins and outs of various nutrients to maximize our nutritional status. While that can help, we must understand that nature provides a theme for its intentions. Understanding this theme is enough. Our job is to figure out what that theme is.

I'll try to simplify as much as possible so that we can all use this information effectively. However, some of what follows might get complicated. Please bear with me. I need to demonstrate the complexity and a few various components so that we can appreciate the simplicity and use the whole thing effectively. But it will get easier to understand as you continue reading. Just keep going. You'll see the rhyme and reason soon enough.

Thank you in advance for your time. I commend you for reading something that goes against what most people currently believe. But your reward for doing so will be acquiring information and clues to help you achieve your goals. Let's begin!

Different Doctors for Different Things

How can we distinguish between a true expert and an overconfident novice? Different doctors do different things, and it's a misconception in this country that medical doctors are the end-all-be-all of health. This idea needs to be revised on many levels, and it's a dangerous misconception that even some physicians have come to believe.

This section is a brief overview of some of the differences, and there will be exceptions to what I write here. In fact, this topic deserves its own book because there is so much to discuss. However, I need to make some of these differences clear.

We should ask experts for advice, but it can be problematic if we don't know who the true experts are and if novices don't realize their lack of expertise. If you remember nothing else from this section, let it be that some doctors produce knowledge to be used in practice while others practice the knowledge produced. Knowing this difference can help you determine where to start looking for the information you need. Of course, this idea also requires context.

MDs and DOs are usually the ones who practice the knowledge produced. Generally speaking (not always), their specialty and purpose are to stabilize a patient with acute (sudden onset / short course) illness. These doctors also tend to focus on symptoms and will look to treat the symptoms and issues that impact and stabilize the patient at that moment. There are some MDs and DOs involved in creating research, but this is less common than you might think.

MDs and DOs start with their undergraduate degree. Then they attend medical school, which comprises two years of pre-clinical work and education and two years of on-the-job training, often referred to as "clinical work." The bulk of this education focuses on the body's various processes, acute illness, and trauma. After that, they attend residency (an internship). The time in residency varies depending on their specialty, but it typically ranges from three to seven years.

The main difference between an MD and a DO is their philosophical approach. MDs are allopathic doctors and are considered conventional or mainstream medicine. DOs are osteopathic doctors who tend to focus more on the holistic nature of the situation. In practice, these two types are very similar. You'll often find both in hospitals and clinics using similar instruments, procedures, and treatments.

On the other side of the health coin, EdDs and PhDs are the doctors who produce the knowledge used in practice and determine various applications. Health-oriented EdDs and PhDs will research specific health aspects, determine why things are happening, and how to best use the information. They then publish their findings for other doctors to either improve upon or put into practice. The research conducted by EdDs and PhDs tends to be hyper-focused on a few specific aspects.

EdDs and PhDs must start by getting a four-year undergraduate degree. After that, they move on to their Master's degree, which generally takes two to three years. Once they have acquired a Master's degree, they begin their doctorate. The time required for this degree varies widely, as it largely depends on students' progress in their research. However, students usually have six to eight years to complete their work. Most students will finish their doctorate between three and six years, depending on various variables.

In my experience, the difference between an EdD and a PhD is relatively minimal but critical. The difference is in their approach to research. For example, the PhD typically emphasizes theory-based research on a specific topic, while the EdD focuses on exploring the potential applications and integrations of findings from or within a particular pool. In other words, the PhD tends to focus on creating a tool, and the EdD thinks about the various ways that tool can be used. However, both work together indirectly to advance knowledge and its application in a particular field. My personal bias is on the application side of things, which typically focuses on the bigger picture and recognizes that the picture continually changes.

None of the four degrees (MD, DO, PhD, EdD) is necessarily better than the others. They simply do different things. Although, the PhD is likely the powerhouse and the unsung hero. However, at the same time, the information created by the PhD is only useful if other doctors can do something with it.

It is important to remember that the various types of doctors focus on different aspects and have different approaches to finding potential solutions to various problems. Both research and practice are necessary in many cases, and collaborations can lead to remarkable discoveries and solutions when egos are put aside.

One oversimplified and idealistic way to think about it might be that the PhD creates an idea, the EdD figures out its various applications, and the others put it into practice. Of course, some PhDs and EdDs will practice in specific settings, just as some MDs and DOs may be involved in research and discovery. While this may be an idealized oversimplification, it is also not a bad generalization of how things should go. Personally, I turn to the practice side for acute illnesses and to the research side for a better understanding of chronic ailments.

Now that we have learned some of the differences, it is important to understand that being an expert in one area of health does not make someone an expert in all others. For example, EdDs and PhDs do not spend much time learning how to stabilize patients experiencing acute trauma, surgery, and similar situations. On the other hand, most MDs and DOs focus little on the study of chronic or behavior-related diseases, their treatment, applied nutrition, supplementation, and exercise. This is where problems begin.

The Centers for Disease Control and Prevention (CDC) estimates that 60% of Americans have at least one behavior-related chronic condition (CDC, 2019). 40% have more than one. A recent study published in PLOS One suggests that more than 85% of these chronic diseases are caused by lifestyle choices, including diet and exercise (Rappaport, 2016).

This is a significant issue because behavior-related diseases and their treatment are not a focus in the training of most physicians. Research by Jennifer Abbasi shows that many medical students do not receive adequate education on nutrition (Abbasi, 2019). Abbasi's findings support a 2015 survey that found that 71% of medical schools provide less than the recommended 25 hours of nutrition education and over one-third provide less than half of that (Adams et al., 2015).

Exercise is also crucial for health, but again, it is not something that many physicians are required to learn. A 2015 study of allopathic and osteopathic medical schools found that only 12.2% of medical students had a single required course on physical activity (Devries et al., 2017). A 2015 study by

Cardinal, Park, MooSong, & Cardinal found that over half of all American physicians receive no formal education in physical activity (Cardinal et al., 2015).

These findings are concerning, especially considering that behavior-related diseases are the leading causes of death and the public typically looks to their physician for advice on these conditions. It can be difficult to treat or advise on behavior-related conditions if you have never learned about them or only have a basic understanding of them.

It is important to have humility, consider facts and perspectives, and understand the potential for new information to change our understanding of old concepts. Science is constantly discovering new things, and it is essential for doctors to continue learning to ensure their expertise. However, some people may view their degree as the end of their education, when in reality, graduation is just a demonstration of the minimum level of competence, not expertise, as shown by the *Dreyfus Model of Skill Acquisition*.

The Study Flaw – What Are We Missing?

When conducting a study on health, researchers often focus on a specific aspect, such as a nutrient, reaction, or composition. However, it is important for readers to understand that this process has limitations. For instance, it is only possible to include certain factors in a single study. For example, a researcher might study the vitamin, mineral, or fiber content of legumes, but boiling legumes can change their properties, and regular consumption can have a long-term impact on the microbiome. Additionally, there is an interplay between legumes and other foods and factors such as absorption. Therefore, the study only provides part of the story, and caution should be exercised before implementing its findings.

Another aspect to consider is that every study needs a baseline, an established point of normalcy that helps the researcher understand differences. However, what is considered "normal" can bias the study's outcome. For instance, the average American consumes between 150 to 170 pounds of refined sugars per year or 77 grams per day. While this may be considered "normal," it is not "normal" because Americans far outpace other nations in sugar consumption. Furthermore, nature does not view this level of consumption as normal, as the toxic effects of such high intake demonstrate. Additionally, different foods and activities can impact people differently, depending on factors such as genetics, source materials, personal history, past exposures, habits, and undiagnosed diseases. These factors may be missed by researchers due to bias.

Furthermore, we must appreciate that science does not prove anything. Instead, it merely suggests a particular outcome based on certain criteria and specific conditions. A health-related example of this might be the consumption of meat. Some studies suggest that consuming an abundance of meat is beneficial, while others suggest it can be detrimental. However, most studies do not address the interplay of meat with refined carbohydrates and sugar.

Moreover, the animal's health, the processing of the material, the preservatives used, the animal's food supply, the preparation, and a slew of other factors are often not considered. Therefore, such studies are missing essential puzzle pieces, and their conclusions are likely flawed. This belief is especially true when any potential contrast is deliberately omitted.

There are plenty of examples of this throughout health-related studies. Another example might be the idea of avoiding salt. Many health professionals continue to tell their patients to avoid salt despite that recommendation being highly flawed and outdated. Of course, there is a bit of irony in a physician telling their patients to avoid salt. When the avoidance of salt finally takes its toll, the patient will rush to the hospital only to find that the first course of action is a saline bag (salt).

The point and problem are that most studies involving salt do not consider the level of inflammation that a lifetime of consuming refined carbohydrates might do to the body. Moreover, such studies do not consider how that inflammation might impact how the body processes various nutrients. Meanwhile, the misconception that salt is bad has set the stage for years of terrible advice that has likely made things significantly worse for many. Furthermore, this is despite the logical and obvious facts that humans require salt, cry salt, urinate salt, and sweat salt but do not store salt. Shockingly, without enough, people can die.

The truth is that the healthiest nations on the planet consume substantially more salt than Americans. Moreover, aside from a small percentage of people who are sensitive to salt, even people with high blood pressure can benefit from adding salt to their diet. That is not to say that everyone should add salt to their diet; individuals who are salt sensitive should avoid excess salt intake. However, a growing body of literature is beginning to demonstrate an association between hypertension and inflammation and that adding salt does not increase inflammation levels. In fact, adhering to a low-salt diet could worsen inflammation (Chamarthi et al., 2011; Forrester et al., 2010; Gijsbers et al., 2015; Mallamaci et al., 2013).

These truths should be enlightening. Researchers have likely been looking in the wrong place, and newer studies are starting to find that recommendations to avoid salt were just wrong. In fact, Dr. Lynn L. Moore, associate professor of medicine at Boston University School of Medicine in Massachusetts, completed a 16-year study on the matter. After reviewing the data, she said, *“We saw no evidence that a diet lower in sodium had any long-term beneficial effects on blood pressure. Our findings add to growing evidence that current recommendations for sodium intake may be misguided”* (Newman, 2017).

Meanwhile, the association between hypertension and excessive consumption of carbohydrates is highly documented. Nevertheless, many professionals still recommend a high-carbohydrate diet and avoiding salt. It is alarming that such recommendations continue despite the evidence.

The point is that it is nearly impossible to include every necessary factor in a single study. Moreover, sometimes the information changes as new factors are discovered and included. As readers, we must understand this fact and accept that various studies are only clues. At the same time, we should review them with some skepticism and consider what might be missing from the examination. We should also think about the study's motivation. Of course, proper understanding requires some detective work, foundational knowledge, and intuition. However, having a decent understanding of the topic is crucial. If we don't have this, we are likely to fall victim to the Dunning-Kruger Effect.

Therein lies the key to our foundational approach. We must remember that if we ask the wrong question, we will probably get the wrong answer. Moreover, we cannot have the complete picture if we

only have pieces. At the same time, we must accept that we will miss some things, and the researcher probably did too.

So, we must always ask ourselves, *what are we missing?* Even better, we should research, learn, and then assume that we have missed something. However, this comes with a warning. Our levels of knowledge and understanding will largely determine how deeply we can explore. Our bias on the topic is a major obstacle. Therefore, we must strive for accuracy instead of confirmation bias and recognize that we cannot know everything about a topic because there is always more to learn.

On a related note, the relationship between unethical science and big food corporations has been problematic for many years. This relationship has resulted in campaigns and perspectives leading to poor outcomes. For example, doctors once recommended a low-fat diet, which benefited big food companies. Similarly, doctors and dentists once endorsed certain cigarette brands and provided false health claims. Is this still happening today?

While science is important, we must remember that there are often other factors to consider and agendas at play. Sometimes, the complete picture is not presented if there is profit or a bottom line to protect. At the same time, we must remember that health research is often not a black-and-white situation. Instead, it should be seen as providing clues.

It is true that there are flawed scientific studies and unethical food corporations. However, there are also reliable scientific studies and integrity-driven food companies. We must be critical consumers of information and learn to identify good information from bad. As consumers, we also need a baseline to reference. The following may help establish that baseline.

Chronic Disease – The Foundational Clues

It is sad to know that most Americans are dealing with some type of chronic ailment, with many suffering from multiple conditions such as obesity, heart disease, cancer, and type 2 diabetes, which are among the leading causes of death in the United States. These chronic diseases are not genetic or communicable but rather are caused by lifestyle choices, including diet. Strangely, the diet of many of these sick individuals often includes foods marketed by big food corporations, physicians, or influencers as "healthy." Despite these promises, the number of people suffering from chronic conditions continues to rise, indicating that something is being missed.

Health researchers recognize that diet is a fundamental aspect of health. However, there needs to be more clarity about which diet to follow. The typical advice is to ask a physician about diet, which is odd considering that nutrition is not a primary focus in the training of most physicians. Seeking guidance from a physician who may not have a thorough understanding of the topic seems like poor advice. Studies and surveys consistently show that the majority of physicians do not receive even the minimum required training on nutrition (Robertson, 2022), and what little they do receive is often based on outdated understandings. This results in a situation where it is like the blind leading the blind. When combined with the misunderstandings and flawed understandings that are common in schools and on the internet, it creates the perfect storm.

Regardless, when we look at the list of chronic diseases and understand that such diseases are the result of lifestyle or diet choices, we get our first major clue. It is easy to suggest that various chronic diseases result from people not following the current health recommendations. However, this thinking has an inherent flaw because it assumes the current recommendations are correct.

If the recommendations were accurate, they would be easy to follow, and more people would see a clear benefit by following the advice. Clearly, the advice is either wrong or, at the very least, highly flawed. Logic dictates that poor nutritional decisions will likely result in poor outcomes, including chronic disease and associated symptoms such as gastrointestinal issues, brain fog, lethargy, and weight gain. When we look around, that is what we see. Again, what are we missing?

Consider the advice and the difference in perspectives discussed earlier. A physician is usually all about the “effect.” They might see obesity, diabetes, or heart disease as primary diseases and prescribe drugs to help manage the symptoms. However, this approach often avoids a focus on the offending behaviors that caused the problem in the first place. From a health science perspective, the focus is on “cause.” This perspective suggests that these diseases are likely nothing more than significant symptoms and that the goal should be to correct the causing behaviors to remedy the adverse effect or result.

The question then becomes, do we prefer symptom management or actual disease resolution and prevention? However, while resolution or prevention is preferred, symptom management might be necessary. The thing to remember is that one path does not equate to the other.

Remember, these conditions are behavior-related, meaning that the fix is likely not found in only addressing the effect and using the latest pharmaceutical drugs. Instead, the proper fix occurs by addressing the actual cause or behavior. The bad news is that sometimes the cause is not entirely clear, and most of the time, the desire for profit might encourage a focus on the effect alone. Nonetheless, when symptoms progress enough to prompt a visit to the physician, the pharmaceutical approach is likely necessary to stabilize the patient and provide the necessary time to correct the behavior. In such scenarios, both sides are necessary.

This scenario is where things get messy. If the physician is not familiar with behavior-related diseases, they may not recognize the symptoms for what they are. Similarly, if the physician is not trained in nutrition and physical activity, they may not understand how to truly correct the problem. Ultimately, the behaviors that created the problem may go uncorrected, and true healing will not occur. Hence, the pharmaceutical becomes the crutch, and the patient now suffers from the chronic disease for their entire life. Moreover, since the behavior was not corrected, the compounding nature of the disease begins to take its toll, creating a spiral effect that results in drug dependence and worsening the disease. This is a terrible scenario for obvious reasons.

The good news is that despite so many people being utterly confused about the topic, the resolution can be explained and understood with just a little context. However, we need to become health detectives to find the clues necessary to put it all together. We also need context, intuition, and a theme to put the information into practice.

If we want to be detectives and hunt for clues, we need to understand what we are looking for and why. We need a profile of sorts. Once we know what we are pursuing, we can ask ourselves where we might

find it. Instead of focusing on diet, we should start by examining essential nutrients and common deficiencies. This will give us a better understanding of the necessary nutrient profiles we need and empower us to ask the right questions about how it relates to our diet.

Nutrients – The Foundational Clues

If we want to be detectives and search for clues, we need to understand what we are looking for and why. We need a profile of sorts. Once we know what we are pursuing, we can ask ourselves where we might find it. Instead of focusing on diet, we need to start with essential nutrients and common deficiencies. Examining these elements will give us a better idea of the necessary nutrient profiles we are seeking and help us ask the right questions about what it means for our diet.

I won't be able to cover every vitamin and mineral here. That would require volumes you probably wouldn't want to read and that I'm not motivated to write. Instead, this will be a brief overview that helps us establish a foundation for our investigation and makes a strong case for a dramatic point later on.

This exercise will focus on the nutrients that many people struggle to get or retain and their best sources. These alone will help paint a detailed picture of nature's intent. Additionally, these various nutrients will help lay the foundation for my nutritional philosophy discussed later. So, let's begin this journey with a molecule often touted as one of the most important: glutathione.

Glutathione

Glutathione is often referred to as the "Master Molecule" due to its many vital roles in maintaining overall health. However, obtaining sufficient amounts of glutathione can be difficult as it requires a well-balanced diet. Glutathione is produced by the liver and nerve cells in the central nervous system using the amino acids glycine, cysteine, and glutamate.

Many people tend to focus on glutathione's antioxidant properties, due to the belief that free radicals are harmful and should be eliminated from the body. At the same time, many people have come to view antioxidants as beneficial due to claims of potential benefits for stroke, diabetes, cancer, memory, and skin damage. However, not many people have stopped to question whether these ideas are true. Let us consider some contrast.

The truth is that, in many cases, antioxidants do not reduce the risk of developing certain diseases, and higher concentrations of antioxidants can significantly increase the risk of mortality. Therefore, consuming large amounts of antioxidants may do more harm than good, especially if other behavior-related factors are involved. For example, getting too much beta-carotene has been linked to an increased risk of cardiovascular problems and lung cancer in smokers.

Despite this evidence, the idea that we must rid our bodies of free radicals persists. However, the fact is that free radicals are essential for good health. Various free radicals play a critical role in wound healing and overall detoxification. Nitric oxide is a good example of this. Nitric oxide is a free radical that helps prevent blood clots, removes lactic acid waste from the body, improves oxygen and nutrient transport, improves circulation, and lowers blood pressure, among other things.

It is not wise to think of free radicals as something we must eliminate from our bodies. Sure, having too many free radicals at one time can be problematic, as the lifespan of a free radical may only last a fraction of a second, but the damage from having too many free radicals at once can be extensive. It is important to strike a balance. Rather than seeing free radicals as something to be eliminated, we should consider them powerful things to keep under control or regulated. That is where glutathione comes in.

If the body has enough glutathione, it helps control free radicals rather than eliminate them. But this fantastic molecule also plays several vital roles in our immune system. For example, it helps metabolize toxins, repair DNA, prevent various diseases ranging from high blood pressure to Alzheimer's, helps rebuild tissue, and helps in the production of essential enzymes and hormones. Scientists have also found that unhealthy brains consistently have lower levels of glutathione.

There is much more that we could discuss. However, these brief examples help set the frame and demonstrate that we can gain insight by examining the contrast. So, let's explore what happens when we don't have enough glutathione.

Glutathione Deficiency

Improper diet, lack of exercise, various chronic diseases, a weakened immune system, infection, and stress can all decrease glutathione levels and contribute to a deficiency. Having a deficiency in glutathione can lead to problems on several levels. For example, even reduced levels can contribute to adverse health outcomes such as a weakened immune system and various chronic diseases. This creates a vicious cycle where glutathione levels remain low due to these conditions, further contributing to the deficiency. Considering the contributing factors, it is likely that most Americans are operating with a glutathione deficit.

Glutathione also affects the brain. When discussing its deficiency in relation to the brain, the symptoms of not having enough are alarming. These can include brain fog, memory issues, depression, anxiety, difficulty focusing, and confusion. The consequences of poor brain function, including flawed thinking and bad decisions, are especially concerning when considering the potential impact on health-related decision-making.

Imagine that you visit your physician with any of these symptoms. It is possible that a discussion about diet or potential glutathione deficiency may not occur, and you may leave with a prescription for the latest drug on the market instead. This medication may only mask the symptoms rather than address the underlying glutathione deficiency. The lack of conversations about behaviors contributing to the deficiency only prevents it from being corrected. This scenario should be a wake-up call because situations like this happen daily.

We must resist the temptation to blame or shame physicians. Currently, testing for glutathione levels is unreliable, which may be why it is not included in standard medical practice. Even if testing were reliable, many physicians might not know how to interpret the results or how to address a deficiency. The solution to glutathione deficiency can be complex. Either way, it is important to consider the consequences of masking symptoms without correcting the underlying behaviors contributing to the deficiency.

The Complication

To further illustrate a point and a particular theme, it is necessary to delve into some technical information. As previously mentioned, glutathione comprises glycine, cysteine, and glutamate. A brief overview of these elements will help set the stage for the following discussion.

Glycine

Glycine is an amino acid that is a building block for various proteins in the body. These proteins are necessary for the growth and maintenance of our tissue and the production of hormones and enzymes. Good food sources of glycine include gelatin/collagen, bone broth, poultry skin, seafood, and organ meats.

Cysteine

Cysteine is a semi-essential amino acid found in high-protein foods such as chicken, yogurt, cheese, eggs, and turkey. It helps create protein and plays a variety of roles in metabolic function. In addition to its impact on bone, heart, and respiratory health, it has also been shown to be beneficial for digestion, reducing inflammation, improving cardiovascular health, supporting mental health, and aiding in overall detoxification.

Glutamate

Glutamate is an amino acid that is essential for normal brain function. While it can be found in many foods, the glutamate we consume does not cross the blood-brain barrier, so it cannot be supplemented to influence levels directly. Instead, glutamate is synthesized in neurons from precursors such as glutamine. It is worth noting that glutamate is a *nonessential amino acid*, while glutamine is a *conditionally essential amino acid*. The two are connected, so to ensure sufficient levels of *glutamate*, it is necessary to have enough *glutamine*, which can be found in foods like beef, poultry, seafood, eggs, dairy, and some plants.

It is worth considering the primary sources of these vital nutrients and comparing them to the advice that you might receive from your physician to avoid them. Logically, it would be difficult to correct a deficiency if you avoid the foods that are necessary to correct it. Unfortunately, this is just the beginning of the challenges involved.

The Important Cofactors

Nature has determined that our body's master molecule, glutathione, requires a specific set of ingredients. However, the issue goes deeper, and we must examine some additional factors to fully understand the point. In addition to the nutrients we have already discussed (glycine, cysteine, and glutamate), it is also important to ensure that we consume the essential cofactors required for their proper utilization and synthesis. If the protein structure is compromised, glutathione production is hindered. These cofactors include alpha lipoic acid, vitamin C, vitamin E, vitamins B1, B2, B6, B12, folate (B9), and minerals such as selenium, magnesium, and zinc.

Good food sources of B vitamins include salmon, liver and organ meats, eggs, milk, beef, chicken, yogurt, and pork. Good sources of vitamin E include trout, butternut squash, sunflower seeds, and

avocado. Citrus fruits are a good source of vitamin C, and organ meats are the best source of alpha lipoic acid, but it can also be found in red meat and tomatoes.

If you're paying attention, you'll likely notice that a particular theme is emerging, and we find similar themes for other essential nutrients. For example, selenium is abundant in Brazil nuts, salmon, tuna, turkey, cottage cheese, and chicken. The best sources of magnesium and zinc also follow this theme.

It is important to remember that nature would not set us up for failure. Our job is to understand and follow what nature intends for us. While challenging, the thing to remember is that, like everything else found in nature, there is a complexity to contend with.

Supplementing Glutathione and Diet

For many people who recognize that they have a glutathione deficiency, the simple solution may seem to be taking supplements or getting a multivitamin. However, this approach is unlikely to be effective. Glutathione degrades quickly in the digestive system and is destroyed by stomach acid and bile. This makes it difficult to increase or replenish glutathione levels through supplementation. While there are supplements that try to bypass the digestive system, they often result in more being lost than retained. Getting a shot might be more effective, but it can be expensive and may require convincing a physician of the need.

To restore glutathione levels without medical intervention, it is thought that one must consume the proper foods or supplements. However, the diet should always come first. Supplementation should only be used to fill gaps in the diet. Remember the food sources of the various nutrients discussed earlier and compare them to the fad diets that recommend avoiding these foods. Do you see a problem?

If we do not eat the right foods or have gaps in our diet, we may not be getting enough nutrients. If we are deficient, our bodies can start to break down. Supplementation can also be ineffective if we do not understand the role that nutrients play in our bodies or what that nutrient needs for activation. For example, natural glutathione production depends on getting the proper building blocks and cofactors, not just supplementing with glutathione. By consuming the right building blocks, we can restore our glutathione levels.

This is just one example of how our bodies are meant to work. By understanding how our bodies are designed and the role that nutrients play, we can better understand the importance of getting the right nutrients from the right sources. We can also see how fad diets and quick fixes often do more harm than good, as they may deprive our bodies of the nutrients they need to function properly.

Instead of relying on fad diets and quick fixes, it is important to focus on whole, nutrient-dense foods and strategic supplementation to ensure that our bodies have the nutrients they need to function optimally. By taking this approach, we can support our overall health and well-being and reduce the risk of chronic diseases and other health issues. Allow me to show you what I am talking about.

Vitamin D3

Vitamin D has been in the news a lot lately, and it's considered one of science's most misunderstood vitamins. However, this fact is a warning that we should be careful about our beliefs. Our current

understanding is that vitamin D is crucial and involved in various bodily systems. We are still learning about it all the time.

Vitamin D is essential for our immune system. It helps us create antibacterial proteins that fight infection and impacts our muscles, skin, cardiovascular system, kidneys, intestines, bones, blood, etc. It's also responsible for the intestinal absorption of calcium and magnesium (among others).

Above all, vitamin D plays a role in brain function, including its protection against neurodegeneration, its role in neurotransmitter synthesis, and its role in nerve growth. To understand this better, it's important to know that vitamin D is not a vitamin at all. It's actually a prohormone created when our skin is exposed to sunlight or when we consume certain foods. However, only about 10% of the vitamin D our bodies need comes from food.

This may be a big problem for most people, especially those with compromised digestion, those who consume a poor diet, and those who spend too much time indoors. It's not surprising that vitamin D sufficiency is somewhat rare for those living a modern indoor lifestyle and following the odd and ill-advised recommendations to avoid the sun. It's also dangerous, in my opinion, because experimental evidence suggests a possible strong association between vitamin D deficiency and cancer risk. On the other hand, vitamin D sufficiency has shown the ability to slow or even prevent cancer development through apoptosis and angiogenesis.

Vitamin D3 Deficiency

Are you eating enough food sources of vitamin D, such as trout, salmon, sardines, eggs, and beef liver? Are you avoiding the sun? If so, you might need more vitamin D. It's worth noting that even a slight deficiency can be problematic.

If someone is not getting enough vitamin D, they may not absorb enough magnesium or calcium. Cognitive impairments, such as mild memory loss and dementia, have been linked to lower levels of vitamin D. Many studies have found that people with depression tend to have lower levels of vitamin D. In addition, those with a deficiency of vitamin D are at an increased risk of various types of infections and autoimmune diseases, such as rheumatoid arthritis and inflammatory bowel disease. I encourage you to research the numerous other issues associated with vitamin D deficiency; the complete list is quite alarming.

If you go to your doctor with these symptoms, what advice might you receive? If your levels are tested and found to be low, you may be told to take high doses of vitamin D supplements to correct the deficiency. However, it's important to be cautious with this approach. Excessively high doses of vitamin D can lead to magnesium deficiency and unhealthy calcium displacement. This is because vitamin D requires specific cofactors to work properly.

Vitamins D and Its Cofactor

I would encourage anyone to research the different types of vitamin D. For simplicity's sake, it is generally considered that vitamin D3 is better than other forms available on the market. When people discover that they are vitamin D deficient, they often assume that increasing their vitamin D intake is

the solution. However, if their physician is not nutritionally competent, they may recommend vitamin D supplements without mentioning the necessary cofactors.

High doses of vitamin D alone can contribute to or cause hypercalcemia, as vitamin D helps move calcium into the blood for transport. Too much calcium in the blood can lead to blood vessel calcification, which is associated with conditions such as heart disease, kidney disease, and stenosis. In this case, the physician's intention was good, but the popular advice can worsen the situation.

This is where vitamin K comes in. Vitamin K regulates calcium in the body, and vitamin K2 (menaquinone) specifically tells the body where to move the calcium released by vitamin D3. Adequate levels of vitamin K2 can reduce the risk of calcification in the body. It instructs the body to release *osteocalcin*, which directs the calcium to be deposited in the bones and teeth. The supplement industry has recognized the importance of including vitamin K2 (also known as Mk7) in vitamin D3 supplements, making supplementation with D3 safer.

Vitamin K plays several other bodily roles, such as its involvement in blood clotting. There are two natural forms of vitamin K: vitamin K1 (phylloquinone) and vitamin K2 (menaquinone). There is also a synthetic form, vitamin K3 (menadione). However, it is not found in nature and is not relevant to our discussion.

Nonetheless, it is worth noting that vitamin K2 is not found in significant amounts in the diets of most Americans. This is because it is not found in many of the foods that most Americans consume to any significant degree. Therefore, to correct this issue, we must ensure that we are consuming the proper by including abundant sources in our diets or by supplements. It is worth noting that the benefits of vitamin K discussed here are more closely associated with K2, according to the literature. Here is the kicker: vitamin K2 is primarily found in animal-sourced food such as eggs, the dark meat of chicken, and fermented foods like natto.

Zinc

Zinc is an essential mineral that is crucial for maintaining optimal health. It supports many functions in the human body, including immune response, digestion, smell, taste, nerve function, metabolism, skin health, prostate health, wound healing, and DNA synthesis. Zinc is also important for brain health, as it can help protect the brain from age-related decline and improve memory and brain cell membrane neurotransmission. When we do not get enough zinc in our diet, it can lead to deficiencies and negative health consequences.

Zinc Deficiency

Zinc deficiency is relatively common, especially in older adults, vegetarians, and those with digestive issues. Aside from causing emotional instability, zinc deficiency can result in symptoms that are the opposite of the benefits of having sufficient zinc. These symptoms include a compromised immune system, more infections, reduced taste or smell, slowed or compromised wound healing, and compromised digestion. Zinc deficiency can also lead to growth retardation in children and decreased fertility in men and women. The list of issues is extensive. Research more if this topic interests you.

From a health science perspective, the problem is that 60 to 70 million people are affected by some form of digestive disease. Another problem is that even a mild zinc deficiency can be problematic. In an ideal world, a person would get plenty of zinc from their diet. However, a lack of zinc hinders digestion, affecting absorption. If not addressed correctly, this issue creates a detrimental cycle where one problem exacerbates the other.

To ensure sufficient zinc intake, it is important to include zinc-rich foods in the diet. Most nutritionally competent health professionals recommend getting nutrients from the diet as the best option. Oysters, crab, lobster, red meat, pork, and chicken are some of the best sources of natural, bioavailable zinc. However, these foods are not typically found in the diets advocated by many health professionals. There is a bit of a mismatch here.

It gets worse because many supposed "healthy" foods can rob you of potential zinc. Specifically, popular vegetarian proteins like legumes can hinder zinc absorption. That is a compound problem for plant-based eaters. When plant-based eaters consume these foods, they not only avoid good sources of zinc, but they may also hinder the absorption of any zinc they get from weaker sources such as nuts, whole grains, or supplements. It is, therefore, not surprising that people who follow a vegetarian or vegan diet are often zinc deficient.

Zinc and the Cofactor

Taking high doses of zinc over a long period of time can result in low copper levels, which can negatively impact the nervous system in various ways. To prevent this complication, it is important for zinc supplements to be combined with a copper component. This is why nutritionally competent physicians recommend this combination. However, some physicians may prescribe high doses of zinc without copper, which can be dangerous.

Symptoms of zinc or copper deficiency can include problems with the absorption of other minerals, such as calcium, magnesium, and phosphorus. When the body lacks sufficient zinc, it may not be able to properly utilize these minerals, leading to deficiencies that can seriously affect health. If you experience these symptoms, it is important to speak with your physician about the possibility of a zinc or copper deficiency rather than immediately seeking a prescription.

Of course, zinc is a vital cofactor in and of itself, and it helps in many enzymatic reactions in the body. We will discuss this shortly. However, the complexity of the interplay is real.

Sulfur

Sulfur is an essential macronutrient that plays a role in various processes in the body, including the production of strong bones, teeth, connective tissue (cartilage, ligaments, tendons), skin, hair, and nails. It is also involved in insulin processing, gene expression, gut healing and cell regeneration, DNA production and repair, digestion, antibody production, and various elements of the immune system. In addition, sulfur helps produce glutathione by enabling the body to make cysteine.

Recommendations for sulfur intake are often confusing. In the past, sulfur has been portrayed as a dangerous substance, but the truth is that most people do not get enough. One of the best sources of

bioavailable sulfur is cod and other seafood. It makes sense, as the ocean represents a significant reservoir of sulfur on the planet. Considering our close relationship with the ocean, it also makes sense that our bodies require this.

It does not have to be seafood, though. Milk and cheese, beef, organs, turkey, and eggs are also good sources. Of course, an important note might be that our bodies prefer to obtain sulfur through the consumption of *methionine* in our diet. The issue here is that methionine is not abundant in plant foods. Therefore, it is important to ensure regular consumption of the listed foods to avoid deficiencies.

It is true that other foods contain sulfur, such as legumes. However, it is important to note that legumes can also inhibit zinc absorption, which can be detrimental to overall health. It is best to consume optimal sources of sulfur that do not interfere with the absorption of other nutrients and align with our physiology. It is likely that nature would not set us up for failure, so it is important to choose sources that support overall health and well-being and align with nature's intent.

Sulfur Deficiency

Most physicians may not consider a sulfur deficiency during an evaluation because it is commonly believed that we obtain enough from our diet. However, many people just don't. Unfortunately, sulfur levels are not routinely tested, and its symptoms may be ambiguous and mistaken for other conditions. From a health science perspective, a sulfur deficiency or insufficiency is likely more prevalent than currently recognized.

Gut health issues, heart disease, neurological issues, obesity, lowered immune function, chronic fatigue, and allergies are all epidemic health problems. However, a nutritionally competent physician would consider the possibility of a sulfur deficiency or insufficiency in these cases, as these are clear warning signs that one may exist. The mass consumption of processed foods, avoidance of protein-rich foods, and adherence to popular fad diets that lack nutrients are merely warning signs. Of course, these activities can further contribute to existing sulfur deficiencies and insufficiencies.

Sulfur deficiencies are a particular concern for plant-based population groups. Sulfur production and processing require essential cofactors such as fatty acids, selenium, zinc, vitamins E, and magnesium, which are found in the various sources discussed thus far. Therefore, it is not surprising that deficiencies or insufficiencies in these nutrients may exist for many people.

Unfortunately, sulfur insufficiency is understudied. Again, many "experts" assume that people get enough from their diet. However, the evidence suggests otherwise. In fact, some experts are beginning to recognize the potential for widespread sulfur insufficiency.

Based on available studies, it is clear that those who avoid essential foods or have poor gut health may be at risk for sulfur deficiencies. That is a very large group of people. In fact, it is quite possible that even small intestine bacterial overgrowth (SIBO) may be linked to a lack of sulfur. Remember that sulfur is typically obtained through the consumption and absorption of various nonessential amino acids and essential cofactors.

Insufficient sulfur, whether from malnutrition or deprivation, can lead to inefficient detoxification, an accumulation of phenols, reduced protein synthesis, and excessive calcium buildup. However, sulfur

insufficiency also contributes to glutathione deficiency. It is cause-and-effect and can be problematic on several levels. For example, if we are sulfur insufficient, and when our glutathione stores are low, the brain is vulnerable to degenerative processes such as sleep disturbances, dementia, and Alzheimer's due to a reduction in antioxidant defenses because the body attempts to stabilize cysteine levels.

Yes, it can get complicated. However, it is important to appreciate the connections between these issues. It is also important to understand that while this topic is complex, there are some amazing and simple overlaps. A simple example of this overlap might be that part of the synthesis of sulfur occurs due to vitamin D3 status and sun exposure.

You do not have to memorize all of this to make it work for you. The solution to the complex problem of sulfur insufficiency is relatively simple. Moreover, it also reveals important insights into the larger theme of the book.

If you're fortunate enough to be diagnosed with a deficiency in sulfur and receive treatment from a nutritionally competent physician, you may be advised to *get more sun exposure, consume more seafood, and eat grass-fed beef and free-range eggs*. When considering the issues we have previously discussed, it's clear how this advice can address a range of problems. Of course, taking an occasional Epsom salt bath may also be helpful. The point is that these recommendations provide hints about nature's intention and can help you avoid potential problems in the first place. Furthermore, they should serve as a cautionary tale about trusting advice from nutritionally incompetent "experts."

Vitamin B12

Vitamin B12, also known as cobalamin, plays several essential roles in the body. Some examples include its role in methionine synthase, the development and proper functioning of the nervous system, and its role in protecting nerves. However, the importance of B12 goes even further.

B12 is crucial for overall nerve function. When we don't have enough B12, our nerves become brittle and more prone to damage. This can have serious consequences. We could examine numerous examples here, but an example from personal experience seems prudent.

Years ago, I was dealing with some intense intestinal issues due to antibiotic use. My B12 levels dropped as a result. My central vision began to decline, and I was forced to wear glasses. This decline was likely due to damage to my optic nerve that resulted from my B12 deficiency. However, restoring my levels of B12 reversed much of the damage and restored most of that lost vision. I no longer wear glasses.

It took a lot of research to find the solution to that problem. However, we should be mindful of how we conduct research because not all articles on the internet provide a complete or accurate understanding of a topic. Many articles about B12 may only mention that it plays a role in *proper cell division, cell metabolism, and DNA production*. While these points are true, they do not fully capture the scope or importance of B12. In order to provide a more comprehensive understanding, here is some additional information about this important vitamin.

It's likely that most people already recognize the importance of having healthy red blood cells (erythrocytes) for overall health. In high school biology, we learned that red blood cells play a vital role

in transporting oxygen to cells. But what is not often discussed is that B12 is necessary for red blood cells to function correctly, and it is also responsible for proper red blood cell formation.

B12 also plays a significant role in brain function. It is important to understand that oxygen levels directly affect our ability to think clearly, and oxygen is essential for brain growth and healing. When the brain doesn't get enough oxygen, brain cells can die. Red blood cells, which are formed with the help of B12, transport oxygen to the brain. It's also worth noting that the brain uses almost three times as much oxygen as our muscles.

Of course, oxygen levels directly affect the function of the heart and lungs. When we consider the role of oxygen in overall energy supply, immune response, and cell repair, it becomes clear how important B12 is for maintaining good health. Inadequate B12 intake can lead to issues regarding red blood cells, which can, in turn, hinder our overall health.

B12 can also play a role in weight loss and weight gain. When there is less oxygen in the body, it can lead to weight gain. On the other hand, having more oxygen can help with weight loss. This is because burning fat, which is stored energy, requires a lot of oxygen. Oxygen helps the body produce adenosine triphosphate (ATP) through aerobic respiration, using fat reserves as a source of energy. Even just doing breathing exercises for a few minutes a day can help activate fat-burning processes due to the increase in oxygen circulation. However, this process relies on healthy red blood cells, which require adequate B12.

B12 can also help prevent stroke and heart disease. These conditions are often linked to elevated levels of homocysteine in the body. B12 plays a role in breaking down homocysteine, which is important because high levels of homocysteine are also associated with dementia and poor cardiovascular health.

These are just a few examples of the many roles that B12 plays in the body. In reality, there is much more to learn about B12, and it could be the subject of an entire book. Nonetheless, the examples provided here should clarify that getting enough B12 is essential for good health. However, there are two requirements for obtaining B12 naturally: the colon must be healthy, and we must consume the right foods.

Vitamin B12 is produced exclusively by microorganisms in the gut using materials from the foods we eat. In other words, to obtain natural B12, we must consume certain foods and have a healthy gut. Of course, if we eat the right foods, we are more likely to have a healthy gut. This relationship is why antibiotic use, as mentioned earlier, can be a problem when it comes to obtaining sufficient B12.

Nonetheless, if your microbiome is functioning correctly and your intestines are healthy, you can obtain B12 by consuming certain foods. The theme continues. The best foods for B12 creation include clams, beef, eggs, milk, yogurt, fatty fish, and organ meats. On the other hand, avoiding these foods may lead to B12 deficiency or insufficiency. While it is possible to obtain lab-produced forms of B12, it is likely that nature intended for us to get B12 from natural sources.

Nonetheless, assuming your microbiome is functioning correctly and that your intestines are healthy, we need to know that only certain foods provide us with the B12 we need. The theme continues. The best foods for B12 creation include clams, beef, eggs, milk, yogurt, fatty fish, and organ meats. Conversely, avoiding such foods can result in B12 insufficiency or deficiency. Yes, lab-created forms of

vitamin B12 exist, but one can assume that nature did not intend lab-produced B12 to be our primary source.

The "debate" surrounding B12 often lands on deficiency specifically. Indeed, deficiency can be an issue. However, the necessary contrast to consider is sufficiency. I say this because we can get by with minimal B12 but thrive with abundance. However, therein lies the problem and our next clue.

Vitamin B12 Deficiency

It is important to emphasize that the most common cause of B12 deficiency is a poor diet. A plant-based diet, such as veganism, can often result in B12 deficiency because it lacks animal protein sources. This underscores the importance of obtaining B12 from natural sources

From a health science perspective, there are two aspects to consider when it comes to B12: dietary intake and absorption. It's important to consume the right foods to get enough B12, but if our ability to absorb it is impaired, we may still experience deficiency. Maintaining a healthy gut is essential for proper B12 absorption. To do this, we must consume the things that support gut health. Unfortunately, many people do not prioritize this.

At least twenty million Americans suffer from chronic digestive diseases. However, the truth is that many gut-related issues go undiagnosed because many people learn to deal with them. Nonetheless, the statistics we do have paint a pretty nasty picture. Just remember that most of our health and immunity resides in our gut.

The statistics are alarming: approximately 25 percent of all surgical operations are related to digestive diseases. Moreover, digestive disorders also account for most hospitalizations in the United States. A couple of examples might be that colorectal cancer is the second leading cause of cancer deaths, and digestive disorders are the most common causes of disability in the workforce. The list goes on and on.

The point is that this nation has an intestinal problem. If we have an intestinal problem, we also have digestive and absorption problems. If we have digestive and absorption problems, we likely have an immune system and overall health problems. However, this all merely points to a diet problem.

Many gastrointestinal symptoms are actually caused by B12 deficiency, which is a well-documented but often overlooked issue. Despite this, people continue to avoid consuming the necessary foods and suffer from symptoms of B12 deficiency such as vision problems, tongue inflammation, tingling and numbness, pernicious anemia, chest pain, fatigue, tinnitus, dizziness, heart palpitations, confusion, pale skin, digestive issues like constipation or diarrhea, depression, memory loss, nervous system dysfunction, and behavioral changes. In severe cases, B12 deficiency can also cause delirium, acute psychotic states, and temporary schizophrenia. It is important to address B12 deficiency to avoid these serious health issues.

The solution to B12 deficiency is simple, yet many people continue to suffer from it. A study from Wayne State University School of Medicine found that "*a B12 vitamin deficiency as a cause of cognitive issues is more common than we think, especially among the elderly who live alone and don't eat properly*" (Hanna et al., 2009). The key point to focus on here is the importance of eating a proper diet. In fact, eating the right foods is essential for correcting a B12 deficiency or absorption problem.

It's worth reminding ourselves that B12 can only be obtained naturally through the digestion of animal products in the intestine.

There is good news for those who are dealing with digestive issues or B12 deficiency. Many gastrointestinal symptoms can be resolved or managed through the creation of B12 sufficiency. This is also true for complex conditions such as autoimmune atrophic gastritis, as a B12-rich diet can prevent further complications. However, diet alone may not be sufficient if the deficiency is severe. In such cases, B12 injections or supplements may be necessary, but it is always best to work with a nutritionally-competent physician.

It is important to note that mild B12 deficiency may go unrecognized, and consumers and physicians should be aware that a highly processed or plant-based diet is a warning sign. This is especially true if the person is experiencing any of the symptoms previously mentioned. If the individual is already experiencing other related symptoms, it is critical to consider the potential for B12 deficiency.

Iodine

We need to discuss halogens for a moment. There are six halogens: fluorine, chlorine, bromine, iodine, astatine, and tennessine. Tennessine is an artificially created halogen that is not found in nature, so we don't need to worry about it. Astatine is also not a concern for most people as it is a radioactive halogen that is mainly used in research and certain medical treatments, such as cancer. However, it is important to be familiar with fluorine, chlorine, bromine, and iodine.

Fluorine (fluoride) is often classified as a neurotoxin (Grandjean, 2019). Chlorine and its byproducts can cause cancer (Morris et al., 1992). Bromine disrupts thyroid function, cognitive function, endocrine function, etc. (Brownstein, 2012). And finally, there is iodine, which is essential for a healthy life.

Halogens can compete with each other, including iodine. If there is an excess of one halogen, it can displace the weaker group. It's important to be aware of the sources of harmful halogens in your environment, such as plastics, pesticides, baked goods, soft drinks, medications, fire retardants, swimming pool treatments, tap water, and certain types of toothpaste. These can all affect our iodine levels, meaning that our iodine status is continually being challenged.

If there were ever a single nutrient that demonstrated nature's intent, it would have to be iodine. Iodine is a vital nutrient that plays a role in almost every function in the human body. It is essential for good health, no matter how we look at it.

Iodine plays a role in many bodily functions, including reproductive health, immune function, thyroid and hormone production, metabolism regulation, and protein and enzyme activity. Without enough iodine, the body will not function properly. Unfortunately, many people do not get enough iodine.

Some of the most significant benefits of sufficient iodine intake include its ability to reduce damage caused by free radicals in various organs, its anti-inflammatory properties, and its ability to improve immune function. Arguably most important, iodine has a significant impact on cognitive function. A deficiency of iodine impairs cognitive function, while sufficient intake can improve it. Some research even suggests that iodine can improve perceptual reasoning in younger individuals (Gordon et al.,

2009). This may be due to iodine's ability to decalcify the pineal and pituitary glands. There are many other benefits of iodine as well, but you probably get the point.

The theme continues because the best sources of iodine are animal protein foods like cod, tuna, shrimp, beef liver, dairy, eggs, and to some extent, chicken. Of course, the amount of iodine obtained from land animals depends on the iodine content of the soil in which they were raised. This is worth mentioning as it can affect the iodine content of these foods.

The best plant sources of iodine are sea vegetables such as kelp, nori, kombu, and wakame, but these are not typically staples in most people's diets. Of course, our ancestors likely would not have had access to these foods anyway, as they are usually found underwater. Similarly, our ancestors likely would not recognize them as food while swimming in the ocean anyway. Therefore, these underwater choices may not be for us.

Unfortunately, many people do not know what their primary source of iodine is, and some believe it is table salt. However, it's important to note that iodine is not naturally found in table salt. It is usually added by manufacturers. Regardless, this poses a particular problem for those who avoid iodine-rich foods and table salt. Where is the iodine coming from?

Iodine Deficiency

Iodine deficiency is likely a much bigger problem than currently appreciated, especially given the depletion of soil and the popularity of fad diets that can lead to deficiency. Moreover, looking at the multiple symptoms associated with iodine deficiency, it is easy to see that a more significant problem might exist. The various symptoms associated with iodine deficiency, such as dry skin, weight gain, fatigue, and constipation, have all been linked to iodine deficiency on some level.

Iodine deficiency can lead to more than just minor inconveniences. It can cause significant problems cascading into other issues, even affecting future generations. Here are a few examples to illustrate the point.

Iodine deficiency is the most common cause of mental impairment worldwide. Pregnant mothers who are deficient in iodine may have children with severe mental impairment. Many studies have linked iodine deficiency to cognitive decline, and it has also been linked to autism. Although it may not be the sole cause of these issues, iodine deficiency is still a significant factor. In addition, a deficiency can increase the risk of calcification in the pineal and pituitary glands due to halogen exposure.

Another example might be the issues associated with the thyroid. Thyroid-related problems are on the rise, and many doctors are unaware of the true nature of the condition, as demonstrated by the alarming rate of misdiagnosis and the lack of curative advice. Millions of Americans have some form of thyroid disease. However, considering the number of people who confuse a thyroid issue with something else, as well as the rate of misdiagnosis, we can assume that number to be significantly higher.

The first place we should be looking is diet and behavior. Leaky gut, chronic inflammation, chronic stress, and poor eating habits have all been identified as contributing factors to thyroid-related disease. The theme seems to continue with the numerous conditions we face. I will address all of these shortly, but for this portion, we need to understand that without enough iodine, the thyroid does not work

correctly. Deficiency often leads to an under-active or overactive thyroid gland. As we will soon see, the previously discussed factors merely set the stage.

People who are at risk for iodine deficiency include those who do not use iodized salt, pregnant women, vegetarians, and vegans. A category often ignored is those who consume carbonated beverages containing brominated vegetable oil. Remember that bromine blocks thyroid function.

A proper diet can fix or improve the problem. However, certain foods will not help the cause, and the theme continues. For example, broccoli, kale, Swiss chard, and Brussels sprouts (among others) contain goitrogens (goy-tra-gens), which inhibit iodine uptake by the thyroid and contribute to deficiency. For clarity, if the thyroid is robbed of iodine, it becomes compromised. As a result, it will grow more cells to make up for the inadequate hormone production, which results in goiter, which leads to iodine deficiency. The point is these foods present a particular problem for those who consume them in their misguided attempt to be healthy.

Take a moment to really consider that point. The ironic thing is that "experts" will suggest that these vegetables are "healthy in moderation," that cooking them can reduce their goitrogenic effects (and vitamin content), and that goitrogens are only a concern for people with an iodine deficiency or compromised thyroid function. However, it seems to me that if consuming these foods contributes to deficiency and thyroid dysfunction, and such foods are only a problem for those with deficiency and thyroid dysfunction, then perhaps we might want to avoid them altogether. What is nature telling us?

Now we have come full circle because the preceding is a significant problem for those subscribing to a diet rich in such foods and that avoids salt, fish, and animal products. Compound this with the fact that our environment is filled with harmful halogens that compete with the limited amount of iodine that most people consume. It's not surprising that people become sick under these circumstances.

The Almighty Mineral - Magnesium (Mg)

Magnesium is our powerhouse. Magnesium is involved in a wide range of processes in the body, including the functioning of the brain, heart, and blood. It is also necessary to activate over 600 enzymatic reactions in the body. Some of the benefits of magnesium include supporting healthy blood pressure levels, maintaining normal muscle and nerve function, and supporting a healthy immune system. It is also important for bone health and the synthesis of DNA and RNA. However, this is just a small selection of the many roles that magnesium plays in the body.

What I find particularly interesting about the study of magnesium is that the literature often views magnesium as a cofactor. Meaning that it acts as a "helper molecule" in the various biochemical reactions within the body. I am not disputing that because it acts as a helper in multiple situations, including converting food into energy, forming proteins, repairing DNA, and regulating neurotransmission. However, many of the other nutrients discussed would not work without magnesium. That is why, much like zinc, I view magnesium as an essential mineral with cofactor abilities.

The importance of magnesium cannot be overstated. For example, while iodine is essential, we must know that the thyroid cannot function properly without magnesium. Of course, magnesium cannot do

its thing without some parathyroid hormone, but that is a different discussion. Regardless, even our mood can hinge on our magnesium status. The same can be said for blood sugar, pancreas, gut bacteria, etc. However, one of the things I love most about magnesium is its anti-inflammatory effects, which help to keep the body in a state of balance and wellness.

Magnesium is essential for brain health and can help improve cognition and repair cognitive impairment. However, it is important to ensure that vitamin D levels are sufficient for magnesium to be effective in these situations. It is also effective at preventing certain types of migraines.

Magnesium can also help prevent or treat arterial stiffness and calcification. Studies have shown that there is a direct correlation between low magnesium levels and these conditions. In fact, research has found that increasing magnesium intake helps chip away at the tiny pieces of calcium clinging onto arterial walls and that even small daily doses of magnesium are enough to cut calcification by up to 25 percent (Hruby et al., 2013). Improved magnesium status is crucial for maintaining healthy arteries and preventing cardiovascular diseases.

It is currently thought that higher magnesium intake is associated with a lower risk of type 2 diabetes, a lower risk of cardiovascular disease, and a significantly lower risk of ischemic heart disease. The list goes on. However, you will likely note in your research that any benefits are associated with a relatively high intake. The catch (and hint) is that we always need a lot of it.

Unfortunately, the sad truth is that most are not getting enough. Most Americans do not even consume the minimum Recommended Dietary Intake (RDA) for magnesium. Oddly enough, and regardless of the symptoms they experience, only a tiny minority of people ever get their levels tested.

Mg Deficiency

There are numerous reasons why people may not be getting enough magnesium. One reason is that the soil in which our food is grown is often depleted of nutrients, including magnesium. This means that the foods we eat may not contain as much magnesium as they would have in the past. Another reason is that people may not be consuming enough of the foods that are rich in magnesium. Additionally, certain medications, such as proton pump inhibitors, can interfere with the absorption of magnesium in the body.

From everything I have examined, magnesium deficiency is a huge problem. This problem is especially true when considering other factors contributing to that deficiency. For example, chronic stress, a diet rich in refined carbohydrates, high sugar intake, excess body fat, diuretic use, excessive menstruation, consumption of alcohol, abuse of laxatives, certain medications and antibiotics, digestive and gastrointestinal disorders, endocrine disorders, processed foods, soda, and calcium supplementation (these are just to name a few). These can all contribute to a rather dramatic magnesium deficiency. In fact, in some experimental studies, even a high dietary fiber intake has been found to decrease magnesium utilization as well. Match the preceding with the fact that most people do not consume enough magnesium in the first place, and we have a significant issue on our hands.

Magnesium deficiency is often associated with a variety of diseases. For example, magnesium levels largely determine whether our immune system can address infectious pathogens or cancer cells. That is

because our T-cells require an abundance of magnesium to operate efficiently. If our bioavailable magnesium intake is chronically low, we are inviting illness into our life.

Of course, when you think about things like hypertension, migraines, multiple sclerosis, glaucoma, Alzheimer's disease, prostate issues, recurrent bacterial infection, fungal infections, osteoporosis, impotence, fibromas, type 2 diabetes, low gastric acid, and so on, one must assume that a low magnesium level could be involved. Furthermore, to be clear, the entire list is considerably longer. I am just trying to make the point that we are looking at some rather scary outcomes between our lifestyles, behaviors, and consumption choices.

We may be consuming a little magnesium through our diet or supplementation. However, we must remember that we are in a battle to retain what little we get. It can be difficult to maintain adequate levels due to factors such as bioavailability. Of course, going overboard on supplementation is not the answer either. Ingesting too much can lead to magnesium toxicity, resulting in low blood pressure. This complexity is why a daily diet rich in magnesium is so essential. However, this is where misconceptions regarding diet can become so dangerous.

There is a myth that magnesium is only found in vegetables, specifically dark leafy greens. However, this is not true. In fact, there are many non-vegetable sources of magnesium. The theme continues with things like dark chocolate, mackerel, okra, tuna, prunes, dates, shrimp, mussels, coconuts, raisins, passion fruit, salmon, avocado, chicken, bananas, tilapia, turkey, raspberries, haddock, papaya, and blackberries. These are all terrific sources of magnesium. In fact, if your diet were comprised of nothing other than what was listed here, you would likely be fine regarding your magnesium status and many of the other vital nutrients we have discussed thus far.

Unfortunately, the fix for magnesium deficiency is challenging. It is not as easy as taking a few pills. Many pieces have to be in place for someone to absorb the magnesium they might get from food or supplements, and this correction process can take months.

Yes. We need to consume more bioavailable magnesium. However, we must also eliminate or reduce the various things hindering absorption or pulling magnesium from the body to gain the upper hand. Unfortunately, when we examine the diet contributing to magnesium deficiency, we see dietary staples such as refined carbohydrates, sugars, and high levels of fiber that increase our need for magnesium. Ideally, we would eliminate or drastically reduce the consumption of such foods. I will talk more about food shortly, but something else to keep in mind is that just because we consume something does not mean we will absorb it. For example, magnesium absorption requires much more than just having some in our diet. Absorption requires vitamin D, vitamin B6, selenium, and some parathyroid hormone to make the magic happen. Again, think of some of our best sources for these cofactors.

Indeed, this can get complicated. However, I believe that it is important to appreciate that nutrition and the human body are complex and not fully understood by taking a single class, reading a few memes or articles, or watching a short video. It's important to resist the temptation to think that we have a complete understanding of these topics with limited information, as this can lead to the Dunning-Kruger effect. Instead, we should approach these topics with humility and recognize that our bodies are complex and require certain nutrients in specific ways.

What follows is just one example of many regarding such complexities. However, don't be discouraged. Think of this demonstration as a foundational clue that will help us find a straightforward solution. After this brief demonstration of complexity, I will show you that we can make the topic much easier to understand and utilize.

A Brief Demonstration of Complexity

Regarding nutrients and various body processes, one often connects with the other, which in turn connects with the first. It can get complicated, which is ironic because this topic is often underappreciated. We will continue with the example of magnesium, using it as our baseline for continuity.

Glutathione and magnesium are directly linked. Glutathione enhances intracellular magnesium levels, but our magnesium levels must be sufficient for glutathione to function properly. Glutathione requires magnesium for its synthesis, but high levels of magnesium can lead to the depletion of glutathione. At the same time, the more glutathione and magnesium we have, the more our bodies will use. Similarly, a deficiency in one of these nutrients often leads to a deficiency in the other.

Magnesium and sulfur are also directly linked. Magnesium and sulfur are essential for proteins and work together to strengthen cells and bones. Additionally, sulfur helps mobilize vitamin D, which is also connected to magnesium. Magnesium activates vitamin D, which in turn helps strengthen the immune system.

In a complex interaction, sulfur is needed for glutathione synthesis, but glutathione synthesis requires magnesium and cysteine, and cysteine requires sulfur. Sulfur in the body is found primarily in cysteine and methionine. While the body can produce its own sulfur if it gets enough amino acids, magnesium, selenium, zinc, vitamin E, and vitamin C, it is important to ensure sufficient levels of glutamate, glycine, and cysteine if you want glutathione to reach cells.

Magnesium and vitamin D are closely connected as well. A deficiency in magnesium can affect vitamin D and calcium homeostasis. Sufficient magnesium is necessary for the absorption, transportation, and metabolism of vitamin D. However, large doses of vitamin D can lead to severe depletion of magnesium and copper stores, and a vitamin D deficiency can sometimes cause a deficiency in magnesium.

Magnesium and zinc have a direct link as well. Magnesium is essential for the metabolism of zinc and helps regulate zinc levels in the body. These two nutrients also work together to create other necessary substances. For instance, the prostate gland contains high concentrations of both zinc and magnesium, and a reduction in either can lead to disorders. However, getting too much zinc can impede magnesium absorption, as zinc and magnesium compete for the same receptors. It is, therefore, advisable not to supplement with both simultaneously.

Magnesium and iodine are also linked, though their full relationship is not well studied. However, there are some examples of how they work together. Magnesium is necessary for iodine utilization by the thyroid, and physical or psychological stress can deplete magnesium, hindering iodine utilization and

impacting the thyroid. Iodine and magnesium also work together to produce large amounts of adenosine triphosphate (ATP), which carries energy within cells but requires sufficient vitamin B12.

It is important to stress that when we find a deficiency in either magnesium, vitamin B12, or vitamin D, we often see a deficiency in one of the others. Individually or holistically, these deficiencies can negatively impact overall immune or bodily function and cause unusual symptoms that may be misdiagnosed. For example, heart arrhythmia is often associated with a deficiency in magnesium or iodine. However, such nutrient deficiencies may not be immediately suspected when faced with the symptoms of various imbalances.

The complexities continue, but it is unnecessary to understand all the details of the complexities. Instead, we need to appreciate that such complexities exist. Moreover, we must understand the common theme.

When we aim towards sufficiency, things improve. For example, studies are starting to find that supplementing vitamins D and B12, along with magnesium, can profoundly affect immune enhancement. In fact, this combination is now being considered for the treatment of various illnesses, including COVID (Tan et al., 2020). Of course, that makes sense when you think about what I have provided thus far. However, my advice, especially if you get a recommendation to take supplements from a physician, is always to remember the essential cofactors.

It is important to choose supplements that are well absorbed by the body. For example, zinc oxide does not absorb as well as zinc picolinate, which does not absorb as well as zinc amino acid chelates. It is important to consider the absorption rates of different supplements, as there is little benefit to taking supplements that are not well absorbed by the body.

There is, however, one more thing to think about, and this point will be vital for our understanding of the coming points. If our digestive system is wrecked, our ability to absorb any nutrient from food or supplement may be hindered. This hindrance is especially true if our diet or supplements do not include the essential cofactors. If cofactors are not considered, we could be setting ourselves up for a problem. An example might be consuming zinc supplements without the necessary copper, which I discussed previously. Consuming D3 without K2 is another.

Indeed. Sometimes it is necessary to supplement the diet if it lacks certain nutrients. However, it is important to address any underlying issues with the diet that contributed to the deficiency in the first place. Doing so will help heal the gut and provide a better opportunity for supplements to be effective. In other words, if you do not change your behaviors regarding your diet, the food or supplementation you take in will likely not be as impactful as it otherwise could be. Moreover, excessive supplementation of certain nutrients can also be risky, as more does not always mean better. It is important to be cautious when taking supplements and to follow recommended dosage guidelines.

Diet – The Foundational Clues

Diet plays a crucial role in our overall health, providing the nutrients our bodies need to heal and stay healthy. However, it's not just about having a healthy diet; we also need healthy intestines to absorb

those nutrients. If our intestines are not functioning properly, we won't be able to absorb the nutrients we need, leading to illness.

Most people who care about their health understand the importance of a proper diet. The debate tends to revolve around what exactly constitutes a proper diet. However, I believe that our understanding of nutrition has been distorted on purpose. The good news is that once we gain a clearer understanding and make the necessary changes to our diets, the benefits can be almost immediate.

Unfortunately, research has shown that diets today are not much healthier than they were 30 years ago (Miller et al., 2022). During this time, we have also seen a significant increase in diet-related diseases such as obesity and chronic conditions like cardiovascular disease, type 2 diabetes, and non-alcoholic fatty liver disease. These issues continue to worsen despite the various diet trends, physician recommendations, and drugs that claim to address them. It's clear that we are doing something wrong.

So far, we have looked at various nutrients and diets. It's possible you've noticed that some things don't quite add up when contrasting the information most have been conditioned to believe. Diets lacking in essential nutrients are being heavily promoted. It's important to note that these vital nutrients can be found in abundance in certain sources. However, consuming these sources is now discouraged and even sometimes viewed as *self-destructive behavior*. Clearly, something is amiss.

There is a way of eating that has been linked to weight loss, improved brain function, enhanced immunity, gut healing, and better nutrient absorption. It's not a miracle; it's just nature at work. Once you see this for what it is, you may agree that we have been conditioned to view certain diets through a distorted lens, and you may never look at food the same way again.

The Nature Connection

We do not give enough credit to nature. We have to remember that our bodies evolved over many millions of years. Our bodies have evolved over millions of years to adapt to the environment of our ancestors, and this history should be considered in any analysis. I am reluctant to believe that nature is wrong and that we can improve our outcomes by better understanding it.

The foods we consume have a significant impact on our health. If we choose the right foods, we can achieve better results. On the other hand, if we make poor food choices, the results will be negative. It is crucial to understand which foods are best for us and make conscious decisions accordingly.

Our next clue comes in the idea that our physiology suggests that we are meant to be hunter-gatherers, not hunter-gatherer-*planters*. We should use our physiology as a guide and recognize that no animals with similar anatomy and physiology consume grain or other processed foods that are common in modern society. This should be the starting point for our dietary choices.

Our ancestors on the hunt did not cultivate crops for food or rely on fast food or vending machines. Instead, they ate what they recognized as food along their journey and the animals they hunted. This raises the question of what they would have considered food on their journey.

The most likely answer is that they would have eaten animals and readily available fruit, including fruits that are sometimes mistaken for vegetables. However, it is worth noting that many vegetables might not have been considered food if encountered in the wild. However, therein lies another clue.

As demonstrated, animal products provide essential nutrients not found in other foods. Fruits are also a great source of nutrition. However, from a logical, scientific, and results perspective, certain vegetables are probably not our best choice. *Dead foods* of any kind are not in our best interests either. Instead, we need live and recognizable foods. However, what does that really mean? Or, perhaps the question we need to ask is, what exactly is “food?”

What is “Food?”

First, we need to understand what food truly is. *Food* can be defined as *material having essential body nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals, that an organism ingests and assimilates to produce energy, stimulate growth, and maintain life*. When we give this any thought, the concept of purpose begins to shift, and a philosophical approach to diet begins to emerge.

We need to consume food to survive. However, we can also think of it as *inputs* versus *outputs*. Better inputs give us a better chance for better outputs, while poor inputs lead to poorer outputs.

There are three primary options for food and five essential nutrients that we need from that food. These options are plants, animals, or a combination of both. The essential nutrients are fats, carbs, protein, vitamins, and minerals. Water is the sixth essential nutrient, but that is a separate topic. If we do not get the nutrients we need, we will eventually die. However, humans can thrive by consuming the right foods and avoiding the wrong ones.

Unfortunately, there is much debate over what constitutes *proper food*, and people often have strong emotional attachments to their dietary beliefs. However, not everyone takes into account the bigger picture, such as physiology, in these debates. In addition to what we have already discussed, there are other factors to consider when examining our food options. Let's take a closer look at these options.

Plants

Plants are often defined as *living things that grow on the earth, in water, or on other plants, and usually have a stem, leaves, roots, and flowers and produce seeds*. It's important to remember that plants are living things. In many ways, they are similar to humans and animals in that they need essential nutrients to survive. Plants also eat, move, reproduce, experience illness, communicate, and more. Some scientists even suggest that plants can feel pain.

For example, a team of scientists from Tel Aviv University found that plants will emit ultrasonic distress sounds when they are cut or deprived of water (Lanese, 2019). In addition to crying out for help, they also produce chemical defenses when they are injured, as demonstrated by the smell of freshly cut grass, which is actually a chemical communication of distress. Researchers have also discovered that plants respond with their defense mechanisms when they hear caterpillars eating them (Veits et al., 2018). The ability of plants to have defense mechanisms is more important than many people realize, and we will discuss this further shortly.

In general, plants thrive with plenty of sunlight, clean water, and clean soil. When a plant does not receive enough nutrients or water, it becomes sick and may die, just like humans and animals. The point is that plants are alive and can be killed.

Animals

An *animal* is usually defined as *any living organism characterized by voluntary movement, possessing cells with non-cellulose cell walls and specialized sense organs enabling rapid response to stimuli and ingesting complex organic substances such as plants and other animals*. Clearly, animals are different from plants. However, there are some interesting similarities as well.

Like plants, animals eat, move, reproduce, experience illness, communicate, and more. They also experience pain and can suffer. If an animal does not receive enough nutrients or water, it will die, just like humans and plants. Similarly, animals thrive in natural outdoor environments, where they eat what nature intended them to eat and avoid environments that promote disease.

It is also worth noting that the same is true for humans since we are animals as well. If we want to thrive, we should avoid things that make us sick. This might seem obvious, but if it were, rates of chronic disease would not be rising, and people would generally make healthier dietary choices. So, what are we missing?

Live Food vs. Dead Food

When we (without emotion) consider vegetables, genetically modified organisms (GMOs), fortified foods, preserved foods that can last for years, and heavily processed and prepared foods that are lacking in essential nutrients, our instincts tell us that these "dead" or "zombie" foods are not good for us. Our bodies instinctively know what is right, but we are often swayed by fad diets, marketing, conditioning, and ignorance to make unhealthy choices. We have been conditioned to ignore our instincts or trust in those who claim that nutrient-poor, processed "food-like" products are as good as the nutrient-dense, living foods that our bodies crave.

The various diseases linked to the consumption of dead, refined, and processed foods, such as obesity, type 2 diabetes, cardiovascular disease, liver and kidney disease, certain types of cancer, and Alzheimer's disease, make it clear that these foods should be avoided. It is logical to conclude that our bodies would not react this way if we were following nature's intended course.

Life is defined as *the property or quality that distinguishes living organisms from dead organisms and inanimate matter, manifested in functions such as metabolism, growth, reproduction, and response to stimuli or adaptation to the environment originating from within the organism*. When it comes to food, we have two choices, live or dead. *Dead foods* are unnatural products or truly deceased foods, such as "zombie" foods that do not decay over time. *Live foods* are as natural and alive as possible and are not heavily processed or preserved in packaging or delivery.

Life is a complex and wonderful thing, encompassing humans, animals, plants, and microorganisms like fungi and bacteria. However, there is a darker aspect to life that we often don't consider. To maintain life, we must often rely on the sacrifice of other living organisms. In a way, it feels like we

need to consume the "life force" of these organisms to stay healthy. This may be a strange concept, but it's important to understand. It doesn't matter whether you follow a plant-based, carnivorous, or mixed diet - we all rely on consuming parts of other living organisms to sustain our own lives. At the same time, we must recognize that consuming dead or spoiled materials will not provide our bodies with the nutrients they need to thrive.

There is a vital clue for us hidden within these ideas. The clue is that to live our best lives, we must follow what nature is telling us and our food to do. Just as consuming dead foods, staying indoors, or living in an unhealthy environment is harmful to our food, the same is true for us. We need to be active, spend time outdoors, consume high-quality food, and drink plenty of fresh water. But nature is likely telling us even more than that.

You Are What You Eat

Live food or dead food? One of these is clearly linked to negative health outcomes, and it's not difficult to guess which one. It's clear that nature has a plan, but what is it?

We instinctively avoid eating something that is already dead because we know it could make us sick. It's as if nature is saying, *"If you want to eat dead foods, you'll probably end up like them. Live foods equal life. Fresh is best."* This is true regardless of the types of foods we're consuming.

However, while this may seem logical, it doesn't fully explain which types of foods we should consume. It's worth noting that there is disagreement among experts about what constitutes "healthy" food. However, nature doesn't seem to care about these experts, their recommendations, or their misconceptions.

We're ready to challenge some paradigms with all of this in mind. Be prepared. For many, this will fly in the face of everything we have been sold.

The Dangers of Some Vegetables

Due to conditioning, most have probably never stopped to consider that many of the vegetables we consume might have some dangerous side effects. However, there are numerous hints that suggest certain vegetables may be harmful to our health. For instance, during a gastrointestinal flare-up such as Crohn's disease, it is often advised to avoid foods that may be harsh on the intestinal tract to allow it to heal. This may include reducing the intake of certain fruits and eliminating all vegetables and whole grains.

After gastrointestinal surgery, it is common for patients to be advised to avoid vegetables for a period of two to six weeks to allow the intestines time to heal. Similarly, when individuals are experiencing bloating, cramps, diarrhea, and stomach aches due to Irritable Bowel Syndrome, a healthcare professional with expertise in nutrition may recommend avoiding high-fiber foods, including vegetables and grains, to help alleviate symptoms and support digestive healing. There are many other examples of situations in which avoiding certain vegetables may be advisable.

So, ask yourself the following questions. If we are supposed to avoid vegetables and grains to allow our gut to heal during times of distress, what message should we take away from that? Conversely, what are the foods that encourage or support healing?

Upon further consideration and comparison, it seems clear that vegetables and grains may hinder the healing process of the intestines. That presents a particular problem if the majority of health resides in our gut. Of course, eliminating vegetables would leave us with only animal products and fruits as options. This may seem strange, but there is more to consider.

The biggest clues come from the damage caused. I will reiterate the examination of raw cruciferous vegetables. Often pushed as "healthy," the truth is that they are packed with goitrogens. As previously mentioned, many do not realize that goitrogens suppress thyroid function by blocking iodine uptake, a vital nutrient for the brain, fertility, growth, etc. We could also discuss the defense mechanism called *lectin* in various plant foods. Lectins are harmful to our intestinal lining and interfere with cellular metabolism. In fact, the list of "*anti-nutrients*" related to vegetables and grains is alarming.

Then there are the toxins. The truth is that the list of vegetable toxins is also rather extensive. Corn, potatoes, sprouts, celery, beans, etc., all have elevated adverse health risks. These risks range from oxalate and aflatoxin issues to solanum tuberosum poisoning. Just look at alfalfa sprouts, for example. These contain canavanine that can aggravate or even cause autoimmune issues. Nevertheless, everything mentioned is touted as "healthy."

This list is extensive. Spinach is another great example. Several warnings suggest that nature did not intend for us to eat it. The salicylate content is a big clue, but the interference of mineral absorption should also be high on the list. In fact, typical side effects of eating spinach are excess gas, cramps, and an excessively long time to digest what little we can. Furthermore, the biggest clue might be that our bodies cannot metabolize all of it at once, so eating too much of it often leads to diarrhea.

Again, nature is likely trying to tell us something. However, "experts," tell us that cooking or steaming can reduce some of the effects, but this often destroys the integrity of why we consume them. We are told that the health impact of some of these toxins is not fully understood, and more research is needed. Indeed, but then why consume something we do not fully understand and something that demonstrates clear natural warnings?

In all fairness, we are often told that levels of these toxins are generally low and the risks associated with consuming them are minimal in most cases. Perhaps, but I would argue that a little bit of poison is still poison, especially if we are told to make them staples in our diet. Sometimes we are told that, despite the risks, they are a good source of certain vitamins, so one should consume in moderation or cook them to mitigate the risks. Again, cooking them destroys the purpose of consumption, and why bother when better non-damaging sources exist? Coming full circle, we are told to avoid them for gastrointestinal healing and that our health resides in our gut, but somehow, the people saying such things have not put the two ideas together to see the bigger picture.

Our Instincts are Strong

Let us start this exercise by examining our birth. At birth, we do not need to be told about the nutritional benefits of breast milk. Moreover, we do not set ourselves to pasture to chew on weeds like grass-eating animals. Similarly, we do not need to be taught to put our mouths on everything to help our immune system adapt to our environment. These behaviors are instinctual.

Imagine yourself 20,000 years ago, hungry and searching for food. You come across an apple tree, but the effort required to climb it far exceeds the ease of simply picking up an apple that has fallen. However, all the apples on the ground are brown, bruised, and being eaten by various insects. What do you do?

Imagine yourself 20,000 years ago, hungry and searching for food. You come across a clearing where you see a rotting corpse of a bull on one side and a live, healthy bull on the other side. While the dead bull would be easy to access, you do not know how long it has been there or why it died, and various insects have already started feeding on it. What do you do?

If you are being honest with yourself, your instincts are likely telling you that the risks of consuming rotten or dead foods outweigh the dangers of climbing a tree or hunting a live animal. Eating old rotten foods may be easy, but it also comes with various risks that our instincts warn us about. Similarly, this insight should also tell us everything we need to know about processed or "dead" foods. Furthermore, note that your first, second, or third response was not to plant something and wait months to harvest it. This suggests that our instincts are trying to tell us something about the types of foods that are most beneficial for us.

This is where it gets interesting. One food group that many children tend to reject is vegetables. It is possible that their instincts are warning them away from foods that are not well-suited for them. Consider the idea that children do not have a lifetime of conditioning influencing their preferences, so it is possible that they are responding more directly to their instincts. This theory cannot be proven, but it is consistent with the idea that our instincts are trying to guide us toward the foods that are most beneficial for us. I cannot help but appeal to Occam's Razor.

Nature's Little Massive Hints

Nature provides many hints about the types of foods that are most beneficial for us. Animal products, such as meat, dairy, and eggs, provide nutrients that are not found in plants, while fruits are generally higher in calories, soluble fiber, and absorbable vitamins, minerals, and antioxidants than most vegetables. The nutrients that we need and the best sources of those nutrients demonstrate a very specific truth.

Some nutritionists and dieticians may argue that vegetables, particularly cruciferous vegetables, are uniquely abundant in the sulfur-containing phytochemical called glucosinolates, which have antioxidant, anti-inflammatory, and anti-cancer activity. However, while it is true that cruciferous vegetables are a good source of glucosinolates, it is important to recognize that vegetables are not the only source of these compounds. Moreover, that fact does not somehow negate the plant's negative

anti-nutrient nature. Again, we must be mindful of any compounds that may negatively affect our health.

As previously stated, cruciferous vegetables have a lot of goitrogens that suppress thyroid function by blocking iodine uptake. Clearly, that is not a good thing! I believe that we should see this as a clue that perhaps nature has other options in mind. This is also true if you are consuming glucosinolates for their anti-cancer activity.

Allow me to define this clearly. Iodine is essential for a healthy immune system because it helps the body identify and eliminate rogue and pre-cancer cells. However, vegetables containing goitrogens can interfere with the body's ability to absorb iodine. This can create a mismatch between the supposed benefits of these vegetables and their potential negative effects on thyroid health. The mismatch is only highlighted when you consider that thyroid carcinomas are one of the most common endocrine malignancies. What can we glean from that?

To clarify, iodine deficiency has been linked to an increased risk of cancer development and progression. This suggests that it is important to ensure adequate intake of iodine to reduce the risk of cancer. Consuming foods that are high in goitrogens, such as some cruciferous vegetables, may interfere with the body's ability to absorb iodine and could potentially increase the risk of cancer. Altogether, cruciferous vegetables just seem like a bad idea to me. After all, what are the potential benefits really worth when compared to the net loss of vital nutrients or organ damage that results from its consumption?

Still, glucosinolates are important for cancer prevention. However, there are over 30 different types of glucosinolates. Most are actually chain-elongated compounds derived from the essential amino acid methionine. Methionine can be found in foods such as eggs, fish, and some meats. Methionine plays a significant role in the production of cysteine and glutathione, which are important for maintaining good health. Glutathione helps the body prevent cancer by promoting apoptosis (the death of cancer cells).

Methionine also has a number of other health benefits, including nourishing hair and nails, protecting cells from toxins, detoxifying the body, slowing aging, helping the body absorb nutrients, removing heavy metals, preventing fat buildup in the liver, lowering cholesterol, potentially reducing the risk of colorectal cancer, reducing tremors associated with Parkinson's disease, building bone strength, aiding in weight loss, and treating drug withdrawal. A lack of methionine in our diet, along with excessive inflammation (caused by specific "healthy" foods), can lead to a reduction in glucosinolates. Not only will this likely cause weight issues, but it also hinders the body's ability to function optimally.

It is important to consider that this is just one example among many. For instance, certain plant-based foods like beans, nuts, whole grain bread and cereals, bran, seeds, and potatoes all contain high levels of phytates. Phytates are another anti-nutrient that inhibits zinc absorption. On the other hand, animal proteins can improve zinc absorption. The point is that if we seek optimal absorption of nutrients such as iodine, calcium, iron, magnesium, phosphorus, and zinc, we probably need to rethink what we consider a *healthy diet*.

The Grain and Sugar Clue

There is an ongoing debate about the differences between whole and refined grains. It is important to note that the main difference between the two is that the bran and germ are removed in the refining process. Regardless of whether we are discussing phytic acid, lectins, saponins, or gluten, it is clear that grains contain various pro-inflammatory and anti-nutrient compounds that may not be intended for human consumption. For example, the phytic acid and saponins in whole grains interfere with and decrease the absorption of essential nutrients, and this has been well-documented.

The inflammatory response is particularly alarming. Of course, the pro-inflammatory mechanisms of refined grains are well known. Specifically, refined grains create an inflammatory response in the body—constant consumption results in chronic, low-grade inflammation. Chronic, low-grade inflammation is a well-known factor in chronic diseases, such as type 2 diabetes, heart disease, cancer, obesity, insulin resistance, increased gut permeability, and much worse.

Refined grains, also known as refined carbohydrates, are forms of sugars and starches. In terms of the body's metabolism, there is no difference between refined grains and sugar. Both are considered inflammatory foods that can cause chronic low-grade inflammation, which the body perceives as a threat.

So here is my argument. Nature is trying to tell us to avoid such things, as evidenced by the response to consuming such things. Clearly, we are seeing a pattern of destruction with refined carbohydrates and sugar. Unfortunately, that is about as far as most will look into it. Frankly, I think most are missing the forest for the trees. Understanding the outcomes of refinement merely provides us hints about the low-grade inflammation that seemingly eludes those trying to find its cause.

We can simplify this. When we remove the bran from the whole grain, what is left is known to cause inflammation. Question: Is it safe to say that the inflammatory component left behind from the refinement process was a part of the original whole grain before it was processed? Of course. Therefore, it is logical to conclude that the pro-inflammatory components of grains are equally harmful whether they are in their refined or unrefined state. Thankfully, I am not the only one that sees this.

Dr. Mark Hyman, the author of *The Blood Sugar Solution*, said, “*This new modern wheat may look like wheat, but it is different in three important ways that all drive obesity, diabetes, heart disease, cancer, dementia, and more. It contains a super starch, amylopectin A, that is super fattening, a form of super gluten that is super inflammatory, and acts like a super drug that is super addictive and makes you crave and eat more.*” Super inflammatory is correct. However, it is interesting that he draws attention to modern wheat.

Of course, he is not the only one. Dr. William Davis, the author of *Wheat Belly*, is quoted as saying, “*This thing being sold to us called wheat is this starchy little high-yield plant, a distant relative of the wheat our mothers used to bake muffins, biochemically light-years removed from the wheat of just 40 years ago.*” Neurologist Dr. David Permuter, the author of *Grain Brain*, said, “*The problem with gluten is far more serious than anyone ever imagined. Modern...structurally modified, hybridized grains contain gluten that’s less tolerable than the gluten that was found in grains cultivated just a few decades ago*”.

Of course, when you look into this debate, you will find that it centers around the fiber's ability to mediate inflammation and to what level any inflammation might occur. Indeed, a moderate intake of fiber can have anti-inflammatory effects due to the various substances released by our microflora when we feed them. However, I contend that if we avoided the inflammatory food designed for other animals in the first place, we would not have to worry about how it was prepared, nor would we have to deal with any level of inflammation that comes with it. Modern or not, I do not believe we are supposed to be consuming it, and I am not the only one. Dr. Loren Cordain, a professor at Colorado State University and an expert on Paleolithic lifestyles, says that humans are NOT designed to eat grains, and doing so may damage our gut (Cordain, 2011).

Dr. Cordain says that *“There’s no human requirement for grains. That’s the problem with the USDA recommendations. They think we’re hardwired as a species to eat grains. You can get by just fine and meet every single nutrient requirement that humans have without eating grains. And grains are absolutely poor sources of vitamins and minerals compared to fruits and vegetables and meat and fish.”* Think about that for a moment. Cordain goes on to say that, *“Grains are the seeds of a plant. They’re its reproductive material, and plants don’t make their reproductive material to give away for free to other animals. If they did, they’d become extinct, and so the evolutionary strategy that many plants, particularly cereal grains, have taken to prevent predation is to evolve toxic compounds so that the predator of the seeds can’t eat them so that they can put their seeds in the soil where they’re meant to be to grow a new plant and not in the gut of an animal to feed it.”*

These examples go on. Whether the problem resides in a new type of grain or because it opposes our physiological design, the evidence seems to suggest that we should reconsider its consumption. Of course, since we are discussing inflammation, we can gain insight by examining supplements that help fight inflammation.

Professionals often tout two supplements as effective nutraceuticals in the fight against inflammation: fish oil and lipoic acid. The theme presents itself again because fatty fish provide fish oil, and arguably the best source of lipoic acid is beef liver. Plus, with these options, we get the added B12 benefit. Of course, plenty of other foods with anti-inflammatory effects fit nicely into the diet we were designed to consume. Berries, grapes, and cherries would be great examples of this.

All of the signs seem to point us in a particular direction. Still, it is important to carefully consider all the available information before deciding. While I have likely provided a compelling case thus far, we should refrain from jumping to conclusions. We still need to examine *nature’s trickery* before we can make a sound decision.

In Defense of Life

Nature can be tricky or hard to figure out sometimes, but there is a reason for it. Most of the time, our bodies attempt to save us and preserve life, but sometimes this effort can come at a cost. Autoimmune issues, for example, occur when the body tries to protect itself from a perceived or actual threat.

Similarly, the body's natural response to hypothermia is to constrict blood vessels in the extremities to preserve heat in the core, a process known as *vasoconstriction*. While this helps to protect the body, it

can also result in damage to the affected extremities. Unfortunately, fingers, hands, the nose, legs, etc., can die as a result.

Nature can be tricky sometimes, but there is a reason for it. Most of the time, our bodies attempt to save us and preserve life. Unfortunately, the body sometimes hurts itself to try and protect itself. For example, autoimmune issues result from our bodies trying to deal with a perceived or actual threat. Another excellent example of this might be when the body experiences hypothermia. The body will automatically defend itself by sacrificing specific systems. Through a process known as *vasoconstriction*, the body contracts blood vessels in the extremities to keep heat in the core. Unfortunately, fingers, hands, the nose, legs, etc., can die as a result.

These are just a couple of examples out of many. The body has many mechanisms to protect itself when it perceives a threat. It is possible that similar systems may exist in relation to the body's response to certain foods. I believe this is the case, and I can provide some supporting evidence to support this theory. However, I must get technical for just a moment to do so.

I cannot cover every potential example or angle here (although there are many). However, some compelling evidence of the body's potential response to certain foods may be found by examining intestinal tertiary lymphoid organs (TLOs). TLOs typically form in response to injury, autoimmune conditions, infection, or cancer (Hiraoka et al., 2016). The formation of TLOs in the intestines may indicate that the body perceives the intestines as being under attack.

There is a strong link between the formation of intestinal TLOs, inflammation, and stress, which have been shown to exacerbate the symptoms of intestinal diseases such as inflammatory bowel disease (Buettner & Lochner, 2016; Gomez-Nguyen et al., 2022). Researchers have also discovered that stress can directly increase TLO formation as a way for the body to survive in a perceived hostile environment. It is important to note that TLOs typically form in response to an environmental trigger. This insight provides a clue because it is only when the offending trigger cannot be removed and when the inflammation is chronic that the intestinal TLOs will form.

If the foods you regularly consume are inflammatory, the body never truly removes the offending agent, leading to chronic inflammation and stress in the intestines. If your intestines are chronically inflamed and stressed, intestinal TLOs begin to form. While it is difficult to determine the exact number of people with intestinal TLOs, considering the high number of people experiencing gastrointestinal issues and undiagnosed chronic gastrointestinal problems, we can probably assume this number to be relatively high. Regardless, this is a rather significant clue.

Granted, part of this process remains a mystery. However, we do know that such lymphoid cells are known to be involved in the progression of numerous types of metabolic diseases and can act as promoters of obesity and metabolic imbalance. What I find particularly interesting is that you will likely find a metabolically challenged host where you find a chronically inflamed intestine. I do not believe this to be a coincidence. Even if it is, it seems wise to err on the side of caution.

Let us revisit lectin as an example of why this is important. Lectin can disrupt the breakdown and absorption of nutrients, disrupt the growth and action of our intestinal microbiome, and cause autoimmune and inflammatory issues. Imagine you are the body and constantly presented with this

inflammatory toxin. If the body is continually exposed, it is likely to feel under attack and would attempt to defend itself. This is a natural response to protect the body from harm.

In addition to inflammatory toxins, our Standard American Diet is often filled with other substances that may not be well-tolerated by the body. This includes some so-called "health foods." Of course, when most think of the Standard American Diet, they think of fat, not inflammation or toxins. However, these are likely linked. Given the widespread nature of this issue, it may be helpful to consider the body's response and how it may impact health.

Our bodies are fat-storing machines. However, we must understand that fat is little more than stored energy. The question is why we store fat in the first place. As you may already know, our bodies evolved to include the capacity to store energy to survive periods of famine. *Famine* is a *severe food shortage that often results in starvation*. However, another way to define starvation might be *severe hunger*. These are stressful and dangerous occurrences. So what if we looked at fat and weight gain as nothing more than a defense mechanism? I believe that I can make this case.

Chronic stress can cause an increase in ghrelin levels. If you recall, ghrelin is a hormone that signals your brain to feel hungry. When you are hungry, you will likely intake food. This may be true even when you are not truly hungry and only stressed. This can lead to overeating, increasing the risk of weight gain, especially if you eat the wrong things. Again, remember that your body is hard-wired to react to stress, but these responses are meant to protect you even though they can hurt you in the long run. In this instance, your body feels the need to store energy and sends you the signals to do so.

Cortisol is another hormone that is released in response to stress. Its release can also alter immune system responses. Chronic cortisol activation can have significant negative effects on the body and mind. One of the major effects of cortisol is increased hunger and weight gain. Chronic stress can also cause the immune system to behave erratically as the body tries to cope with the stress. To simplify, when the body experiences stress, it releases cortisol. Your immune system then begins to behave erratically because the body is trying to figure out what is happening and why it is experiencing the trauma.

I could go on, but clearly, there is a relationship between stress and fat accumulation. Chronic stress can lead to weight gain, negatively affecting the body. However, I am suggesting that weight gain may be a key indicator of stress and cause and a result of stress. Or, more specifically, it could be a defense mechanism in and of itself.

Let me set up the point by examining a common mistake that many people make. Restricting calories and constantly monitoring food intake can increase perceived stress. Chronic stress can lead to a range of negative consequences, including weight gain rather than weight loss, as the body's stress response may lead to an increase in cortisol and ghrelin levels, which can contribute to increased hunger and weight gain.

Our bodies can tell whether the foods we eat are nutrient-dense or not. If the body perceives that it is going hungry, this increases stress. The body will then attempt to protect itself against famine by storing energy (fat), which can lead to weight gain. However, this response can also weaken the immune system and increases the risk of disease. This generally requires a stronger pull of various

nutrients, nutrients that are likely missing if nutrient-dense foods are not consumed. It becomes another vicious cycle because it results in more hunger hormones and more eating. Similarly, consuming foods that the body is not adapted to eat or not easily digested might be recognized as a warning sign that something is wrong, leading to more stress and negative consequences such as weight gain, reduced immunity, and increased disease.

Now, imagine that we compound the problem. Imagine that you are hungry (stressed) and consume foods that further stress the body, such as anti-nutrient, pro-inflammatory, or intestinal-irritating foods. Now imagine that you have done that your entire life. That is a lot of stress and inflammation over a long period of time, which we might also call *chronic stress and inflammation*.

Many people may not be aware that they are dealing with chronic stress, but it is important to recognize its impact on the body. Chronic inflammation can damage healthy cells and DNA, increasing the risk of developing diseases such as cancer, heart disease, type 2 diabetes, and obesity. Look around! It is an epidemic on all fronts. Meanwhile, the popular fad diets recommend avoiding the foods that are critical for the correction. Methionine would likely help tremendously here but will be absent if you are avoiding the foods that carry it in abundance. The complication continues.

It is important to understand that the foods we eat can influence gene expression. The extent to which this occurs may vary, but it is known that genes do not typically turn on or off randomly. There is usually an environmental factor, *such as diet*, that triggers gene expression. We are still learning about the complex relationship between nutrition and genetics, but it is clear that the foods we consume can impact gene expression and, ultimately, our health.

With the preceding in mind, I will reiterate a couple of questions. Does it make sense that the body might perceive a problem when we consume foods that are a problem for our body? Could our body recognize this behavior as a potential threat? If so, it seems we have a strong candidate for that environmental trigger.

Granted, sometimes the physical response is not immediate. It is important to note that the effects of diet on the body may take years to surface. However, this does not mean that negative consequences are not occurring and potentially worsening over time, even if the body can compensate for the damage in the short term. It is important to consider the long-term impact of diet on overall health and well-being and to make choices that support long-term health.

We must stop and reverse the damage if we want to avoid the logical outcome. In other words, to prevent negative consequences and achieve our desired health outcomes, it is necessary to address the root cause of the issue. This may require changing our diet and aligning it with nature's intent. However, that requires clearly defining what that intent is.

The Omnivore Clues

Arguably one of the most significant clues regarding nature's intent is the unique characteristics of the human digestive system. Humans do not have the same type of complex, multi-chambered digestive system as plant-eating animals (herbivores). Moreover, the other aspects of the human digestive system, such as stomach capacity, colon, saliva composition, and liver function, also differ from those

of herbivores. Furthermore, humans lack the short intestine of the carnivore. This suggests that it may not be appropriate for humans to try to mimic the diet of either herbivores or carnivores. Instead, it may be more beneficial to consider the specific needs and characteristics of the human body when choosing a diet.

Humans have a hybrid digestive system primed to eat *certain* plants and animals. For clarity, humans are something called *omnivores*. Omnivores are animals that feed on both meat and plants.

A novel idea emerges. What if omnivores did something crazy and fed like true omnivores instead of posing as herbivores and carnivores? Would that not provide us with better outcomes? While likely a disagreeable thought for those who have aligned their identity to an alternative diet, the logical thing would be for omnivores to appeal to their design.

Now, it is true that omnivores eat some plants. However, it must be stressed that omnivores do not eat *all* plants. The question then becomes, what kind of plants should omnivores consume?

We could revisit the grain discussion for a moment to further this point. It is worth noting that whole grains come from grasses cultivated for their seeds. However, as omnivores, not only are humans not adapted to consuming grass, which is primarily consumed by herbivores, no animals with anatomy and physiology similar to humans consume grains as a significant part of their diet. While some might argue that some grains may be less harmful than others, it seems that "less harmful" is still harmful. Therefore, it may be advisable to limit or avoid grains altogether to support optimal health and well-being.

The list of inflammatory foods is extensive. However, for the sake of time, let us examine the short list of well-known inflammatory foods to express this point. Sugar, vegetable oil, refined carbohydrates, grain-based alcohol, and processed meats. This short list basically says vegetables, grass seed, and dead food, which are all known to cause various chronic diseases in humans (and other animals). These are pretty big clues. Whether we ignore these hints or not is irrelevant because the result will continue to be the result if nothing changes.

Remember that we should consume things our distant ancestors would recognize as food on the trail. However, this idea is very much in line with the diet of other omnivores. In fact, when we look at omnivores that are at least somewhat comparable to humans, we see some interesting commonalities with what I have suggested thus far. Many omnivores, including bears, have a diet that consists of a variety of natural and unprocessed foods such as large game, fish, berries, eggs, fruits, honey, and tree gum (sap/sapwood).

Perhaps we should examine what our distant cousins like to eat. Chimpanzees are not vegetarians or frugivores (mainly fruit), as many believe. A chimpanzee's diet consists of what many might suspect, like fruit, nuts, and termites. However, it also consists of a variety of meats. In fact, research has demonstrated that animal products are an essential part of their diet and that they will cooperatively hunt roughly 45 different animals, including other primates.

However, it is not just the chimps. It is known that over 89 species of primates eat meat. The animal products they consume include birds, eggs, reptiles, amphibians, mammals, and fish. Of the primates that do not eat meat, we still find ourselves stepping away from vegetables because the food choices

that many of these primates focus on are fruits, nuts, insects, and flowers. Sure, we could split hairs and find various exceptions to this, especially in emergencies. However, the focus and primary food source seem rather obvious. Of course, even when food is scarce, the theme continues because omnivores will begin to look for "emergency foods" such as seeds, flowers, insects, leaf buds, etc.

When we look at our tribal counterparts, we notice that they follow a very similar diet. We could look at the standard Aboriginal diet as an example. It consists of meat that includes anything from fish to wallabies, dingoes, possums, emus, anteaters, frogs, lizards, snakes, crocodiles, and wild turkeys. Various pickable fruits follow this up. When things get tight, they go after insects and seeds. Occasionally, they will make something called "*Damper*." This primitive "bread" is made from water and ground seeds they usually eat in its whole form. Other tribes around the world follow a similar diet and stick to meat, fruit, insects, and honey.

The good news for us is that our primary food sources are not entirely scarce, so we can afford to focus on our preferred diet of animal products and fruits and avoid the foods that fall into the "*when times are tough*" category. I say this for a couple of reasons. While it is true that many foods can provide some sustenance, it is important to recognize the difference between "edible" and "food." Edible means that *something is safe to eat*, while food is *something that nourishes and sustains us*. Just because we can eat something does not necessarily mean that it is the best choice for our overall health and well-being. Similar to the reality forced upon Uruguayan Flight 571, just because eating seat cushions worked for a few days does not mean that seat cushions should become a primary staple in our diet.

A New Theory and Approach

There is still much that we do not know about the human genome, including the function of approximately 20 percent of our genes and the role of thousands of proteins. In recent years, the field of epigenetics has emerged as a way to study how our behaviors and environment can influence the expression of our genes. While much progress has been made in this field, there is still much to learn and new theories to explore. However, epigeneticists seek to understand what turns genes on or off and have found that various environmental factors, including diet, can impact gene expression.

If the relationship between diet and gene expression is true, then it is important to consider the impact that specific foods may have on the body. I theorize that consuming "emergency" or non-optimal foods may trigger a stress response in the body, signaling that the primary food supply is running low. In turn, the body responds with storage features. While this theory may seem unlikely, there is evidence to suggest that it may have some basis in reality.

As mentioned earlier, these types of stress can increase levels of hormones such as ghrelin and cortisol and can also have negative effects on gene expression. We now know that environmental factors, including diet, can contribute to stress levels and the way that our genes respond. Therefore, it must be possible that certain foods that create stress in the body could also be contributing to the issues being discussed. At the very least, it is worth considering that such stress may trigger the body's storage and defense mechanisms. After all, plenty of evidence suggests that visceral obesity is nothing short of a physiological adaptation to stress. Rhetorical to make the point, but it all adds up.

As a result, and just as the body will do in other instances, these defense mechanisms slow down or even sacrifice normal functions and processes that would otherwise keep us healthy. It does this by altering various aspects of our immune function. This response might help to explain why those with a poor diet are both heavier and prone to sickness. If that seems far-fetched, then consider the known association between diet, visceral fat, and chronic disease.

Fad diets lacking essential nutrients can make it more difficult for the body to function properly and manage various issues that may arise. This may be due to deficiencies in certain nutrients, and the body's attempts to compensate for these deficiencies may lead to additional problems. The result is a vicious cycle that can only be broken by eliminating nutritionally inadequate foods and replacing them with nourishing options more suitable for human consumption.

I probably need to clarify that. We have a relatively strong understanding of the inflammatory part of this equation. We know that chronic low-grade inflammation is terrible for our bodies, and we are well aware of some of those results. However, I theorize that our bodies see foods outside our primary omnivore diet as emergencies or problematic foods. I am suggesting that the possibility must exist that emergency foods trigger something in our genetics to activate the storage and defense mechanism and slow down immune function in an effort to ensure preservation. When this occurs, our primary defenses are hindered, we gain weight, and we get sick.

It is possible that our bodies are genetically programmed to perceive certain foods as a warning that our primary source of nutrition is scarce and that we are in trouble. Granted, the totality of this theory is largely observational, anecdotal, and likely nearly impossible to prove due to the complexities of the lifestyle and diet interplay. However, the clues are there, and the conclusion is logically based on what we know. The predictable negative outcomes of consuming nutritionally inadequate foods are likely nature's red flag indicating that these foods are not suitable for consistent human consumption.

Regardless, it is clear that making changes to our diet can have a positive impact on our health. However, most people have been eating wrong for a very long time. Hence, there is likely much damage to be resolved. Resolution can be had, but it is important to recognize that improving our health and addressing chronic conditions may require a long-term commitment to the necessary change. Simply stated, I believe we must adopt an omnivore or "Tribal" diet to see our best results, and this is regardless of whether we are trying to prevent disease, treat disease, lose weight, or optimize overall performance.

Necessary Context for this “New” Approach

The truth is that we would not be missing much (or anything) by eliminating vegetables and grains. There are 13 essential vitamins our body needs to be healthy. These are vitamins A, C, D, E, K and the B vitamins: thiamine (B1), riboflavin (B2), niacin (B3), pantothenic acid (B5), pyroxidine (B6), biotin (B7), folate (B9) and cobalamin (B12). Additionally, there are 21 essential minerals broken down into five major and 16 trace. I challenge you to test my theory by picking a vitamin or mineral and seeing if it cannot be found in either an animal product or fruit.

I absolutely believe that a plant-based diet can be problematic, and there is clearly a lot of evidence that supports this opinion. Of course, when faced with criticism regarding the supposed dangers of an omnivore diet (which is weird considering that we are, in fact, omnivores), there is usually a focus on seven essential nutrients that many believe are only addressed with vegetables. I want to address these directly.

- **Vitamin C** – found in abundance in kiwifruit, citrus fruits, and various berries.
- **Flavonoids** – found in virtually all plant foods, including fruits.
- **Quercetin** – found in cranberries and apples.
- **Catechins** – found in abundance in apricots, apples, pears, grapes, and peaches.
- **Hesperidin** – found almost exclusively in citrus fruits, especially oranges.
- **Cyanidin** – found in dark-colored berries such as blackberries, black currants, and black raspberries.

Again, not a single vegetable is needed. Of course, there is an argument regarding the various types of dietary fiber. However, some of the best sources of beneficial dietary fiber are found in great supply in various fruits. These fibers are, Beta-glucan (apples, strawberries, and prunes), Pectin (oranges, apples, plums, guavas, bananas, and various berries), Inulin (bananas), and Lignans (apricots and strawberries). It seems that no matter how we cut it, pickable fruits are a wise choice because of what they do and do not include.

As nature would have it, many essential nutrients, including Vitamin D3, Vitamin B12, Vitamin K2, Vitamin A (Retinol), Creatine, Carnitine, Carnosine, Heme Iron, Docosahexaenoic acid (DHA), Eicosapentaenoic Acid (EPA), and Taurine, are found almost exclusively in animal products. If we are not consuming animal products, we will not receive these vital (essential) brain and body-nourishing nutrients unless we supplement them. This fact is why vegans and vegetarians are so often deficient. Specifically, plant-based diets are notorious for various nutrient deficiencies, including calcium, vitamin D, vitamin A, vitamin K2, Omega-3 Fatty Acids, iron, iodine, zinc, vitamin B6, vitamin B12, and magnesium. This paragraph alone should provide an abundance of clarity.

Some might argue that eating meat is unhealthy. That is true if we are talking about processed meats. However, that is true for all processed foods. Studies have repeatedly demonstrated that eating many ultra-processed foods is linked to cognitive decline and adverse health outcomes.

Unprocessed meats are fine, though, and objective science supports this idea. For example, a recent *Burden of Proof* study from the University of Washington's Institute for Health Metrics and Evaluation (IHME) declared, "*We found weak evidence of association between unprocessed red meat consumption and colorectal cancer, breast cancer, type 2 diabetes, and ischemic heart disease. Moreover, we found no evidence of an association between unprocessed red meat and ischemic stroke or hemorrhagic stroke (Lescinsky et al., 2022).*" The researchers went on to say that "*While there is some evidence that eating unprocessed red meat is associated with increased risk of disease incidence and mortality, it is weak and insufficient to make stronger or more conclusive recommendations.*" There are many others to support this conclusion.

Weight Loss and Microbiome

Sometimes there are concerns raised about the inclusion of animal products in the diet. Particularly, these concerns are regarding weight management and the microflora of the gut. I want to discuss these for a moment, just so there are no misunderstandings.

The Microbiome Question

Indeed. Our microbiome changes when we switch from the Standard American Diet to a vegetarian diet. Yes. Our microbiome changes when we switch from either of those diets to an omnivore diet. This change begins in about two days (David et al., 2013). The question is not whether it will but whether such alterations are good or bad.

Anything we consume will ultimately impact our microbiome to some degree. For example, even drinking an 8oz glass of tap water, which contains chemicals designed to kill bacteria, can affect the microbiome. Unfortunately, this impact is often touted as the reason to avoid this eating pattern. However, this perspective is highly misguided, and the concern is unwarranted. Instead, this impact is precisely why we should adhere to this eating pattern.

It is important to recognize that the health of our gut is closely tied to our overall health and well-being. Factors such as the composition of our microbiome, physical activity, stress levels, and diet all play a role in shaping the health of our gut. We must nourish and protect our microbiome as though our quality of life depends on it – because it does. Understanding what helps and hinders the health of our gut is crucial, as imbalances in the microbiome can affect other aspects of our health, such as stress levels and physical activity.

Fruits are a rich source of fiber that can have several beneficial effects on the body. These fibers, also known as *prebiotics*, nourish the beneficial bacteria in the gut, leading to a range of positive outcomes. Studies have shown that consuming fruits can improve cognitive function, motor control, reduce inflammation, enhance vascular function, and aid digestion. Just remember that fresh is best.

The part often missed in this debate is the difference between insoluble and soluble fiber. I have written about this before, so I will not rehash that discussion other than to say fruits and vegetables tend to have both types of fiber, but usually in different amounts. Insoluble fibers tend to be *pushers*, and soluble fibers are great *feeders*.

While insoluble fibers are great, I would argue that we need soluble fiber the most. Studies have repeatedly demonstrated (and I am simplifying this) that the soluble fiber that reaches our colon is fermented by the gut microflora more efficiently and ultimately contributes to an ideal environment for our bacterial community. On the other hand, insoluble fiber merely bulks and pushes waste out while contributing to intestinal irritation. As mentioned, fruits have both soluble and insoluble fiber. However, the obvious presents itself when we compare an apple or banana to a celery stick.

Soluble fiber has many health benefits. For example, it can help manage weight by making you feel full without adding calories to your diet. Soluble fiber also helps to lower cholesterol levels and regulate blood sugar levels, making it beneficial for heart health and diabetes management.

Moreover, certain types of soluble fiber are also excellent medicines. One type of soluble fiber that is particularly useful is *Larch Arabinogalactan*, which comes from the sap of the larch tree. This fiber has been shown to stimulate the immune system, increase levels of beneficial bacteria in the intestine, and influence various immune proteins. It has been used to treat various conditions such as the common cold, flu, ear infections, AIDS, and even some types of cancer and liver disease.

On a side note, I am not a fan of *refined* plant-based fibers and would like to warn you about them. *Highly refined* (manufactured) plant-based fibers may be dangerous for certain individuals in certain situations. Studies have found that these fibers can potentially cause immunosuppression and increase the risk of cancer in individuals with silent immune system defects and vascular deformities (San Yeoh et al., 2022; Singh et al., 2018). For clarity, *highly refined* fibers are often found in processed and bakery foods that tout weight or diabetes control. A great example of this might be *refined inulin*.

In its natural state, *inulin* is just fine. However, *refined inulin* is another story. Often touted as a beneficial substance, refined inulin is made from wheat, barley, and vegetables like chicory root, Jerusalem artichoke, garlic, asparagus, etc. However, this type of inulin is also called *fructan*. Perhaps that is another clue. Common symptoms of fructan intolerance, which are oftentimes confused with gluten intolerances, include bloating, diarrhea, intestinal pain, and constipation.

I see that as a warning. Research does as well. In fact, a 2018 study showed that fructan caused worse symptoms in people with IBS, not gluten (Skodje et al., 2018). A worsening of intestinal distress and cancer risk due to a fiber made from wheat and vegetables? That is probably not our best decision.

Regarding the microbiome conversation, fruits win out over vegetables in a landslide. Fruits are generally more effective at promoting a healthy microbiome than vegetables. Many fruits, such as blueberries, can help diversify the gut community and destroy harmful bacteria. The increased bacterial diversity resulting from fruit consumption can also improve the absorption of vitamins and minerals. In addition, consuming fruit can help heal the intestinal lining, boost the immune system, aid in the digestion of other foods, regulate hormones, and increase the production of vitamins (such as B12).

So, what about animal products? Admittedly, proper studies on this topic are limited. Moreover, the study of the microbiome is still in its early stages. Hence, we must examine the clues and use some intuition to find our greater truth.

Some studies discuss the impact of various foods on the gut's bacterial composition. Several discuss the potential adverse effects of consuming meat and dairy. I do not want to call them out, but I will say that the context has been skewed on several levels.

For one, many studies assume that vegetables and grains are either preferred or "normal." However, these studies do not consider the potentially harmful interactions between plants, grains, beef, fat, dairy, and sugar. Moreover, such studies have yet to examine the omission of vegetable and grain eaters specifically.

The dairy situation is complex, and studies rarely discuss the nuances necessary to fully understand it. I will talk about this more in-depth shortly but understand that raw cheese has often been shown to support and improve gut health. Fermented dairy products, such as yogurt and kefir, are a good source of lactic acid bacteria and can provide health benefits as long as the individual is not allergic to dairy.

Despite this, some people continue to advise avoiding dairy products. Why? I believe this results from contortions in understanding (misconceptions) and certain issues related to various studies, as I discussed early on.

Again, anything we eat will impact the microflora. Of course, altering our diet will alter the composition of the microbes living in the gut. However, the studies that consider more of the necessary details, such as cooking methods, sugar, absorption, etc., are not only limited (and seemingly buried) but the ones that exist often find that meat is not a problem and might actually be exceptionally advantageous. To better understand this, we must examine a few things.

Remember, the average American consumes between 150 to 170 pounds of refined sugars in one year and untold amounts of refined carbohydrates. These can negatively affect the microbiome, promote the growth of candida, and contribute to weight gain, insulin resistance, and glucose intolerance. These issues can lead to inflammation and chronic disease. Yet, these are considered "normal" despite the obvious issues. This also means that any examination of a particular food group might be confused if these certain offenders are not deliberately omitted.

When studying the impact of a certain food group, such as meat or fruits, it is crucial to have a control group that does not consume vegetables, sugar, and cereal grains to ensure that the results are not biased or misleading. However, if someone views these foods as "normal" or acceptable, they may not think to exclude them from the study. Moreover, participants would have had to adhere to such lifestyles for a considerable amount of time for any result to be deemed reliable.

When it comes to our intestinal microbiome, it is actually quite simple. We already know that a decrease in gut microbial diversity is associated with increased inflammation. This inflammation is increased with vegetables and grains. Conversely, we know that animal proteins contribute to microflora stabilization, and studies have already suggested that when someone begins to *replace* carbohydrates with lean red meat, they see a **reduction** in overall inflammation (Hodgson et al., 2007). Moreover, we know that protein consumption positively correlates with improved overall microbial diversity, and we know that consuming things like whey protein **increases** beneficial Bifidobacterium and Lactobacillus bacteria.

Based on everything that I have provided thus far, I come to the following conclusion. Animal products reduce inflammation and nourish and heal the intestine. At the very least, this creates the necessary foundation for microbial diversity. Fruits, as already stated, contribute significantly to that necessary diversification. On the other hand, vegetables and grains throw a wrench into the equation. The odd part is that we have known these things for quite some time. However, from what I can tell, this is the first time anyone has put all of this together.

Now, imagine what else we might find if researchers would consider the previous truths and examine higher intakes of animal products and fruit, along with the omission of refined sugars, vegetables, and grains. Thankfully, we do not have to wait. The clues are already there. Unfortunately, the news and research we often see narrows in a specific element that often highlights a potential negative and then blows it out of proportion.

It can be difficult to make informed decisions when we do not fully understand all of the variables at play. To illustrate this point, consider the common belief that hamburgers are an inflammatory food that should be avoided. But what is the source of the inflammation? Is it the refined carbohydrate bun, the sugary condiments, or the cheese and meat, which may have microbially beneficial and anti-inflammatory properties? Understanding the specific factors that contribute to inflammation can help us make more informed choices about what we eat.

Yes! That question was formulated for dramatic effect. The seemingly obvious answer would be the bun and the condiments. Yet, somehow animal products get the blame despite the seemingly obvious. However, this should also be a solid demonstration of how impactful inflammatory foods truly are. Clearly, the inflammatory components have a greater overall impact than the beneficial ones. Once again, I see this as a fantastic warning.

Logic dictates that consuming more meat can be beneficial if it is accompanied by a reduction in the intake of unhealthy foods and an increase in the consumption of fresh fruits. Some research suggests that red meat may be less inflammatory, or not inflammatory at all, compared to carbohydrates. However, there is a lack of literature and bias in the current research on the relationship between meat, the microbiota, and various dietary compounds. To truly understand the impact of meat on the body, more objective research is needed. In the meantime, it may be helpful to use logic and intuition to make informed decisions.

Aside from the reduction in inflammation, microbiome diversity has been linked with improved mental health, reduction in obesity, improved digestion, and improved immunity. An omnivorous diet that includes both animal products and fruit may be particularly effective at promoting healthy gut flora. This is because such a diet can increase the levels of lactic acid bacteria, which can reduce the antigen load, increase the production of antimicrobial chemicals that target harmful bacteria, decrease inflammation, improve digestion, and improve mental health, weight loss, and immunity. The arrows that I see all point directly to animal products and fruit.

Of course, weight management deserves specific attention, so I will discuss that next. In fact, it might provide our biggest clues regarding long-term and overall health. However, before discussing this topic, I want to mention that in some cases, professional intervention and treatment may be necessary to restore gut health. In these situations, I would recommend caution when it comes to using drugs and would instead suggest exploring alternative options such as *fecal microbiota transplant* (FMT). There is a growing body of research demonstrating the effectiveness of FMTs in treating a range of conditions, including IBS, IBD, and *C. difficile*-associated disease. There is also an ongoing exploration of the use of FMTs in the treatment of conditions such as fibromyalgia, depression, hay fever, asthma, and eczema, among others. Given the important role that the gut plays in overall health, it is worth considering FMT as a potential treatment option. Again, it makes sense because the bulk of our health resides in our gut.

Weight Loss

Some people may argue that a plant-based diet is the best way to lose weight. While it is true that weight loss can be achieved through calorie restriction or deprivation of nutrients, this approach is not

sustainable in the long term, nor is it ideal. There are several reasons why plant-based diets may not be effective for weight loss, including the fact that they may be low in certain nutrients and may not provide enough satiety to prevent overeating.

When we starve ourselves, we often feel too hungry to continue. If we feel hungry, that is our body's way – nature's way – of saying that we need nutrients. When we consider the common deficiencies associated with a plant-based diet, it is no wonder why the body would scream for more food in its effort to get what it needs. The question I ponder is why anyone would want to fight or ignore that.

When we are hungry, it is natural to seek out food to fill the void. However, to provide quick energy, we may turn to unhealthy, simple, and refined carbohydrate-rich foods. This can lead to a rise in cortisol and ghrelin levels as the body goes into defense mode and tries to store as much energy as possible in case of future shortages. This cycle can be detrimental to our health and weight management efforts. That is not a good plan.

However, it does not have to be this way. It is possible to break this cycle and achieve consistent energy without experiencing hunger or the need to turn to unhealthy, quick-energy foods. By eating nourishing, satiating meals, it is possible to lose weight and feel satisfied at the same time. Additionally, by eating in response to true hunger rather than habitual snacking, we may find that we are hungry less often. This approach aligns with nature and is supported by scientific evidence.

Quite a few studies have shown that increasing protein results in eating fewer calories. Interestingly enough, even if protein comprises only 30 percent of our diet, we will automatically drop our calorie intake by over 400 calories per day (Weigle et al., 2005). However, I am suggesting that perhaps nature intended animal products to comprise a much higher percentage of our diets. My guess would be somewhere between 60 and 90 percent.

The reason I believe that is so high is due in part to the high amount of B12 and other nutrients that are necessary for optimal brain function. It has been theorized that the first major evolutionary change in the human diet was the inclusion of meat and marrow from animals. The inclusion of meat in the human diet helped to increase brain size by around 300 percent. Today, the brain requires a significant amount of energy, accounting for about 20 percent of the body's total energy needs.

In addition to the metabolic benefits of animal products, it is worth noting that they take longer to digest than carbohydrates. This slower digestion can help to suppress appetite for longer periods of time while still providing the nutrients and energy that our bodies and brains need. The science behind this is relatively straightforward.

The hormones in our brains play a significant role in regulating our feeding habits. Ghrelin is a hormone that stimulates hunger, while other hormones, such as GLP-1 and cholecystokinin, promote satiety. Consuming a higher protein diet not only provides the necessary metabolic advantage, but it can also help to reduce ghrelin and increase levels of satiety hormones, leading to improved weight regulation and reduced hunger. As a result, we are less stressed and less inflamed, and we begin to heal because we are getting everything we need.

Yet, for some reason, plant-based diets are all the rage for things like weight loss. However, this does not make much sense. Aside from the lack of protein, vitamins, and minerals, which can lead to

inadequate nutrient intake, plant-based diets often result in long-term stabilization of weight, not long-term loss. When the herbivore approach ultimately fails their body (and it likely will), they may give up on their diet. However, the damage may already have been done in terms of conditioning the body to store rather than burn excess calories. This may be due in part to the stress of calorie or nutrition restriction, which can trigger the body to go into storage mode and lead to the yo-yo effect of weight loss and gain.

I have read several studies showing that people eating a high carbohydrate and high fiber plant-based diet often report that their weight either increased or stabilized. Conversely, animal-based protein and low carbohydrate diets often result in more significant relative weight loss. People that consume such foods are also significantly less hungry over a greater period of time. The amazing part is that people who consume enough animal products will often experience some level of weight loss in under a week.

Imagine being on a "diet" where you were hungry less often, more satiated, healthier, lighter, less inflamed, and less stressed. Now imagine that the same diet came with the added benefit of improved brain function. Most would probably find that to be as close to perfect as possible.

Indeed. You can get protein from certain vegetables. In fact, for example, ounce for ounce, broccoli has almost as much protein as steak. However, protein is not the focus of the debate here, and it never really was. Instead, the protein part of the discussion gets the ball rolling and leads the discussion to necessary clues. However, since we are on the topic, we must understand that not all proteins are created equal.

This part of the conversation turns to amino acids. Amino acids are the building blocks for various proteins that provide the structural components of our brain, muscles, nervous system, blood, skin, etc. There are 20 amino acids that we need. Our bodies only make 11 of them. We have to consume the rest. The remaining nine amino acids are:

- Histidine
- Isoleucine
- Leucine
- Lysine
- **Methionine**
- Phenylalanine
- Threonine
- Tryptophan
- Valine

Question: From a hunter-gatherer perspective, would nature force us to desperately scavenge for the things our body needs and then provide us with foods that rob us of essential nutrients? Or would nature design our bodies and systems over millions of years to align with the solid food sources normally available to us? Is nature wrong, or are we wrong?

Here is a simple scenario to demonstrate this point. Animal products contain high levels of all nine essential amino acids. That is why they call proteins found in animal products *complete proteins*.

However, plants usually contain very little of at least a couple of the essentials, depending on which vegetables we are talking about. That is why they are often called *incomplete proteins*.

Of course, I am not a fan of the *complete* and *incomplete protein* labeling. This labeling is flawed because the truth is that many plant foods contain all nine of the amino acids that we need. However, the catch is that not all plants have a high enough amount of all nine to make the necessary impact.

Vegans or vegetarians can usually compensate for this by mixing and matching their protein sources. For example, a popular and easy pairing to meet the need is to consume whole grains and legumes. This pairing will result in the *presentation* of a good amount of all nine amino acids. However, my question is, at what cost?

If we think back to earlier, we know that legumes hinder zinc absorption, which may ultimately hinder our immune system. We also know that grains have pro-inflammatory components which contribute to metabolic issues. Furthermore, both contribute to intestinal irritation and immune stress. I should probably add that legumes and cereal grains also contain a high amount of lectins, often called "*the anti-nutrient*."

When we combine these two vegetables, the opportunity to get some amino acids and protein is there. I concede to that. However, they also get a lot of inflammation and a reduction in other vital nutrients. So, should we consume this pairing, or would it be better to consume something that provides us with what we need without all the negatives?

To clarify, lectins are known to wreak havoc on our gastrointestinal system, creating stress and absorption issues. Sure, we could boil legumes and grains to reduce the lectin activity, and we can keep our grains somewhat whole. However, I ask again, at what cost? As you may or may not know, the water-soluble vitamins in vegetables and grains dissolve in water and when exposed to heat, but many of the harmful components remain.

The issue cannot be overstated. As described in a quote from the May 2022 edition of the Journal of Food Biochemistry: "*Antinutritional factors in plant-based foods hinder the absorption of nutrients and reduce the nutritional value of the food. Among them, thermosensitive antinutritional factors, such as trypsin inhibitors, urease, lipoxygenase, and lectins, have a high proportion among the antinutritional factors*" (Kong et al., 2022). Of course, try to mitigate the negative effects of these factors by cooking them. Or, we could face the fact that nature had something else in mind. These foods (legumes, cereal grains, and cultivated vegetables) have considerable "*antinutritional factors*" because they can inhibit the absorption of essential nutrients. Clearly, this is not ideal. Instead of consuming *antinutritional* factors, we want to consume *nutritional* factors - all of the time!

The Tribal Omnivore Diet

There is a clear pattern emerging from the evidence presented. Nature seems to promote a certain level of physical activity, moderate sun exposure, and avoidance of a sedentary lifestyle. Additionally, nature supports the consumption of non-GMO fruits, non-homogenized milk, fish, lean or grass-fed meats, and fresh spring water. On the other hand, certain vegetables and grains may not align with nature's intended diet for humans. This diet, which resembles the diet of other omnivorous animals with similar

anatomy and physiology, could be called the "Omnivore Diet." It could also be called the "Tribal Diet," as it aligns with the traditional diets of indigenous peoples living away from modern society. What we call it is irrelevant as long as it works. The important thing is that this way of eating is effective and supports optimal health.

It boils down to 10 simple rules.

1. Only eat foods that our distant ancestors might recognize as foods along the trail.
2. Eat plenty of clean and lean animal products. This includes eggs and non-homogenized dairy products *in moderation*, and switch them up (eggs, dairy, fish, steak, chicken, pork, etc.)
3. Eat or supplement with organ meats.
4. Eat a variety of different types of fruits. This includes vegetables that are actually fruits. However, if you are after nutrition, do not cook them.
5. Consuming REAL honey occasionally is just fine because it is also an animal product.
6. Avoid processed, irradiated, GMO, pesticide-laced, or otherwise "dead" foods.
7. Eat until you are comfortably full – and – only when you are truly starting to get hungry
8. And because our soils are often nutrient deficient, supplement in accordance with the important nutrients discussed herein. Specifically, I ensure that I am getting plenty of sodium, magnesium, sulfur, zinc/copper, D3/K2, B12, and Iodine. SIDE NOTE: Coincidentally (or naturally planned), this short list also reflects what our bodies might be abundantly exposed to if we spent more time in the ocean. Perhaps that is why our bodies have such a difficult time storing these.
9. Consume plenty of "live" water, such as spring water.
10. A quality multivitamin is fine at first, but I would avoid the big box stores for this purchase.

Now, some have suggested that the preceding list might be hard to follow or remember. So, to simplify this even more, I have boiled it down to the essentials. Remember, this does not have to be complicated, nor should it be. Personally, and after plenty of practice, I prioritize and follow these basic rules:

- Live and lean animal products (including organs and fish) are the bulk of the meal
- A variety of organic fruits (especially berries) are the side or dessert
- Do NOT avoid REAL salt
- Avoid vegetables that are not actually fruits
- Avoid refined and processed foods whenever possible
- Avoid sugar (cane and refined) and grains

Supplements to Consider

Tier 1 – The Primaries

- Sodium
- Magnesium
- Sulfur

Tier 2 – Likely Necessary

- Zinc/Copper

- D3/K2
- Iodine
- Or a multivitamin (especially at first)

Tier 3 – Nutraceuticals

Nutraceuticals are supplements that treat a specific condition we might face. For example, N-acetyl cysteine (NAC), Human milk oligosaccharides (HMO), Berberine HCL, Modified Citrus Pectin (MCP), Olive Leaf Extract, etc. Speak to a nutritional-competent physician or researcher if you have questions or need guidance regarding nutraceuticals.

I am often asked two questions about this protocol or lifestyle.

1. Is supplementation truly necessary?
2. Why have I chosen to focus on these supplements?

For many people, supplementation is necessary due to various factors that affect our ability to obtain sufficient nutrients from our diet. These factors include a sedentary lifestyle, reduced sun exposure, and limited access to nutrient-rich environments like the ocean. Additionally, modern farming practices and preservation methods can alter the nutrient content of our food supply, making it difficult to get all of the nutrients we need. Supplementation can help ensure that we are getting enough of the nutrients that may be lacking in our diet, especially when we make dietary changes that may increase our nutrient needs, such as when we are addressing existing damage to our bodies.

Our bodies have evolved over millions of years and are not adapted to the modern, sedentary, indoor lifestyle that many of us now live. Our bodies still require the nutrients that were necessary for our ancestors, and our physiology and history demonstrate a strong connection to the ocean. For example, human embryos retain gill ridges that suggest an aquatic heritage. These insights are important because our bodies are designed to obtain certain nutrients from our environment and can benefit from them when they are provided. For instance, our skin is a selectively absorptive organ that can absorb nutrients such as sulfur and magnesium. This is why a bath with Epsom salt or a swim in the ocean on a sunny day can be so rejuvenating. On a side note, perhaps our collective desire to vacation at the beach demonstrates our instincts at work.

Regardless, most of us are no longer saturating ourselves in our preferred environment. It is interesting to note that certain diseases, such as those related to behavior, tend to be more common in inland areas further from the coast. Granted, there are other factors to consider and exceptions to that idea; I just find it interesting. Nonetheless, we probably need to supplement with what we are missing first. One need only look at the oceanic composition and compare that to our common deficiencies to see some interesting commonalities. We can also look there to gain insight into some of our most prized solutions. For example, we can note the overall improvement of various conditions using saline (salt water) for blood, eyes, nasal irrigation, wound cleaning, general hydration, etc.

My experience has been that the body responds rapidly when I appeal to this idea. That is the reasoning behind the tier system. However, Tier 1 is the base and must come first because, according to the data and my personal experience, Tier 1 must be in place for Tier 2 to be most effective. Again, this is not necessarily a recommendation. It is merely what I have found to work best for me.

Also, remember, the goal here is to balance the immune system, not boost it. However, if someone needed a boost to get the healing ball rolling, they could consider supplementing with N-acetyl cysteine (NAC). As mentioned, supplementing with glutathione can be problematic. Therefore, aside from following a proper and strict omnivore diet, supplementing with NAC helps to get things started. As a supplement form of cysteine, NAC is a precursor for glutathione. However, it also helps the kidneys and liver, disrupts biofilms, helps the respiratory system, and helps regulate glutamate levels in the brain.

Putting This Into Practice

To make the omnivorous diet work for optimal health, there are three key factors to consider. First, it is important to choose clean and healthy animal products and fruits, and to prioritize fresh, natural options. Second, it is essential to avoid vegetables, refined sugars, packaged carbohydrates, pesticides, and other artificial ingredients. Finally, it is helpful to vary the types of fruits consumed, as if we were foraging for them in nature while searching for our beasts.

It seems Hippocrates was right when he said, "*Let food be thy medicine and medicine be thy food.*" It sounds nice. Theories are great, and the "rules" are helpful, but how does this really go in practice? Remember that this entry is merely a brief overview of a much bigger picture. Still, one could implement a portion of what has been discussed here and see some remarkable results. However, the true long-term benefits are seen with time and effort invested, discipline, and consistency.

If someone switches to a proper omnivore approach, and despite seeing some changes in a matter of days, it does take some time to switch things back to where they need to be. Just as it takes a considerable amount of time for chronic issues to present themselves, it often takes considerable time to resolve them. However, as the body begins to trust that the food supply is just fine, it will begin to purge what it does not need. This purge includes the unnecessary fat and bacteria as the microbiome shifts and as oxygen levels restore. The key appears to be in understanding the switch itself.

Remember that we do not want our bodies to feel as though food is scarce. However, we also want to avoid overeating. Therefore, I believe we should eat nutrient-dense omnivore foods until we are comfortably full (not stuffed). However, we should also only eat when we are truly hungry. Of course, if we want to be real about it, there will be times when we will not eat at all. This truth might be an argument for intermittent fasting and likely explains why *autophagy* works so well. Although, when we eat nutrient-dense foods, our desire to eat numerous times a day simply disappears, and we will naturally fall into a state of autophagy.

Furthermore, I would absolutely avoid eating several calorie-restricted meals throughout the day for the reasons previously discussed. When our bodies no longer feel threatened, they can relax and shut off the storage features and turn on the healing features. The result of this approach is often dramatic weight loss, improved insulin resistance, better cholesterol levels, and some of our chronic ailments just fading away.

Granted, it may be difficult to fully prove this idea (especially if nobody is looking). However, that does not mean it should be ignored. It is important for individuals to consider this approach if they are

concerned about their health and mental capabilities. While it may not be suitable for everyone, it is worth considering.

Let me close this section by saying that science does not have to recognize or document every truth for us to act. Furthermore, sometimes science changes its mind. Again, we have to think of science as strong clues instead of absolute proof. Remember that science merely suggests something based on specific criteria and settings. However, I believe that I have demonstrated that, in this case, not all of the factors have been examined yet.

Results should matter. If they do, then what I shared with you here should also matter. An omnivore diet can be nutritious and well-rounded. When I focus on the omnivore diet (fruits and animal products) exclusively, when I avoid foods that are hard on the gastrointestinal system or stimulate an immune response (herbivore diet), and when I avoid "emergency" foods, my body has responded to great effect.

That said, remember that this is merely a nutritional philosophy, but I adhere to it with discipline. As a result, I have seen my intestinal issues heal, my blood sugars reduce, my insulin resistance has improved, my fasting triglycerides are no longer an issue, and my cholesterol levels are in a healthy range. In addition, my chronic complaints have either been better managed or have completely disappeared. My sleep has also improved, I have lost a significant amount of weight and have maintained a more aesthetically pleasing physique, and I feel fuller when I eat. Other positive changes include improved skin and vision, and the list goes on.

Important Clarifications

The "Vegetable" Clarification

Indeed, with this approach, we want to avoid certain vegetables. However, it is important to clarify that "cultivated vegetables" are the focus of this statement. Foods such as lettuce, carrots, broccoli, spinach, cabbage, radishes, peas, kale, cauliflower, beets, Brussels sprouts, celery, Swiss chard, and turnips are some of the biggest offenders. Fruits that are often confused for vegetables, such as tomatoes, bell peppers, cucumbers, zucchini, pumpkins, eggplants, avocados, and squash are typically not included.

The Nut and Seed Clarification

Not all nuts and seeds are bad. Nutrient-dense nuts and seeds that are typically acceptable in this approach include Macadamia nuts, Pecans, Pine nuts, Hemp seeds, and Chia seeds. Yes, these options do contain some phytic acid. However, the level is considered relatively low and is not likely to pose significant problems from an epigenetic or nutritional standpoint when consumed as part of a balanced diet.

Similarly, sunflowers are often considered great medicine, and their seeds are a good source of vitamins (such as vitamin E), minerals (like magnesium and selenium), and healthy fats. Yes, phytic acid in sunflower seeds can sometimes negatively influence the body's nutritional and metabolic responses, but its effects are generally mild compared to more significant dietary factors. This is to say that while they do contain a decent amount of phytic acid, which can bind minerals and reduce their

absorption, for most people, a small or moderate and occasional amount seems to be tolerable. That said, it should probably not be regularly.

The Dairy Clarification

The health benefits of lactoferrin (a globular glycoprotein), colostrum, and human milk oligosaccharides (HMO) are well-established. These substances can positively affect the immune system and have been shown to have anti-bacterial, anti-viral, and anti-fungal properties. While milk is a common source of lactoferrin and colostrum, there is some debate about the overall healthfulness of consuming milk and dairy products. This debate may stem from misunderstandings about allergies and lectins, which are proteins that can cause digestive issues in some people.

The internet tends to perpetuate the myth that all dairy products and some meats have lectins. However, it depends on what exactly we are talking about. We need to clear this up and use it as another example of why we should be highly mindful of the things we consume – either food or information.

Indeed! We are what we eat. Well, the same is true for the foods we eat. For example, when we consume too many lectins, it can become a problem. When the animals we eat consume too many lectins, not only can it become a problem for them, it can become a problem for us.

Consider the differences between grass-fed cows, free-range chickens, and wild-caught fish versus grain and soy-fed cows, chicken, and farm fish. They are different on several levels. We know that there is a difference in health status between the two groups as well, but few of us take the time to consider the outcome of consuming one over the other.

For example, grain and soy-fed animals tend to have elevated lectin levels in their meat, eggs, and milk because they are consuming elevated levels of lectin. The same can also be said for antibiotics and hormones. It makes sense. However, these animals are supposed to be eating their natural foods in a more natural environment. They are healthier when they do. Similarly, when they consume fewer lectins, fewer lectins are found in their products. So just as we should probably adhere to nature's intent, so too should our food supply.

The dairy side of this topic is a little more complicated, and I would like an opportunity to clear this up as well. Indeed, dairy can legitimately have lectin in it if the cow is consuming the wrong foods. Unfortunately, some grass-fed cows might also provide a lectin response in humans. However, the issue is not usually about lectin. Instead, it is normally the result of casein A1. Casein A1 can mimic *lectin-like activity* despite the cause not being a lectin. This response is especially true when an individual consuming it is dealing with gut permeability.

Casein A1 is a protein found in milk that is the result of a genetic mutation that occurred in Northern European cows many years ago. While it is found naturally in the milk of these cows, it is not well tolerated by the human body. Some people who have a reaction to dairy products, such as those with lactose intolerance, may actually be reacting to casein A1 rather than lactose.

It is a common misconception that adult humans and animals were not meant to drink milk, but this is not true. In fact, many adult humans and animals consume milk and dairy products without any

negative consequences. Moreover, there is no logical basis for the claim that adult humans and animals should not drink milk. Consider the following:

1. Animals will drink milk whenever they have access to it.
2. Humans have been drinking milk for thousands of years without any significant problems. Only recently have we seen this uptick.
3. Milk makes various healthy things, such as cheese, yogurt, and kefir.
4. Milk was the first thing we consumed in this human experience, and organizations such as the American Academy of Family Physicians (AAFP) now suggest that health is optimized "*when breastfeeding continues for at least two years* (AAFP, 2019)." Of course, some are starting to notice even stronger benefits when we breastfeed longer.
5. Milk provides great nutritional benefits that are easily absorbed, such as calcium, magnesium, selenium, riboflavin, vitamin B12, and pantothenic acid 1.
6. Finally, some researchers now believe that compounds found in human breast milk may help adults with Crohn's disease, arthritis, and even autism.

The issue with milk is not a simple one and cannot be attributed to milk itself. Factors such as the genetic mutation in some types of milk, how the cow was raised and fed, how the milk is prepared, and the individual's health can all play a role in how milk is tolerated. It is important to recognize that this is a complex topic and that blanket recommendations should be avoided, as not everyone will have the same experience with milk.

While it is generally accepted that casein A1 can be problematic for some, the A2 beta-casein protein is easier to digest and is well-tolerated by most people. In fact, A2 beta-casein is the original variant of the beta-casein gene and is found in many breeds of cows. To ensure that you are consuming A2 beta-casein, it is important to read the labels on the milk you purchase and choose brands that come from A2-producing cows.

My other concern is with how milk is often prepared. If A1 milk is homogenized and the person consuming it has a compromised intestinal lining due to a poor diet, they may be more likely to have an adverse immune response. However, that is not the dairy's fault. What happens in this process is that the fat globules produced during the homogenization process bypass proper digestion. These proteins absorb through the broken tissue of the intestinal lining and then enter the bloodstream. At this point, the body recognizes the foreign protein and tries to attack it. Hence, the allergic reaction.

I contend that homogenized A1 milk is probably not suitable for anyone and might be the bulk of the issues we see when it comes to milk. Frankly, I avoid homogenized milk as much as possible. However, homogenized A1 milk is one of many options. For example, you could also choose flash-pasteurized A2 milk. For clarity, light pasteurization kills potential raw milk pathogens without significantly impacting milk nutritional quality. Of course, if food poisoning is a concern, know that your concern is likely misplaced because produce, specifically leafy vegetables, are responsible for most foodborne illnesses.

Remember, there are plenty of casein A2-producing breeds. As it turns out, the consumption of only pasteurized (or raw in some cases) grass-fed A2 dairy, along with efforts to heal the gut lining with a

proper diet, often results in considerable healing of those pesky "lactose intolerance" issues. Perhaps this is another example of the importance of consuming products aligned with nature's intent.

Meats – To Cook or Not to Cook

One common question that arises in this discussion is about the potential nutrient loss that occurs when cooking meat. While some nutrient loss is inevitable when cooking meat, it is generally not significant in terms of meeting our nutritional needs. The extent of nutrient loss depends on the cooking method and temperature, with higher temperatures and longer cooking times leading to greater loss.

From a health perspective, the potential toxins that can be produced while cooking meat, such as polycyclic aromatic hydrocarbons, advanced glycation end products, oxidized cholesterol, heterocyclic amines, and oxygenated aldehydes, can be a concern. However, these toxins can be minimized or eliminated by using quality meat and avoiding the use of vegetable and seed oils for cooking. Instead, it is recommended to use cooking methods such as grilling, roasting, baking, slow-cooking, pan cooking (without oils), pressure cooking, and avoiding overcooking to minimize the risk of toxin formation.

If approached reasonably, we will lose little (if any) of what we need. Moreover, our meals will taste great! That being said, I also suggest that we avoid deep-frying and grilling with modern grills with a drip tray under the meat. However, run-off features are okay.

Whether or not we can or should eat raw meat is debatable. As demonstrated, lightly cooking our meat is a good thing. Humans have been cooking meats for about 250,000 years. Lightly cooking our meat actually aids in digestion because it helps break down the connective tissue. However, I stress again that we do not want to overdo it. Think about a rare steak versus a well-done steak. From an omnivore perspective, the rare option is far superior.

Indeed, we can eat raw meat. Of course, we might be taking a risk considering today's farming and packaging practices. However, that is usually not the fault of the animal. It is the fault of the people who raise the animal and the companies that bring it to market. What makes raw meats potentially dangerous or healthy is usually how the animals are kept, how they are cleaned, and how they are fed. Nonetheless, people enjoy raw beef, raw fish, and even raw chicken worldwide. Of course, the risks vary for the reasons stated.

Fun Fact About Chicken

Of course, catching a chicken 20,000 years ago would probably be a daunting task. Due to selective breeding, chicken is available today and is easier to catch. Of course, we would not want to eat raw chicken we bought at the store. However, contrary to popular belief, humans can eat raw chicken – in certain circumstances.

Chicken contamination is usually the result of the salmonella and campylobacter bacteria that reside in a chicken's gut. Indeed, these bacteria can be problematic for humans. This is why we choose to cook them. However, there are still cultures in the world (like Japan) that consume raw chicken and raw steak or salmon, and they are just fine. So, it is not unheard of.

The difference is found in the quality of the animal's life, the quality of the cut, and its preparation. If there is a doubt, a quick dip in boiling water works great to keep the meat raw and the nutrients intact

without exposing people to harmful pathogens. Evidently, it has been done that way for many years, but this is precisely why I always wash store-bought chicken under hot water before preparation.

Personally, and regardless of the type of meat I am cooking, I like to lightly but thoroughly cook my meats at a lower temperature, and I never overcook them. It is simple, delicious, and does not come with the potential nonsense often overblown to scare people away. Keep in mind that meat and poultry account for far fewer food-related illnesses than produce. Just choose your technique wisely to ensure that the nutrients stay locked inside.

And no, we do not betray the omnivore experience by responsibly cooking our meat. Similarly, baking apples or peaches would not betray the omnivore experience either. We would only be doing that if we overcook our food or eat outside the intended diet. Keep in mind that it has less to do with cooking and more about selection. Do we want healthy omnivorous foods or anti-nutrients and pro-inflammatory foods?

Common Questions and Quick Answers

What About Antibiotics and GMOs

There is still some debate about whether or not such things are safe. However, I would recommend that anyone do objective research examining both sides of that debate and decide for themselves.

Personally, I like to play it safe. I do my best to stick to free-range grass-fed cows, free-range chickens, wild-caught fish, non-GMO organic fruits, non-homogenized milk, and fresh spring water. Of course, it is not always possible to adhere to this in all situations. However, that is not a reason to panic or not eat. We just do our best to avoid them and trust our bodies to handle the rest. Perfection does not exist.

What if I Cheat

If you cheat, you are only cheating yourself. I look at it like this, why would you want to consume things that poison your body anyway? Antifreeze may taste great, but you probably would not want to drink it. The Standard American Diet is similar. Look, there is nothing ground-breaking or controversial about this approach. You are merely eating in alignment with your design. You will likely only slow your healing or weight loss progress if you cheat. However, if you can stick to it, your craving for the garbage will subside over time, and you will not want to cheat with the foods that harm you.

What About Emergencies

Indeed, I have repeatedly mentioned emergency foods. However, the thing to remember is that emergencies are temporary (hopefully). As such, that is exactly how we should look at emergency foods (temporary). Economic collapse, natural disasters, total famine, etc. These are great examples of when it might be okay to turn to emergency foods. These are the foods you consume to sustain your life when your primary foods run low or run out. However, just like in non-emergency times, know that emergency foods come with a health cost and that their consumption may hinder your immune system. This is especially true if you make emergency food a staple in your diet.

What About Herbs and Similar Supplements

Certain herbs, leaves, stems, and roots can have beneficial or immune-enhancing effects for specific conditions. For example, herbs have been used as medicines for thousands of years. However, the thing to remember is that medicine is not necessarily supposed to become a staple. The fact is that many herbs are classified as "toxic" or "slightly toxic" when used long-term (more than a month). For that matter, some are considered toxic in very small amounts (such as chaparral). If you are battling something and feel that you need an herbal remedy, remember that short and medium-term remedies will probably be ideal. Either way, you will want to discuss any options with a nutritionally competent physician.

Of course, I believe that nature demonstrates this warning. For example, Ginkgo biloba works great in the short term but comes with the risk of headaches, heart palpitations, digestive issues, and several other issues. Turmeric is another popular remedy, but long-term use or too much comes with bouts of diarrhea, headache, or skin irritation. Too much ginger gives you diarrhea. Valerian root gives quite a few people headaches and digestive issues. Again, I cannot cover every nuance, but hopefully, you can see the point. Frankly, I believe that this is nature's way of telling us to keep the consumption of things outside of primary to short-term use or to avoid it.

That being said, we must also appreciate the numerous medicinal options provided to us that align with our omnivore experience. For example, one of the best berberine sources is found in specific plants' bark. The flower of the dandelion is known for its beneficial flavonoids and polyphenols. Coconut provides us with a slew of amazing medicines. The petals of Echinacea are amazing for the immune system. Elderberries are quite popular for a variety of ailments (and wine). The flowers of Hypericum perforatum give us St. John's wort. Chamomile is also a popular remedy, and the list continues. And all of these, which align with the omnivore experience, can be used for much longer periods of time.

Ultimately, what I do is try to figure out if the remedy is in alignment with nature's intent. If it is not, I am much more cautious and will limit its use – if I use it at all. An example here might be Olive Leaf Extract. Olives are great, but I doubt we were designed to consume the leaves too often. However, Olive Leaf works great for my sinus congestion. Thankfully, I do not have sinus congestion every day and do not have to consume Olive Leaf Extract every day.

I guess the point is that it is not an all-or-nothing situation. We just need to think about it before we do it. The good news is that when we begin to truly live our lives as omnivores, we begin to heal, we feel better, and our bodies are more apt to fight for us. Hence, we will likely need the remedies significantly less often. Win/Win.

What Side Effects Can I Expect

Everyone is different. However, as your microbiome shifts, you may experience some diarrhea or constipation a few times in the first few weeks or months. You may also begin to purge things like candida or damaged tissue at some point. This is sometimes referred to as a "*healing crisis*." In my experience, this is entirely normal. Moreover, the frequency of your bowels will likely reduce because you will absorb more of what you consume. That said, I will say the best side effect is healing and less hunger.

Can Fruit Stall My Progress

If you tried to eat nothing but fruit, perhaps. If you are eating fruits as I have suggested, probably not. There is a misconception in the health community that fruit will fatten you up or negatively impact insulin levels. Unfortunately, some misconceptions will not go away, no matter how much evidence shows otherwise. However, this idea is just not true, especially when you are NOT consuming other foods which inflame the body.

Remember, nature would not set you up for failure. Yes, fruits have sugar. However, if you are eating whole fruit, that sugar rides in on a tremendous amount of fiber (as previously discussed). This means that the body will not break down the sugar nearly as fast, which also means that its impact on blood sugar is significantly reduced, which also means that your body is less apt to store it. Whole fruits are fairly low in calories anyway, and they come with essential vitamins, nutrients, and enzymes that most do not get from other foods.

The concern usually surrounds diabetes and insulin. Indeed, I understand the concern. However, such concerns are generally unwarranted. There is plenty of research to demonstrate that *whole fruit* does not significantly affect weight, triglyceride levels, blood sugar, or blood pressure and that decreasing fruit does not provide a significant benefit. In fact, when thinking about lipid metabolism and improved insulin sensitivity, researchers are finding that fruits such as citrus might actually have an anti-diabetic effect (Gandhi et al., 2020). I wish I could show you my "shocked" face.

If I could point to an issue with fruit, it would either be with portion size or consuming only the juice. The general rule here is to consume moderate amounts of fruit and avoid fruit juice. However, for the purpose of what I am providing you here, portion size should not be a problem because we are talking about strictly consuming only moderate amounts of whole fruit and completely avoiding fruit juices. I consume fruit in various amounts almost daily, and I have yet to see a stall or reversal in either weight loss or health status. In fact, I think it might have sped up the process.

However, this perspective on *whole fruit* is more than anecdotal and is not exactly new information. For example, a multi-year longitudinal study published by researchers from the Harvard School of Public Health demonstrated that "*greater consumption of specific whole fruits, particularly blueberries, grapes, and apples, is significantly associated with a lower risk of type 2 diabetes, whereas greater consumption of fruit juice is associated with a higher risk*" (Chanchlani & Russell, 2013)." In other words, consuming whole fruits is probably a great thing, but consuming only the juice is probably bad.

That said, and in all fairness, it should be noted that not all fruits are ideal. For example, tomatoes, peppers, and eggplant come with their own issues (such as lectin). As mentioned earlier, lectin is present in many food products. However, the goal is to lower any such intake as much as is feasibly possible.

I am also not a fan of lychees. Not because of the lectin but because they pose some dangers if someone is not familiar with the fruit. The same could be said about other fruits with obvious natural warning signs.

How Soon Until I See the Results

That depends on what results you are looking for. First of all, this is not some fad diet or quick fix. Instead, this is expected to be a lifestyle change or a reset to natural expectations. However, I will say

that if you are strict in your omnivore ways, you should begin to see your first signs of change within the first week. At first, you will likely notice some weight loss. Some of this weight loss may be dramatic. In the coming weeks and months, you will see continued weight loss and improvements in your various chronic conditions. By the end of your first year, you may feel like a completely different person. However, some chronic issues may take longer to resolve. Some conditions may improve but not resolve. Again, everyone is different and dealing with different issues. Accordingly, results will vary. Generally speaking, you should begin to see changes in a very short period of time.

How Much Weight Can I Lose

How much weight do you have? Let me first remind you that I am not advocating this for the sake of weight loss. Instead, I am suggesting all of this as a lifestyle choice for better health. That being said, there are numerous factors here, but you can generally lose all unwanted weight. This includes the visceral fat that is hard on your organs. Of course, this largely depends on how strict you are and the ratio of animal product to fruit you choose.

Moreover, the speed at which you lose fat largely depends on your activity levels. Ideally, you want to be at least somewhat active. Walking, swimming, and riding a bike are great options if they are available to you. Resistance training can also help you burn off that stored energy. However, when I figured all of this out and began my journey, I was overly sedentary and still dropped over 50 pounds and several pant sizes in just a few months.

What About Allergies

I often hear concerns about potential milk or egg allergies. Absolutely! If you have identified allergies, you should avoid those foods. However, as previously alluded to, some of your allergies might very well go away when approaching your health this way. There are many potential reasons for this, but as your body heals, you may find that it is ready to accept more of the things you can provide. Moreover, if you choose healthier options, your body may be less likely to reject them.

An allergy is an abnormal reaction by your immune system to an otherwise harmless substance. However, the vast majority of your immune system resides in your gut. As your gut heals, so too might your allergy. It is not uncommon to outgrow certain food allergies. This is especially true with children. To be clear, as your immune system heals and becomes more balanced, you may outgrow your food allergy. There is plenty of literature on this, but you should consult with an allergist if you have questions or concerns.

What About Chocolate

Enjoy it – with a caveat. First of all, cocoa does not come from a bean. It is actually a fruit seed. The problem is not the chocolate, though. The problem is usually the amount of sugar that people mix with it. However, sugar is not required to enjoy chocolate. In fact, plenty of other sweeteners can be used that adhere to this approach. Monk Fruit Sweetener is a great example. Coconut sugar might be another. I am also a fan of honey-sweetened chocolate. If you can figure out a way to enjoy chocolate that does not require refined sugar, then fine. I avoid refined sugar and milk chocolate options, sticking to dark chocolate (without refined sugar), and using fruit-based sweeteners or honey.

What About Coffee

Coffee “beans” come from coffee cherries. The coffee “bean” is actually the seed. Botanically speaking, coffee cherries are a type of drupe, a fruit similar to a peach or a mango.

Therefore, I believe coffee is okay in moderation because it fits well within the omnivore diet. Plus, having a few cups of coffee has many benefits, including its positive impact and reduced rate of heart disease and arrhythmias. My only concern might be the tannins, but I indulge and have no issues. Enjoy!

What About Coconut

Coconut is also acceptable. Like the coffee cherry, coconut is a drupe. And actually, we can get all sorts of great stuff from coconut. These range from delicious sweeteners to unique medicines such as monolaurin or caprylic acid. Great stuff!

What About Alcohol

Humans have had an interesting relationship with fermentation for thousands of years. So have other animals, for that matter. For example, one of my favorite videos of all time shows a squirrel getting drunk off of a fermented pumpkin.

Fermented drinks are not necessarily bad in moderation. However, they will more than likely slow down or stop any weight loss progress due to the spike in your blood sugar levels that will result from their consumption. To what degree largely depends on what we choose to ferment and consume. Moreover, just as we should not be eating certain foods, the same can probably be said for the fermentation and consumption of those same foods. For example, beer is made from grain and is filled with gluten, and it spikes your blood sugar significantly.

If we are going to consume fermented products, perhaps we should stick to the theme. Fermented milk (kefir) is fantastic and offers a variety of benefits. Fermented grapes (wine) have a long list of benefits as well. Mead (fermenting honey) is another great option. Personally, I am a fan of fermented apples and pears (hard cider) as long as they have not had gluten or tons of sugar added.

At the end of the day, I treat alcohol similarly to any food that I choose to consume. The more human intervention required to make the product, the less likely I am to consume it. It seems to work out pretty well for me.

That being said, I am not advocating the consumption of alcohol. Instead, I am saying that better options exist if you choose to do so. Just remember, less harmful is still harmful. Excess is not your friend.

Are Carbohydrates Bad

Absolutely not! Carbohydrates are an essential source of energy for us. However, the type of carbohydrates we consume can be.

Ultimately, healthy and unhealthy carbohydrates come from simple or complex carbohydrates. This gets complicated, but to simplify this a bit, I find that it is best to look at it as unrefined versus refined

carbohydrates. We want unrefined carbohydrates, which are carbohydrates found in their natural state. Moreover, we want to stick to certain types of unrefined carbohydrates and avoid others.

Again, the more human intervention required to make the product, the less likely I am to consume it. Examples of refined carbohydrates to avoid might be white bread, white sugar, pasta, etc. Examples of *unrefined carbohydrates* to avoid include wheat, sweet potato, chestnuts, chickpeas, or oats. Examples of *unrefined carbohydrates* to seek out might include okra, strawberries, apples, pears, grapefruit, and prunes. As long as we are eating in alignment with our design, and as long as we are avoiding processed foods where possible, carbohydrates usually are just fine.

I Heard That Vegetables Lowers LDL Cholesterol

Indeed, they can. However, let us take a deeper look at this for a moment. A better question is, "*are vegetables our best option to reduce LDL cholesterol?*"

If you were to look up ways to improve cholesterol levels, you would find recommendations such as *eating more monounsaturated and polyunsaturated fats, avoiding trans fats, eating soluble fiber, and exercising*. These are fantastic recommendations, and I would likely recommend the same things to most people. Of course, if you break these down into simplicity, all these recommendations really say is that I may be on to something with this nutritional philosophy.

Let us translate that recommendation for us regular folks. Another way we could say this might be, "*eat more fruit, fatty fish, avocados, olives, red meat, eggs, salmon, mackerel, and herring, while also avoiding vegetable oils, margarine, bakery products, fried foods, pizza, crackers, and non-dairy creamer. Then, just follow this diet with some moderate exercise.*"

The two paragraphs pretty much say the exact same thing. However, you will notice that the theme presents itself yet again and that I did not mention a single vegetable. Indeed! There is a misconception that if you want to lower your LDL cholesterol, you need a diet rich in vegetables. However, that is just not true.

Granted, this is a complex topic. However, the key is both avoiding what causes the problem and consuming the necessary fiber and antioxidants to prevent or manage any existing issues. Soluble fiber can bind to cholesterol and carry it to the liver for elimination. The antioxidants keep the LDL cholesterol from oxidizing in the body. The two work together to prevent elevated cholesterol levels in the body. However, I should remind you about our discussion from earlier talking about going overboard with antioxidants.

The truth is that apples and berries have a fantastic soluble fiber profile. In fact, apples, berries, oranges, and watermelons all have an excellent reputation for being extremely helpful with the LDL cholesterol problem. From their fiber content to their antioxidant content, this short list is known to be a powerhouse in the fight to lower total and LDL cholesterol levels. Just remember that the fruit is not the only weapon in this fight. Fish, red meat, and eggs were on the list as well.

Although, I will say that I am a big fan of watermelon for this job because of its high L-Citrulline levels. Sure, L-Citrulline helps to reduce LDL cholesterol levels, but it also helps generate more nitric

oxide. This is important because nitric oxide helps to balance lipids in the arterial system and keeps both good and bad cholesterol at healthy levels. Best of all, it is delicious!

What About Boron

This might be one of the better questions I received on the topic. Boron is a trace mineral that can do various things in the body. This includes extending the benefit and time of circulating vitamin D. For some reason, boron has a reputation for being associated almost exclusively with legumes. This is actually not the case at all.

Avocados, apples, raisins, peaches, and pears are all great examples of boron-rich fruits. In fact, raisins might be your best source, and they come with the addition of potassium, magnesium, iron, and a decent amount of soluble fiber. Remember, organic is probably best.

What About Snacking

Snacking is usually fine, but this depends on what you choose to snack on and what your goals are. Remember, you do not want your body to feel threatened. If you are hungry and need a snack, you should eat something. However, you should still keep any snacks aligned with your design. I enjoy beef jerky, hard-boiled eggs, apples, pork rinds, a berry and kefir smoothie, dark chocolate, bananas, leftovers, etc. Of course, eating nutrient-dense foods and drinking plenty of water or coffee throughout the day tend to keep my hunger away. And, with that being said, if you are trying to use autophagy to your advantage, understand that snacking will be a roadblock.

What is Autophagy

Autophagy is an amazing function often associated with intermittent fasting. It is a process where our body begins to use up or remove dysfunctional components of our cells. However, it really only occurs when our bodies are looking for energy. The catch is that we must ensure that we hit a fasted state to achieve autophagy.

If I am Not Supposed to Restrict Calories, How Can I Reach Autophagy

There is a difference between restricting calories and not needing them. The trick is that when you are hungry, you need to eat; when you eat, you need to eat nutrient-dense foods until you are comfortably full. Of course, when you are not hungry, you should not eat.

It may seem weird, but your hunger will reduce. I eat maybe once or twice a day now. This feeding usually happens within a three-hour window. Not because I am trying to, but because I do not need to do it any other way. I am just not hungry until late afternoons anymore. Autophagy is usually reached after fasting for about 18 hours. Therefore, in theory, I reach autophagy for at least three hours almost daily.

Of course, sometimes, I will forget to eat over the course of an entire day. In such cases, autophagy is reached for extended periods of time. However, I always eat when I am truly hungry and eat until I am full. I also drink plenty of spring water throughout the day. We have to remember that sometimes dehydration is confused with hunger. Whatever is going on, I do not want my body to feel like it is in danger.

What is the Best Time to Eat

Probably whenever you are hungry. I am not a fan of timing meals. If you try to time your meals, you run the risk of restricting your diet. I believe that we should trust that our body will tell us its preference. Our body will definitely tell us about the need if we are willing to listen. Granted, you will find studies that suggest that eating early is best, that eating late is best, or that it does not matter. In my experience, the timing of your meals is less relevant when your meals are aligned with your physiology.

However, I will say that I have a rough dinner time but that I let my body inform me about the others. Sometimes I eat breakfast, but most times, I do not. Sometimes I eat lunch, but this is not the norm. I usually sense that I need to eat at about five or six, but there is usually about a two to three-hour window. This is my primary feeding window. Sometimes I might get hungry a few hours after dinner. If so, I will usually have more of what I had for dinner or a snack.

What About Candida

You will definitely want to discuss any specific condition that you are experiencing with your physician or health expert. Just know that opinions vary on the topic of candida. At the same time, know that I am speaking from personal experience, having overcome and healed from a systemic candida infection.

In my personal experience, I have found that candida-related issues tend to get rectified rather quickly using this approach. You have to remember that yeast loves sugar and refined carbohydrates. With a strict omnivore diet, we are ridding ourselves of the vast majority of both sugar and refined carbohydrates while also reducing inflammation, increasing beneficial gut flora, and healing the gut. That is an ideal situation for such infections.

However, since fruit has sugar, we should discuss that. Yes, we want to eliminate refined carbohydrates and sugars, but we still need to feed our bodies and microbiome. On the Tribal Diet, you are not consuming pounds of sugar and refined carb every day, and the fruit you do consume will likely comprise 20 percent or less of your diet.

Personally, I am a big fan of dark berries, bananas, and pineapple for candida. Specifically, these feed the beneficial bacteria that will help you keep yeast under control. Now, there is some debate about pineapple, but I like it because it is loaded with bromelain. Bromelain is an anti-fungal agent that is actually a mixture of protein-digesting enzymes that can support the immune system and help kill off candida infections. As long as you are not eating the inflammatory foods we have discussed, I would be fine with some fruit. Just don't go overboard.

On a side note, Candida is pronounced can-*DID*-dah. Not, can-*DEE*-dah.

What is a Healing Crisis?

Your body will normally expel most toxins and waste via the lungs, urine, and bowels. However, sometimes the body must purge other things that do not belong. This might result in a healing crisis. Vomiting might be an excellent example of this. When our bodies begin a healing trend, sometimes there is an abundance of *bad stuff* that the body must try to get rid of. A *healing crisis* is the term that attempts to explain what happens when this occurs. This is also sometimes referred to as a *Die-Off* or a *Jarisch-Herxheimer reaction*.

During a healing crisis, you may not feel top-notch. You may vomit, have diarrhea, or just feel ill. However, this is usually your body's way of managing a potential issue. I mentioned this earlier, but assuming you adopted a healthier eating pattern, you might experience an alteration in your microbiome. As the microbiome shifts, you will likely purge the unnecessary bacteria via diarrhea. While unpleasant, it is actually a good thing.

Another example might be having compromised intestinal tissue. Once a healing pattern begins, your body might shed and discard the compromised tissue. This is not too dissimilar from shedding a scab.

Ultimately, you may experience unpleasant symptoms during a healing crisis. However, most people report feeling substantially better after the purge than they did before the purge. So while it might feel like a crisis at the moment, healing is occurring.

What About Digestive Issues

A very serious topic, but somewhat funny when you think about it. Most gastrointestinal issues could be avoided entirely if we just avoided the things that upset our gut. We can heal the gut when we eat healing foods. It never ceases to amaze me how even when we identify the problem in our diet, we resist giving it up because we like how it tastes.

If you are dealing with digestive issues, you might be reluctant to shift or experience some digestive issues while you make the shift. Either way, a few things might be worth mentioning here. The first one is that sometimes it will feel better when I eat only fruit or only animal product in one sitting. So, for dinner, I might consume only animal products, and then a couple of hours later, usually within a three-hour window, I will consume my fruit.

I have found that sometimes my digestion is improved by separating these out. This might be something worth playing around with. However, if I am going to consume both in one sitting, I absolutely consume the animal product first and use the fruit as dessert. This ensures that the bulk of my digestive power is focused on breaking down the animal product. I do this because fruit is much easier to digest.

Either way, this pattern of eating has done wonders for my digestion. Overall, the inflammation in my stomach and intestines has reduced to the point that I no longer notice it. After some adjustment time, my bowels have improved dramatically as well.

On a similar note, the second thing might be to reconsider consuming too much (or any) water (or fluid) during meals. Granted, there is a lot of debate on this topic from a scientific point of view. However, we must remember that if there is debate, that also means that there are still some unknowns. Actually, I believe I can help clear some of this up. Just remember that if science is involved, sometimes logic is not.

If you look for literature on this topic, much of the focus will be on the impact of water on hydrochloric acid (HCL) or digestive enzymes specifically. Our bodies use HCL and enzymes to help break down our food, kill certain types of bacteria, and facilitate the absorption of nutrients. Some professionals suggest that water can hinder our digestive juices because it might dilute elements of this process (bile,

saliva, mucus, acid, etc.). Of course, some professionals suggest that water has little to no impact whatsoever.

So, which is correct? It can be difficult to decide what to do when such confusion exists. To figure this out, we have to ask a rather basic question. Does water impact our digestive process in any way?

According to Dr. Michael F. Picco, M.D., a gastroenterologist at the Mayo Clinic, "*drinking water during or after a meal helps how your body breaks down and processes food (digestion)* (Picco, 2022)." That sure sounds nice, but is he right? Furthermore, is that all we have to know about it?

On the surface, Dr. Picco suggests that water can impact digestion. He says that water can help. However, I think such advice is irresponsible for most Americans. This is especially true if we do not fully understand the other factors that we have discussed thus far and especially when we have not evaluated the bigger picture. Of course, I think the "*impact of water on HCL*" debate distracts us from a greater truth. The picture is much bigger than just HCL and water. Ironically, we have to get our logic straight before we can see that bigger truth. Stay with me. This will be a fun exercise, and you will enjoy the complexity and simple answer.

Keep in mind that we still do not fully understand a few things about this process. However, the clues we do have are quite telling. For example, we know that people who suffer from acid reflux are better off not drinking water with their meals. Similarly, we know that drinking large amounts of water on an empty stomach can produce more stomach acid, sometimes leading to heartburn. And finally, we know that drinking water at least thirty minutes before meals is beneficial for many and that if water is necessary during a meal, having smaller quantities (sipping) works out pretty well. These all hint at something rather significant regarding water consumption at meals. At the very least, we know that any recommendation to consume water during a meal cannot be blanket.

Again, it is likely not an all-or-nothing situation. If you want to know the full truth, then you have to examine the contrast. For example, consider what happens when there is not enough water. A state of dehydration can lead to things like ulcers, gastritis, and acid reflux. Similarly, sometimes not having enough water results in significantly less stomach acid in general. In these situations, bad bacteria can sneak in, and people get sick. Now, with what I have shared thus far, it is clear that water *does* impact digestive processes to some degree.

Nonetheless, I believe we should be thinking about all of this from a slightly different perspective. The truth is that various foods and drinks can impact the digestive system. For example, salt or zinc levels (deficient/sufficient) can have a dramatic impact due mainly to being building blocks for HCL. Or perhaps a better example might be how diets that are high in refined carbohydrates not only lead to inflammation in the stomach and other digestive organs but are notorious for decreasing stomach acidity. Similarly, we know that the phosphoric acid in soda can impair HCL production and that regular consumption can result in a higher risk of death with digestive disorders and cardiovascular disease.

Not surprisingly, these are just a few of the many examples I could share. However, as I stated earlier, researchers sometimes have not considered everything when they declare their answers. Similarly, some practicing professionals have not considered the missing variables when they adopt such

conclusions. For example, the interplay of various foods, hydration levels, nutrition status, and even stress all play a part in this conversation.

Yes! Even stress (in its various forms) impacts these systems. For clarity, the effects of stress on digestion are extensive and include decreased stomach acid and decreased mucus production. Not only are both stomach acid and mucus impacted by water, but as we talked about earlier, stress can also present itself from dietary decisions. My point is that if the only things we are looking at are water and HCL levels and then trying to make a judgment, we are likely going to miss the accurate answer we seek simply because there is a lot more to consider.

Of course, it is not just the gastric system we have to consider in this discussion. We should also consider things like saliva and both the pancreatic and biliary systems as well, which can all be impacted by water. Then we have to factor in dietary habits, nutritional status, stress, etc. The point is that there are clear examples of how various substances can impact our digestive abilities (including water), and it is irresponsible to suggest that such substances have no impact. This is especially true when the full scope of the potential impact is not clearly understood or is hard to wrap your head around.

Of course, we could think of it in yet another way. Drinking enough water is good. However not drinking enough water can be bad, but so can drinking too much. The question is not whether water has an impact. The question is, how much of an impact, to what degree, under what circumstances, and whether that equates to an improvement or detriment. If we ask the wrong questions, we will get the wrong answers.

It is obvious that the things we consume impact our digestive abilities. That is why respected health researchers and practitioners often suggest that those suffering from heartburn and gastroesophageal reflux disease avoid certain foods or consume certain foods to help control their stomach acid. So, either these experts are lying to their patients or introducing specific foods can have a specific impact. What are we missing? In this case, probably a lot. With that being the case, we need a way to simplify all this for ourselves.

I went looking for answers to do just that, and I got an idea from Japan, which also happens to be one of the healthiest nations on the planet. They believe that drinking water during a meal hinders your *digestive fire*. As someone who struggled with digestion for most of my life and relied heavily on things like Betaine HCL supplementation, I was intrigued because, regardless of what the science says about HCL and water specifically, digestive issues related to water consumption have been my experience. For clarity, when I drink lots of water during a meal, the results are often not pretty and are sometimes painful.

As it turns out, while the Japanese tend to avoid water during their meals, they do enjoy a very small amount of green tea with their meals (generally speaking). Interestingly enough, this preference has a scientific foundation in the idea that caffeine stimulates the release of stomach acid, which aids in digestion. Moreover, green tea comes with a decent antioxidant profile and aids in weight loss. A little more digging found that the polyphenol plant chemicals in green tea stimulate beneficial gut bacteria and help inhibit pathogens. Not too shabby!

However, while I appreciate the knowledge, my preference was the problem. So, I wanted to know if any alternatives fit within the omnivore experience. Thankfully, a little more digging found that green tea and coffee have a lot in common. These commonalities include the stomach acid-boosting effects of caffeine, the antioxidants, the microflora-stimulating polyphenol chemicals, and so on. Perfect!

Coffee is not the only option, though. During this research, I found articles from various gastroenterologists suggesting that milk might act as a buffer between the stomach lining and the stomach acid and that those dealing with gastrointestinal discomfort might benefit from consuming certain types of milk during meals. A walk through that rabbit hole found more compelling evidence to support that claim and reinforce our earlier dairy conversation.

However, while all of this is interesting, I still felt that I needed more tangible evidence regarding drinking during meals. So, I decided to watch a few videos of omnivores eating to glean some insight by watching the behaviors of other omnivores in their natural environment. Sure enough, at least in the videos that I watched, I did not see a single incidence of an omnivore taking a break from eating to drink from the river. Granted, I am sure it happens. Sometimes we do not chew our food well enough and need help washing something down. Again, this is not an all-or-nothing situation.

Anyway, when I considered all the information as a whole, an interesting approach presented itself. Really, it is a mixture of observational and scientific information. I decided that I would drink my water well in advance or after the meal, I would avoid consuming lots of any kind of fluid during the meal, and if I felt it necessary, I would sip on either coffee (naturally acidic) or milk (the natural buffer) depending on what my gut was feeling at the time. At the same time, and to ensure rich and consistent production of HCL, I ensured my diet had enough zinc and unrefined salt because, again, these are the building blocks of HCL, I consumed a strict omnivore diet, and I ate my animal proteins first to ensure my digestive powers were focused on the right things.

I followed this mini-protocol for only a short period of time and found that my digestion improved dramatically. In fact, I am no longer reliant on Betaine HCL supplementation. It really made a world of difference. Whether it is scientific or not is irrelevant because I did not need a gastroenterologist to tell me that the improvement was necessary, real, and amazing. Best of all, the approach aligns perfectly with the omnivore diet.

Yes! Water impacts digestion just like many other things can. To what degree, or why, or how, is not my specialty. However, based on the preceding, the logic would dictate that if you are chronically stressed, eat too many refined carbs, eat too much fatty and fried foods, are vitamin B deficient, are zinc and sodium deficient, drink a lot of soda, or even suffer from various chronic or autoimmune conditions, then not only is your digestion already likely compromised but drinking too much water with your meal is probably not going to help the situation. And I know that because not only did I just describe a number of Americans, but I literally just described the various causes and risk factors of *hypochlorhydria*. Hypochlorhydria is a condition in which hydrochloric acid levels in the stomach and other digestive organs are absent or low. So, what might that tell us about most Americans?

When it comes to hypochlorhydria, the recommendations are clear. One of health professionals' very first recommendations to people suffering from hypochlorhydria is to avoid water during meals. In fact, one of the top-ranked Gastroenterology & GI Surgery centers in America, the Cleveland Clinic, tells

people on their website that people with hypochlorhydria should "*Drink fluids later. Save drinks until at least 30 minutes after you've finished your meal. This gives your stomach more time to produce acid and metabolize proteins* (Cleveland Clinic, 2022)." Of course, they also inadvertently advise the consumption of the omnivore diet because of their essential nutrients. Go figure.

Now, if I described the behaviors and issues of most Americans, and if I just described a nasty issue that results from those behaviors and issues, then perhaps most Americans should consider the instructions of what makes the issue worse. Moreover, if people are having such issues and seek to reverse the problem, perhaps they should consume the opposite of what they are currently consuming. Just a thought.

When you factor in the variables, you can probably see the truth for what it is. Medical recommendations differ for different reasons. This brings us to my third tip, which is very much related to the previous two and brings us full circle back to the beginning of this paper. As demonstrated, sometimes we do not fully understand why things do or do not work, sometimes we are confused about the variables, and sometimes we just have not considered all of the variables during an examination. Indeed, science attempts to discover and explain various components of what we experience. However, when science identifies a particular component, it does not necessarily mean that it has accurately identified or explained the entire phenomenon or process.

Similarly, what works for one might not work for another due to the differences in the variables. For example, compare two identical 40-year-old males. One is a tour guide for a luxury resort that gets moderate exercise and plenty of rest, is in a loving relationship, and strictly follows the omnivore diet listed herein. The other guy is a divorced air traffic controller who eats at the fast food joint at the airport and gets little sleep. If you do not understand the difference here, then let us just say that their needs are probably going to be substantially different despite what any general recommendations might suggest.

Ultimately, we must use intuition and realize that many things in our existence remain a mystery. However, sometimes the answers are there; we just have to dig for them by examining the contrast and accepting the variables. The best advice I can give anyone on this topic is to keep digging and learning and always consider nature's intent.

What About Probiotics

Probiotics are great. So are prebiotics. However, a lot of people waste a lot of money on both. That used to be me too. However, I discovered that you can make your own kefir and that kefir is often far superior to the probiotics we can get at the store. It takes very little to get started and very little to keep going. I will blend my kefir up with the prebiotic and gut-beneficial dark berries discussed earlier, along with some additional whey powder, and I am good to go. You can learn how I used to do it by checking out this [Youtube video I did back in January of 2013](#).

As far as prebiotics go, I have two rules. The first is to avoid vegetable-based refined fibers for the reasons previously discussed. The second rule is that if I must consume prebiotics from sources outside of my diet, I will rely on products that fall within the diet that I have suggested. For example, my cabinet has human milk oligosaccharides and larch arabinogalactan. However, I tend to rely more on

the fruits discussed herein and use these products sparingly. Ultimately, we must learn to listen to our bodies and adjust accordingly. Everyone is different.

You Used to Advocate Some of What You're Saying to Now Avoid

Yes. I used to advocate some of what I now avoid. That is because I did not know what I did not know. New information and understanding have come to light. My previous understanding was flawed due to flawed data, and I have changed my mind and position as a result of seeking accuracy. Do we want to be right, or do we want to be accurate? The preceding seems to be the most accurate set of conclusions based on everything that I have learned over the last twenty-five years. If a new understanding is achieved at some point in the future, I will write on the topic again with those corrections.

Conclusion

It is unnecessary to have a detailed understanding of the various nutrients in our diet to optimize our nutritional status. While this knowledge can be helpful, it is important to recognize that nature has a specific purpose in providing certain foods for our consumption. Even if we do not fully understand this purpose, understanding the general theme is likely sufficient.

We should consider the idea of avoiding certain foods that are essential for good health and well-being and the blind trust often given to those who recommend such avoidance. It may be more beneficial to trust in nature and the nourishment it provides.

We may have neglected or underestimated the value of our food, whether plant or animal. It is important to recognize that obtaining sustenance requires sacrificing another living being and to appreciate this fact accordingly.

It is worth noting that this is simply a philosophy and not meant as advice. However, based on the evidence and information presented, it is likely that this philosophy is not far from the truth. Ultimately, it is up to each individual to determine what is best for their own health. Have you given careful consideration to what truly promotes your well-being?

Current wisdom suggests that it is possible to obtain all the necessary nutrients from the diet. While this is likely true, it is important to keep in mind that there may be qualifications and limitations to this statement. Just because something can be ingested does not necessarily mean it should be or that it will be beneficial to your health if consumed.

Finally, it is important to remember that this understanding is based on the current state of knowledge and my own personal experience and struggles with health. It is always important to continue seeking out accurate information and to be open to the possibility that our understanding may change as new evidence becomes available. Like a detective, we should allow the clues to guide us toward accurate conclusions. We should never stop striving for accuracy and optimal health. I will update my understanding if new information becomes available. In the meantime, it is important for others to also seek out accurate information and be open to new perspectives.

Thank you for your time.

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