THE REAL DIET

Ted E. Slanker Jr.



How to Regain and Maintain Optimal Health with Food Chemistry

THE REAL DIET OF MAN

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www.texasgrassfedbeef.com

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Introduction

There is no better "diet" for losing weight, building the immune system, gaining strength, and for improving and maintaining health than "The Real Diet of Man." Many chronic diseases are arrested and in some cases eliminated by changing one's diet to "The Real Diet of Man." In competitive sports, eating "The Real Diet of Man" increases strength and stamina. And overweight people lose the excess weight.

Are we talking miracles here? No, just proper food. The human body works best when it receives its full spectrum of nutrients in proper balance. Anything less is second best. We're talking food, not supplements, pills, organic labels, hormone free, or whatever. It's just regular food, although properly selected. So, what are those foods?

The USDA My Plate food choices are basically the same as the old Food Pyramid which is similar to what Dr. John Harvey Kellogg was preaching in 1900. So we've had 115 years of being told to eat grain, fruit, vegetables, nuts, lean meat, some fish, vegetable oils, and then some sweets. If this is the healthiest diet, then why are Americans experiencing an Omega-3 fatty acid deficiency? Why do Americans need vitamin pills and other supplements? Why are Americans suffering from autoimmune diseases? Why does the cost of healthcare, mostly for treating chronic disease, continue to soar?

Does the fault lie with infertile soils? Is it pollution? Is it agricultural chemicals? Is Big Business to blame? Is it antibiotics and hormones? Is it because consumers do not have a full gamut of healthy choices? Or is the basic nutritional chemistry of what is now our traditional food fundamentally flawed? If the answer is "Yes" to that last question, then we must assume the USDA's dietary advice is dead wrong.

In the late 1970s nutritional scientists were starting to understand the role that Omega-6 and Omega-3 fatty acids played in body function, both mental and physical. In the years that followed they started analyzing foods for those two fatty acids. Only then did they realize that modern traditional foods are the problem. So now we know the often recommended diversified diet of modern foods does not provide all the essential nutrients required for optimal body function.

Are there food choices you can make that avoid this problem? Yes! Amazingly, REAL FOOD is readily available and humans always respond positively when they eat "The Real Diet of Man." Therefore the choice for optimal health is yours. Welcome to my healthy world.

Here's to Healthy Days for You and Yours! It's your choice to make.

> Ted Slanker Slanker Grass-Fed Meat

Chapter One

The Real Diet of Man is Very Simple

Just Another Diet Among Thousands?

It is so confusing. There are literally thousands of diet plans. But how can that be? Are human bodies so variable in their fundamental function that different humans require different nutrients? Or are humans simply part of the more advanced animal kingdom? That's a kingdom where the foundation food is the same for all.

In the animal world I contend that all advanced animal bodies are the same. The fundamental food at the bottom of the animal kingdom's food chain has always been the same and will always be the same. If humans are part of the advanced animal world, then all human bodies are also universally the same. Sure there are some slight variations, but they are very minor in their nutritional requirements. In terms of body chemistry and body parts and functions humans are also very similar to all other mammals.

So what is the appropriate foundation food for animals?

Being Healthier with More Resistance to Disease

Instinctively animals want to avoid injury and death. They do not comprehend health and disease. On the other hand, humans fully comprehend injury, death, a healthy state, and sickness. That's why they normally want to stay healthy and resist disease. But staying healthy because one is under a doctor's care (drugs and operations) is not being healthy. It's being functional while being sick. This is something most people have forgotten. Primarily the unhealthy states in humans are caused by:

- 1) Genetic mutations (born missing parts or functionality)
- 2) Injuries (accidents, wars, etc.)
- 3) Bacteria, viruses, or chemical irritants (poisons)
- 4) Chronic diseases (body failings)

Diet has its greatest impact on chronic diseases, although diet does impact some genetic mutations. A proper diet also assists in healing. Unquestionably a proper diet builds and maintains a stronger immune system. Diet alone still won't make a body completely bulletproof, yet without eating "The Real Diet of Man" bodies are far more vulnerable to failure.

Diet has a huge impact on chronic diseases which are literally body failings caused by abuse. An improper diet is abuse 24/7. Think of it as hammering the body hour after hour, day in and day out. Sooner or later something fails.

Chronic Diseases (Body Failures) Defined

According to the <u>Center for Disease Control</u> (CDC):

In 2010, the 10 most common chronic conditions among persons living in residential care facilities were high blood pressure (57% of the residents), Alzheimer's disease or other dementias (42%), heart disease (34%), depression (28%), arthritis (27%), osteoporosis (21%), diabetes (17%), Chronic obstructive pulmonary disease (COPD) and allied conditions (15%), cancer (11%), and stroke (11%). The residents ranged in age from 18 to 106 years.

Note that most of the residents had more than one body failing. Almost half of all Americans currently live with at least one chronic condition such as heart disease, diabetes, asthma, or COPD according to the CDC. Maybe if all chronic conditions were included, the entire nation is sick. For instance, being overweight is a chronic disease. Hay fever, ADHD, hemorrhoids, and acne are chronic diseases.

Practice Fusion's Research Division <u>data from 2010</u> shows the top 20 most common conditions diagnosed by primary care and specialist physicians.

Hypertension Hyperlipidemia

Diabetes Back pain

Anxiety Obesity

Allergic rhinitis Reflux esophagitis

Respiratory problems Hypothyroidism

Visual refractive errors Osteoarthritis

Fibromyalgia/myositis, neuritis Malaise and fatigue

Pain in joint Acute laryngopharyngitis

Acute maxillary sinusitis Major depressive disorder

Acute bronchitis Asthma

But that's just the beginning of the actual list! Multiple sclerosis, Autism, Crohn's, and Parkinson's disease are becoming almost commonplace. Alarmingly, there are so many different diagnosable chronic diseases that the actual total number of them may not yet be known! The upshot of all this disease is that fully 18% of our GNP goes to healthcare and of that 86% is for treating chronic diseases. That means 15.5% of the GNP is spent on "treating" chronic diseases.

Compare that with what Americans spend on food. Only 9.7% of the GNP is spent on food and that is less than any nation on earth. In terms of U.S. Household income, only 6.8% of personal income is spent on food.

Naturally, food alone will not create the optimally healthy body. It is the foundation though. It is like building your body on a base of solid rock or on shifting sand. If all the other checks are in the box except diet, the body will still be undermined.

Here are the other primary factors that have a bearing on health and disease.

Genetics plays a role of course. This does not mean if your parents had heart disease you'll have heart disease. That approach implies human bodies are designed to fail. To the contrary. By nature bodies are designed to survive. The family history approach only indicates how your body might fail if it is abused to the point of failure like your parents abused their bodies. Therefore if you eat proper foods that do not abuse your body, your outcome will be different from that of your parents.

The genetic issues involve mutations that are outliers to the norm which dramatically impact basic body functions. Often these genetic problems are noticeable at birth or early in life. In some cases they are fatal no matter what a person eats. These genetic outlier issues are relatively rare.

Poisons impact health too. Generally they involve excessive accidental ingestion or exposure to them. This can involve all sorts of natural and man-made toxins. For instance in and near Churchill County, Nevada there is arsenic in the ground water that is 100% natural and "organic." (Of course arsenic is not an organic substance by definition.) Mycotoxins from a moldy house or moldy food are also natural poisons. Grains and many nuts are universally contaminated with fungi. A perfect diet may be of little use against excessive exposure to toxic poisons.

Stress is both good and bad. It can be beneficial and motivating while on the other hand it can cause anxiety and even health issues. Short bursts of stress can even be healthful. Some stress is always better than being bored. On the other hand longer-term stress or excessive stress can wear a body down.

Proper sleep cleans the mind and restores it for the next day's activities. Following the natural circadian rhythm is best. Bodies require this steady rhythm between activity and sleep. Disruptions of the rhythm negatively impacts brain function.

Sunlight is another requirement for a stronger immune system and stronger bones. Vitamin D is produced endogenously when ultraviolet rays from sunlight strike the skin and trigger vitamin D synthesis. Very few foods in nature contain vitamin D. The flesh of fatty fish (such as swordfish, salmon, tuna, and mackerel) and fish liver oils are among the best sources and small amounts of vitamin D are found in animal livers and kidneys, cheese, and egg yolks.

Exercise comes in three forms. Not enough, too aggressive, and just right. A sedentary lifestyle allows a body to breakdown over time. Too much exercise can cause injuries and actually wear out critical parts long before their time. Being physically active is most important.

Having passionate goals that are engaging also energize not only the brain but the body.

A social life involving friends and family has a positive impact on longevity. Being a hermit is detrimental to health and well-being.

Nutrition underpins all the foregoing. Without proper fuel and the required nutritional building blocks all of the above activities are more difficult.

What Will a Proper Diet Accomplish?

All animal bodies require certain nutrients for building the body and for energy to operate the body. Plants are sustainable in that they get their energy from the sun and absorb basic nutrients from air, water, and soils. Animals must eat something for their energy and their nutrients. Just like plants, animals also require very specific essential nutrients. When an animal eats food, its body can "manufacture" many important components and fuel the body's many functions, but there are many essential nutrients a body requires that the body cannot make.

Not all animals require exactly the same specific essential nutrients. But generally, all animals require these basic essential nutrient groups: oxygen, water, energy, amino acids, essential fatty acids, vitamins, minerals, trace minerals, electrolytes, and ultratrace minerals. Many of these essential nutrients are toxic in high amounts and of course if not present in sufficient amounts lead to body failures.

All nutrients are elements or compounds of elements. This is chemistry. For this reason, every food choice must be viewed as a bundle of chemicals. Does the bundle support proper body function or does it not support proper body function?

Consequently, the key to optimal health is the total dietary intake which best provides the entire spectrum of optimally balanced nutrients. A proper diet must be a full time thing. It cannot be accomplished with supplements because no one can calculate the exact mixture required. The appropriate mix of nutrients can only come via proper food selection.

Chapter Two

The Beginning of Sustainable Life Nutritional Basics

The first sustainable life form was a one-celled green plant. It contained chlorophyll, a complex compound that is the agent necessary for photosynthesis to take place. By means of photosynthesis, plants use the sun's energy to convert carbon dioxide and inorganic substances into organic material such as sugars, fats, and proteins.

The following quote is from the 1979 edition of *Funk & Wagnalls New Encyclopedia*. I am quoting this older edition to illustrate the fact that the science regarding the origin of life is not new, it's just all too often totally ignored by the general public.

The lives of plants and animals are dependent upon the photosynthesis that occurs both on land and in the oceans, because this process is the chief means by which energy from nonliving sources is transformed into chemical energy that can be used in the life processes. All the oxygen taken in by animals and plants originates in the photosynthesis process; enough oxygen is produced by 180 square inches of green leaf surface during a summer to supply the average oxygen requirement of a human being for a year. All the food by man and other animals also originates in photosynthesis. With the aid of enzymes, plants convert the products of photosynthesis, called photosynthates, into starch, cellulose, gum, protein, hormones, vitamins, and fats. Terrestrial plants annually produce about 88 trillion pounds of photosynthesized carbohydrates.

One-Celled Plants Were First

Without there first being plants, there would not be any sustainable food sources for animals and animals on their own are not sustainable life forms. So plants were first with the very first green plant being the one-celled plant of the oceans. Soon after came the first animal. It was a one-celled animal that ate the one-celled plant and other one-celled animals. In time, more microscopic complex plants (bacteria, algae, and fungi) developed. These plants are called photoplankton. The microscopic animals (protozoa, crustaceans, jellyfish, worms, and mollusks) are called zooplankton. Together these microscopic plants and animals comprise what is known as the "plankton soup" of the oceans and lakes.

Again from the 1979 edition of Funk & Wagnalls New Encyclopedia.

It has been estimated that 90 percent of all photosynthesis takes place in the oceans. Marine photoplankton is thus directly or indirectly the primary food source of all marine organisms and constitutes the first link in the vast

aquatic food chain. The zooplankton, which feeds on the photoplankton, is consumed in turn by larger animals such as fish and even the largest mammal on earth, the blue whale.

The green plants of the fresh water lakes and rivers were the forerunners of the grasses, legumes, forb plants, and trees on land. As green plants migrated from fresh water sources onto land, so could animals move from the sea, lakes, and rivers onto land. This tie between green plants and animals remains to this very day, so the green plants on land perform exactly the same functions as their predecessors in the water. Consequently, the green leaves of grasses, legumes, forb plants, and trees are the foundation food for all land-based animal life.

In his 1962 text book titled "Exploring the Secrets of the Sea," William Crombie wrote, "Every plant and animal on earth starts its life in the same state as the first living things that were formed in the sea billions of years ago—as tiny blobs of protoplasm. Protoplasm is a combination of water, carbon, oxygen, nitrogen and hydrogen, together with smaller amounts of inorganic substances such as phosphorus, sulphur, iron, sodium, chlorine and magnesium. All these elements are dissolved in the ocean."

Yes, life springs from a small beginning and its development is guided by the invisible hand of the DNA map for each species of plant or animal. In every case a single cell develops first. In the case of more developed life forms the original individual cell divides, then the resulting two cells divide again, and the process is repeated over and over again until a fully developed adult results. Some folks say it's nature's way; for others it is God's way. In either case, it is the way.

Of course the point is not to debate spiritual beliefs; it's all about understanding the fundamentals of nutritional science . . . our nutrition. It's all about identifying the foundation food for both man and beast. For the past few centuries scientists have worked at gaining a greater understanding of life through observations that have grown more sophisticated as technology advanced. In the past 50 years scientists have become very sophisticated in DNA research and other aspects of life far surpassing what was once just speculation or theory. Science today is moving forward at a blistering pace and what was cutting edge just 10 years ago is often considered parochial by today's standards. And just like with so many other scientific advancements in the past, progress today is being attacked by charlatans who tar and feather change and the new found knowledge.

We all begin as one cell. What does this mean? The science is so well established that an excerpt from an old *Funk & Wagnalls* works once again.

The main parts of a living cell are the plasma or cell membrane, the nucleus, which is surrounded by its own membrane, and the cytoplasm, a complex liquid filling the space between the nucleus and the cell membrane. More than a protective barrier, the cell membrane keeps some

substances out of the cell and keeps others in. Substances involved in the functioning of cell life may pass through tiny pores in the cell membrane.

It is significant to note that even though knowledge has grown significantly in the past 40 years, much of the knowledge regarding the foundation of life has remained basically the same.

Essential Nutrients Keep Organisms Healthy

Animals (including man) are quite capable of "manufacturing" many of the nutrients needed for proper body function. But there are certain, very critical limitations in that there are many nutrients that can only come from the food an animal eats. Nutritionists call these nutrients "essential."

Scientists have determined that the "essential fats" in the membranes of cells have a very powerful influence on each cell's ability to function. These essential fats consist of the Omega-6 (n6) family of fatty acids and the Omega-3 (n3) family of fatty acids. Via laboratory experiments on rats and in some cases humans, scientists have determined that the appropriate balance between these fats range from 1:1 to 2:1. That means the n6 and n3 fatty acids must be in nearly perfect balance for good cell function. When the balance between n6 to n3 exceeds 4:1 cells malfunction and advancing chronic disease is measurable.

Fatty acids consist of the elements carbon (C), hydrogen (H), and oxygen (O) arranged as a carbon chain skeleton with a carboxyl group (COOH) at one end. Saturated fatty acids have all the hydrogen that the carbon atoms can hold and therefore have no double bonds between the carbons. Monounsaturated fatty acids have only one double bond. Polyunsaturated fatty acids have more than one double bond. Because there are hydrogen atoms in the molecule it is called an acid. Amazingly, since these fatty acids have been consistently manufactured by leafy, green plants in the same balance since the beginning of sustainable life on Earth and animals ate the plants or ate the animals that ate the plants, no animal body has had to manufacture the essential fatty acids for themselves. Thus this is another of the absolute ties between green plants and animals.

There is another tie that holds the animal kingdom captive to the leafy, green plant. It's the vitamins plants manufacture. Many of the vitamins required by animals and humans come directly from the leafy, green plants or the meats from animals that ate the leafy, green plants. Without this tie animals can experience severe vitamin deficiencies. For instance, after 180 days in a feedlot eating a grain-based ration a steer can lose as much as 80% of the vitamin A that would normally be in its liver and 75% of the vitamin E that would be in its muscle tissues!

Green plants also breathe out oxygen and breathe in carbon dioxide which is just the reverse of what animals and fish do. They also supply energy, amino acids, minerals,

trace minerals, electrolytes, and ultratrace minerals. Additionally, green plants are very nutrient dense in all of the other nutrients animals require except vitamin D, which animals get from the sun.

All animals eat in order to fuel their bodies. It is a necessity that even trumps reproduction. Animals in the wild state do not think about optimizing body and brain function when they eat. They just eat. Good for them though, when they are in their natural green-plant environment, the primary food for every critter in the food chain always has the green leaf at the bottom of the food chain. For literally millions of years this symbiotic relationship between plants and animals has existed and has been reinforced over and over again. Consequently for best function animal bodies are dependent on green plants.

So, what happens if the green plant is replaced with something else?

Chapter Three

What is the Proper Diet for Man?

Learn Your A, B, Cs

The basic tenets of replicating the original diet of man, prior to his invention of agriculture, is that all foods required for optimizing body and brain function must cover three critically important "A, B, C" parameters. Otherwise don't eat them.

- **A.** Low glycemic foods. High glycemic foods are foreign to body function and cause fungal issues that negatively impact the body.
- **B.** Balanced Omega-6 and Omega-3 fatty acids. The 1:1 balance between n6 and n3 is critical for a strong immune system.
- C. Nutrient dense foods. Focus on foods that provide 100% of the nutrients needed for optimal body function. Why eat foods that do not significantly contribute to the needs of the body?

Because we are living in a rather inflexible marketplace where Big Business responds and markets to a consumer-driven society, you'll rarely hear about the basic A, B, Cs of "The Real Diet of Man." That's because "The Real Diet of Man" is simple, eliminates grain, grain-based foods, grain-fed livestock products, concocted foods, nuts and seeds, many fruits, sugar and refined high glycemic index (GI) carbohydrates, all other high GI foods, the drinking of milk and alcoholic beverages, and leaves no room for supplements. In other words, most of the traditional foods are left out! Excluding traditional foods is taboo when it comes to marketing. The public votes with their pocketbook and they demand traditional foods even if it kills them and Big Business can't do anything else but serve the public's demands.

Unfortunately even many of the so-called health food marketers "invent" foods that replicate traditional foods in name, flavor, and nutrition! For instance, corn is gluten free. So what? It's the worst grain that's very high glycemic with a sickening balance between n6 and n3 fatty acids. It is also a host to 22 varieties of fungi. Honey is often recommended as a sweetener, but it is high glycemic. Nuts are used as a flour and for snacks, but nuts are very high in n6 and low in n3. These few examples are highly recommended by many outfits yet they do not meet the standards of the A, B, Cs.

"The Real Diet of Man" also leaves the marketers of supplements, vitamins, fad diets, drugs, conventional medical solutions (drugs and operations), and nearly all foods and drinks little room to make money off their advice and products. It even cuts out the educational system and various government entities because they are not structured for dramatic dietary change. In fact, the USDA is trying to up the ante in the Red Meat War in 2015 by decreasing meat consumption in favor of more plant-based foods, lower fat,

THE REAL DIET OF MAN – How to Regain and Maintain Optimal Health with Food Chemistry and lower salt recommendations that has already destroyed the health of millions of Americans.

Tragically, today most of our nation's modern food system rests on a grain-farming foundation. Grains are high glycemic, nutrient light, with a highly skewed n6 to n3 profile. It will take decades for our nation to shift away from the foundation of grain. That's why "official" nutritional advice suggests small changes such as eating whole grains versus milled grain and taking supplements rather than wholesale changes in the food selections. On the other hand "The Real Diet of Man" is an abrupt introduction of relatively narrow food choices, new tastes, new cooking methods, and new eating habits. It is a shock for many and few consumers are actually willing to adapt to the new paradigm, no matter how sick they are from eating improper foods! (The consumer gets what he demands and if he is not willing to change, then he cannot expect different results.) Our nation's food system is way out of whack and as result virtually all of the food products sold in typical American grocery stores (Whole Foods is typical), fast food joints, and convenience stores have no place in "The Real Diet of Man."

Diet: Simple and Basic

"The Real Diet of Man" is incredibly simple. It does not involve calorie counting, fat measuring, or portion control. There is no such thing as different foods for young people, pregnant women, middle aged people, and old people. There's absolutely no variation for blood type, sex, skin color, hair color, tall people, short people, hard working people, couch potatoes, or one's location. And the diet is the same for healthy people as it is for people burdened with chronic diseases such as cancer, heart disease, diabetes, arthritis, lupus, asthma, allergies, obesity, mental disorders, and on and on.

Anthropologists tell us that about 60% to as much as 85% of early man's food was meat—and it was only grass-fed meat (meat from animals never fed grain). Meat was followed by vegetables (for instance spinach, kale, collards, beet greens, romaine lettuce, etc. followed by broccoli, brussel sprouts, cabbage, etc.). Then, since they were seasonal, at times in very minor amounts there were some nuts and tart fruits (such as squash, berries, small apples, and the tiny wild fruits such as persimmons and wild plums we sometimes find when hiking in the woods). Sure, at times man also lucked out and had some honey. But that was really rare.

As for dairy, modern man is the only beast on earth that figures he needs milk after weaning. Dairy is one of man's most recent agricultural inventions. So all of this nonsense about drinking milk for strong bones and teeth is mythology. It really does not matter if milk is raw or not. It is flat out unnecessary post weaning. To make matters worse, nearly all diary products available today are from grain-fed cows and goats.

Many so-called health experts are telling people to eat fruits, veggies, and whole grains. Many of the veggies I do not dispute, but most of today's highly developed sweet

fruits are essentially sugar shots. Orange juice and potatoes are perfect examples of sugar and refined high-glycemic-index (GI) carbohydrates. Sugar and refined high-glycemic-index (GI) carbohydrates can fuel fungal infestations that can produce mycotoxin overloads. (See Fungus Among Us.) Eating grain disrupts cell function, breaks down the immune system, and feeds fungi if one has a fungal infestation. Virtually everyone today has some fungal contamination within their bodies because damaged immune systems open the door to fungal infestations. So grains, of whatever kind, are taboo as are other food products loaded with Omega-6 fatty acids, sugar, and refined high-glycemic-index (GI) carbohydrates.

Also, the idea that wine, or beer, or booze of any kind is good for you is also a myth. For starters alcohol is a mycotoxin and secondly it leaches DHA (docosahexaenoic acid) out of the brain. DHA, the most abundant fat in the brain, is a major requirement for proper brain function. Consequently, strict moderation is the only approach one can have with alcohol because most people can handle small amounts of alcohol. But beer, many wines, and mixers can have very negative consequences to one's well being.

Get Exactly 100% of Your Nutrient Needs

As you can see "The Real Diet of Man" (which focuses on the fundamental nutritional needs of man prior to his invention of agricultural pursuits) includes little if anything beyond grass-fed (wild) meats, wild caught seafood, veggies (greens and the immature flowers of vegetative plants) and in a very limited way some tart fruits and a spattering of nuts. Excluded foods are grains, grain-based foods, grain-fed livestock products, potatoes, sugar and refined high glycemic index (GI) carbohydrates, all other high GI foods, many fruits, all foods high in n6 versus n3 fatty acids, most dairy products, and nearly all concocted foods especially those laced with sugar, high fructose corn syrup, and preservatives such as partially hydrogenated oils. All modern grocery stores, fast food joints, and convenience stores stock mostly foods excluded from our lists. This is why so many people are suffering from chronic disease and at least 90% of them are overweight. The food is literally killing them—and THEY LOVE IT!

Eating "The Real Diet of Man" is all that anyone requires for optimal health. It is so fundamental that nutritional scientists, those who have studied it, tell us it provides exactly 100% of man's nutrient needs in perfect balance. How could it not? It's the nutritional profile man ate for several million years before he started farming and changing his foods. Those early agricultural pursuits commenced only 10,000 years ago in a couple of regions and then slowly spread throughout the world. In no way could man's body adapt to such an abrupt change in his food in just 10,000 years. Consequently when one eats foods replicating the chemistry of the prehistoric Paleolithic Hunter Gatherer's diet he won't even want to take a vitamin pill or an Omega-3 supplement for fear of overdosing. Yes, it's possible to overdose on Omega-3 fatty acids!

As you can see, the story regarding the proper diet for you, your family members, or any other person on Earth can be told in a few paragraphs. And if people ate only "The Real Diet of Man" the incidences of chronic disease would probably plunge 90% or more. That would devastate the medical community, the drug companies, health insurers, and marketers of fad diet books, supplements, vitamins, and exercise machines. It would make Omabacare obsolete. "The Real Diet of Man" is so simple the caveman always got it right and he never even thought about it. So, you should be able to do it too. Right? Well, I guess that depends on what kind of person you are. If you want change you can't do the same thing as before.

Chapter Four

Food Analysis

Analyzing the Basic Chemistry of Foods

Starting in late 1999 I personally started suppressing a number of chronic diseases—not one, but many, including being overweight. Before that I believed my ailments were normal signs of advancing age. It turns out that was a stupid assumption. That's because as I learned more about food and turned to more nutritious food, my health improved. My health problems had nothing to do with growing old. Obviously I'm much older now yet I'm enjoying far and away better health—all from eating the proper foods for man! Which foods are they? Well, that's the purpose of the tables in the Appendix.

When I changed my diet my body function improved so fast I was amazed. That spurred me on and I kept at it. I increased my portion sizes, stopped cutting off the fat, ate more meat than ever, cut out the grains, granola, sweets, and other junk, ate more veggies, and today I feel great. I not only improved my body physically but also mentally. So, now I KNOW how important it is to eat right.

The A, B, Cs of "The Real Diet of Man" work for everyone who musters the discipline to change and no longer follow the crowd of fat, sick people who are all around us. There is no doubt in my mind that you too can actually stop and at the very least arrest and moderate the symptoms of your chronic diseases by eating "The Real Diet of Man." But you have to change what you eat and avoid all the concocted and traditional foods that everyone else relishes and expects you to eat with them.

Every time I go to the grocery store to supplement my grass-fed meats I am confronted with a huge array of options in the fruit and vegetable department. Theoretically, according to some nutrition advocates, virtually everything in those departments is supposed to be good for you. But I've discovered that one must be very discriminating about their food and lifestyle choices if they want to continue to improve and maintain body function.

In the Appendix, is a list of foods with their A, B, Cs which is glycemic indexes, glycemic loads, Omega-6 to Omega-3 fatty acid quantities, the all-important Omega-3 deficit number, percent of sugar, and overall nutrition loads. The data illustrate that not all vegetables, many fruits, most nuts, and no grains are good for us. Some are downright UGLY! In my opinion, one must concentrate their food choices in the grass-fed meat/wild seafood and vegetable departments and leave the other food groups in the sparingly-eaten or never-to-touch categories. That recognizes the foundation food for all animal life is the green leaf.

Low glycemic foods with evenly balanced n6 to n3 ratios plus the full gamut of nutrients required for animal bodies will naturally address chronic diseases and restore

healthy immune systems. That statement is supported by thousands of studies over the past 30 years. Unfortunately, few "traditional" foods fit that profile. The very best foods are grass-fed meats, wild seafood, kale, spinach, and a few other vegetables. Of course some foods are marginal. But most foods must be avoided altogether and all too often they are the favorites of the masses who line up in the doctors' offices.

Before trying borderline foods one should strive to spend several months eating only the very best foods that unquestionably meet the A, B, C requirements. Heal the body first and learn what it feels like to be healthy before gambling on borderline foods. Once healed, some people find that they can tolerate some of the borderline foods. Others can only tolerate a taste of one every now and then. Some may not be able to eat any of them without experiencing a negative reaction. If you react negatively, avoid it totally.

Caution: Data is Not Always Accurate

In my years of studying nutritional data, I have discovered it keeps changing. There are numerous reasons why.

For decades the government, the actual source for most of the nutritional data published on the Internet, has been contracting out to universities and other sources for studies on foods. There are literally reams of data in the government's various data banks. Some of it is decades old. Some of it is on food products that actually differ from seemingly similar products available today. Consequently a lot of old data is mixed in with modern data and who knows which is best. It's usually impossible to determine how, where, on what, and when the data was acquired.

Some changes in the data are due to more sophisticated equipment. Today, automated equipment can pick up nutrients in a single run that were previously only detectable decades ago by tedious lab work. But improvements in technology do not always indicate greater accuracy. For instance, some machines designed to analyze fatty acids may work great on vegetables but poorly on meats. Unless this is somehow determined, data creeps into the data banks that is incorrect.

Alarmingly, the data on some food products may be wrong because the food products themselves were improperly selected or labeled. I know this happens frequently with grass-fed and grain-fed meats. Some grain-fed meats are not from fully grain-finished cattle and some so-called grass-fed meats are from cattle supplemented with grain while on pasture. Compare samples from those two supposedly dissimilar groups and you'll find little difference!

Next is just the way some data, such as the Glycemic Index (GI), is determined. GI numbers are subjective because not everyone reacts exactly the same way to high glycemic foods—and the number is a measure of how sharply the food raises blood sugar.

THE REAL DIET OF MAN — How to Regain and Maintain Optimal Health with Food Chemistry In addition GI does not take into account the quantity of carbohydrates in the food while GL does.

Always keep these caveats in mind when peering at data.

Glycemic Index vs. Glycemic Load

The website of the Linus Pauling Institute at Oregon State University explains the differences between <u>Glycemic Index (GI) and Glycemic Load (GL)</u>.

Physiological Responses to High- versus Low-Glycemic Index Foods

By definition, the consumption of high-glycemic index foods results in higher and more rapid increases in blood glucose levels than the consumption of low-glycemic index foods. Rapid increases in blood glucose are potent signals to the beta-cells of the pancreas to increase insulin secretion. Over the next few hours, the high insulin levels induced by consumption of high-glycemic index foods may cause a sharp decrease in blood glucose levels (hypoglycemia). In contrast, the consumption of low-glycemic index foods results in lower but more sustained increases in blood glucose and lower insulin demands on pancreatic beta-cells.

Glycemic Load

The glycemic index compares the potential of foods containing the same amount of carbohydrate to raise blood glucose. However, the amount of carbohydrate consumed also affects blood glucose levels and insulin responses. The glycemic load of a food is calculated by multiplying the glycemic index by the amount of carbohydrate in grams provided by a food and dividing the total by 100. Dietary glycemic load is the sum of the glycemic loads for all foods consumed in the diet. The concept of glycemic load was developed by scientists to simultaneously describe the quality (glycemic index) and quantity of carbohydrate in a meal or diet.

GI and GL data range from low, medium, to high. Most nutritionists agree that for the GI the low range is 0 to 55, medium is 56 to 69, and high is 70 to 100. For the GL the low range is 0 to 10, medium is 11 to 19, and high is 20 to 60. The healthiest foods are in the low ranges. I prefer foods with a GI of 40 or less and a GL of less than 10.

Omega-6 to Omega-3 Fatty Acid Ratio

The Omega-3 deficiency is mostly misunderstood by just about everyone including the medical community and many nutritionists. The deficiency cannot be addressed by merely taking 2,000 mg a day of a so-called Omega-3 supplement. That's because the deficiency is defined by Omega-3's relationship to the quantity of Omega-6 in a body. It

is all about balance, not quantity. And the natural balance for animal life is thought to be very close to 1:1 because that replicates the balance in many green leafy plants.

Because we have a grain-based food system most Americans have ratios that are 15:1, 20:1, or even much higher. In laboratory experiments with rats and other critters researchers have determined that when the ratio exceeds 4:1 chronic diseases (both mental and physical) are measurable. So it's no wonder healthcare costs are so high. Nearly everyone is sick and getting sicker.

There have been scores of studies in the past 30 years that show over and over again that people suffering from chronic diseases of all kinds experience some improvement in their chronic disease symptoms when they take Omega-3 supplements. Many of those studies did not measure the ratio, so the degree of actual improvement in addressing the Omega-3 deficiency in those studies was not properly measured. So it's interesting to know that even though the supplementation may not have been enough, it did make improvements in health.

The best Omega-3 studies are those involving large populations. Some years ago scientists discovered that the Inuits in Greenland had the best heart health records of all nationalities. Their Omega-3 Highly Unsaturated Fatty Acid (HUFA) scores are 68%. The typical American's score is about 20%. Populations with scores approaching 70% have virtually no cardiovascular related mortality. <u>Dr. William E.M. Lands</u> is famous in scientific circles for his research involving population studies and Omega-3 fatty acids.

Omega-3 Deficit

One of the failings of the bare bones Omega-6 to Omega-3 ratio in foods is that it can fool you into believing some really bad foods are good. Let's take walnuts for example. They are advertised as being really good sources for Omega-3 fatty acids. But look at the data.

The n6 to n3 ratio for walnuts is a semi-friendly 4.2 to 1.0. But a four-ounce serving of walnuts has 43,195.7 mg of Omega-6 and that creates an Omega-3 deficit of 32,899.6 mg!

That's a huge deficit to overcome and the Omega-6 overload actually blocks the body's absorption of Omega-3 fatty acids. The only way to compensate for Walnut's huge Omega-6 overload is to eat ground flax seed by the cupful. Combine walnuts and flax seed and one's fat intake soars well beyond anything closely resembling "normal" limits. I believe normal limits are very moderate such as one finds in grass-fed meats and green leafy vegetables. Also note in the Food Analysis tables that Walnuts are a poor source for all nutrients with only a 48% Nutrient Load. In other words, it's not possible to live on Walnuts alone.

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		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Good and Not So Good	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Grass-Fed Beef	0	0	60.1	79.4	19.3	0.00%	100%*	0.76 : 1.00
Salmon (Sockeye)	0	0	90.7	1281.4	1190.7	0.00%	100%*	0.07 : 1.00
Lettuce (Iceberg)	10	1	23.8	58.9	35.1	2.04%	98.00%	0.40 : 1.00
Lettuce (Romaine)	10	1	53.3	128.1	74.8	1.00%	100.00%	0.42 : 1.00
Spinach	15	2	29.5	156.4	126.9	0.29%	100.00%	0.19 : 1.00
Kale	15	5	156.5	204.1	47.6	0.00%	100.00%	0.77 : 1.00
Walnuts (English raw)	18	0	43,195.7	10,296.1	-32,899.6	2.5%	48%	4.20 : 1.00

The short table above shows some of the foods with the best reputations for health. But there are hidden traps. Walnuts I've already mentioned. Inexpensive Iceberg Lettuce looks pretty good with its only downfall being a 98% Nutrient Load. Unfortunately, when it comes to Iceberg Lettuce it is nutrient lite across the full spectrum of individual nutrients. It only has about 5% of the nutrient density one gets from Spinach. Kale has twice the density of Spinach. Consequently, for the same quantity of nutrients one must eat about 30 times as much Iceberg Lettuce as they do Kale. That would be impossible to do if one wanted to eat only Iceberg Lettuce and nothing else to sustain life. This also means that in terms of food value Iceberg Lettuce is very, very expensive and Kale is cheap. A more complete table of nutrient comparisons illustrating this example is in the Appendix.

For <u>overall nutrients</u> and best value, grass-fed meats blow everything away. When it comes to digesting food stuffs and getting the best bang for the buck grass-fed meats are tops. For instance, the protein in red meat is highly digestible, around 94% compared with the digestibility of 78% in beans and 86% in whole wheat. Protein from meat provides all essential amino acids (lysine, threonine, methionine, phenylalanine, tryptophan, leucine, isoleucine, valine) and has no limiting amino acids. Protein Digestibility Corrected Amino Acid Score is a method of evaluating the protein quality, with a maximum possible score of 1.0. Animal meats like beef have a score of approximately 0.9, compared with values of 0.5-0.7 for most plant foods.

Since grass-fed animals are grazing green leaves 24/7 they have all the nutrients required for optimal body function already and it's in perfect balance. Consequently, one can eat grass-fed meats exclusive of all other foods and end up with optimal health.

Antioxidants

In April 2000, an advisory group in the National Academy of Sciences (the Food and Nutrition Board of the Institute of Medicine), reported that Vitamin C, Vitamin E, selenium, and carotenoids like beta-carotene should come from food, not supplements. Vitamin C, Vitamin E, selenium, and beta-carotene are the "Big Four" antioxidants.

The reason the advisory group emphasized the need to get antioxidants from the foods we eat is because when people take antioxidant supplements they can overdose and create health problems.

Interestingly, Vitamin E and beta-carotene levels are higher in grass-fed beef compared to grain-fed beef. The Vitamin E levels can be four times higher. The beta-carotene levels can be twice as high. For that reason I believe grain-fed Americans are also experiencing similar Vitamin E and beta-carotene deficiencies in their own bodies. And that may also mean the Vitamin E and beta-carotene levels in grass-fed meats are the exact levels we need in our own bodies.

Grass-fed beef also has Vitamin C and selenium. Vitamin C is very volatile, consequently to acquire adequate <u>Vitamin C levels from grass-fed meat</u> one would have to eat it virtually raw or cooked lightly.

Currently, there are many anecdotal studies that indicate adequate levels of antioxidants are extremely important in fighting off chronic diseases and even aging. So foods that contain antioxidants rank high in terms of being anti-inflammatory. It stands to reason that grass-fed meats may be a perfect source for antioxidants.

What to Eat

As can be seen from the tables in the Appendix, there are many very popular foods that when eaten may lead to health problems. But there are still a number of different offerings in nearly every food category that we can eat and still be confident we will probably improve our body function.

However, to illustrate just how important it is to avoid grains, check this out. If one eats one ounce of old fashioned oatmeal for breakfast, the Omega-6 surplus is 723.6 mg. To offset that one must eat 23.1 ounces of spinach during the same meal to keep his essential fatty acid profile in a natural balance of one to one. If one eats salmon instead of spinach, he needs to eat 2.77 ounces of salmon to reach the appropriate balance. That's just to keep a balance from eating one ounce of Quaker Oats breakfast cereal.

But grain is not the only problem. If one puts one ounce of olive oil on a salad, that creates a surplus of 2,521 mg of Omega-6 that needs to be offset with a corresponding weight of Omega-3 fatty acids. That requires 80 ounces (five pounds) of spinach!

The reason for my concern here is that in order to maintain optimal health, physically and mentally, and a strong immune system the totality of the day's meals must have an equal balance of Omega-6 and Omega-3 fatty acids. The balance of your daily intake of essential fatty acids is one of the three critical components of diet. This means many of today's concocted foods, those radically high in Omega-6 fatty acids, will not work because there are so few foods that are high enough in Omega-3 fatty acids to offset the concocted foods.

Note that grass-fed meats come with the perfect balance of the essential Omega-6 and Omega-3 fatty acids. Additionally grass-fed meats are loaded with all the other nutrients a land animal needs for proper body function. But, if the other foods on your plate are

heavy in Omega-6 fatty acids, you will never be able to eat enough grass-fed meat to offset the imbalance. The only way to offset a food with an imbalance high in Omega-6 is to have other foods that are low in Omega-6 and high in Omega-3s—and they are rare!

The next important criteria is the Glycemic factor. I want my foods to rank low on both the Glycemic Index and Glycemic Load measures. I can have severe reactions to foods that rank medium to high. That's because fungi react to sugars and spew out mycotoxins to "preserve" that stimulating food source within your body.

The third component is total nutrients without overloading those nutrients which can have negative consequences when one indulges in too much of a good thing. I want to get the full spectrum of nutrients from the foods I eat rather than from supplements. And the best measure for the optimum mix is a grass-fed animal. Grass-fed meats and wild caught seafood provide a full spectrum of nutrients in proper balance and they are zero glycemic.

With my food analysis nutrition data, a little imagination, and some effort anyone can create outstandingly nutritious, caveman-replicating meals. But you must be selective. Grocery stores everywhere sell at least some of the foods we can eat with gusto. Also, it's very simple to always have proper food with you while you're on the road or at the office. Yes, you must plan ahead. Right, your brain needs the exercise. And always keep in mind that it even works to take along prepared meats to lunch meetings. Order a salad and add your own grass-fed meat or pop in tuna or sardines (without the oils) from a can. If anyone expresses dismay over your dietary extremism, tell them you honor your body and you want to take care of it.

The person objecting to your discipline and self respect is usually a great example of being physically and mentally what you never hope to be.

Chapter Five

Fungus Among Us

The Most Mysterious Inflammation Source

Our bodies are often dealing with perfectly natural inflammation on many fronts. For instance, if we are exercising regularly and rigorously, we may have sore muscles and joints. The soreness is from inflammation. Our immune systems may be fighting off a minor bacterial or viral infection. We may have a cut or scratch. The healing processes will include inflammation. Therefore some inflammation from time to time is natural.

Omega-6 and Inflammation

The imbalance of Essential Fatty Acids (EFAs) with high n6 levels compared to n3 levels is now becoming recognized as a major cause of inflammation. This is caused by an abundance of n6 fatty acids in excess of the n3 fatty acids that are in the membranes of the cells in our bodies

Dr. Artemis P. Simopoulos, MD, FACN, is the founder and president of the Center for Genetics, Nutrition and Health, a nonprofit educational organization in Washington, DC. Her research work on fatty acids is legendary in scientific circles. In a relatively famous report, *Omega-3 Fatty Acids in Inflammation and Autoimmune Diseases*, published August 15, 2002 by the American College of Nutrition she stated, "The increased omega-6/omega-3 ratio in Western diets most likely contributes to an increased incidence of cardiovascular disease and inflammatory disorders." Then in that report she lists a few of the many chronic diseases associated with inflammatory disorders such as psoriasis, asthma, type-1 diabetes, multiple sclerosis, coronary artery disease, hypertension, arthritis, cancer, Crohn's disease and ulcerative colitis, and other inflammatory and autoimmune disorders.

Fungal Infestations and Inflammation

There is yet another source of inflammation that is not widely known in medical circles. This inflammation is caused by fungal infestations within our bodies. Certain fungi in our bodies put out damaging mycotoxins, especially when we eat high glycemic food such as grains or foods with high sugar content. The definition of a mycotoxin is that it is a toxic chemical produced by fungi. When fungi reside inside our bodies, the mycotoxins they produce can be very disruptive to our normal body functions, especially if our bodies have compromised immune systems. These "disruptions" are often diagnosed as chronic diseases and at times as bacterial infections.

A body's response to mycotoxins is usually why many foods are considered inflammatory. When certain foods are ingested the fungi residing in the body are

"energized" and they spew out mycotoxins to mark their territory and prevent other parasites from eating "their" food. (Fungi live off their hosts.) Quick inflammatory responses to a particular food are rarely caused by the food itself but rather the body's response to the mycotoxins produced by the fungi that thrive on that particular food. In addition, foods contaminated with mycotoxins can also cause similar, rapid, and severe reactions. For instance, peanuts host many varieties of fungi and some people react violently to merely breathing in their airborne mycotoxins.

It is also possible to have many inflammatory occurrences within a body at the same time. Some of the inflammation may be part of the healing process to mend a wound or from muscle strain. Some may be due to an abundance of n6 in cell membranes. At the same time there may be responses to a mycotoxin overload.

A body may exhibit physical reactions to a mycotoxin overload in various ways. It's easy to imagine upset stomachs, intestinal issues, yeast infections, dandruff, skin rashes, acne, arthritis, diabetes, cancer, heart disease, asthma, hemorrhoids, toenail fungus, and other maladies being associated with mycotoxins. But the brain can be impacted too. Mycotoxins can be responsible for depression, rage, anxiety, mood swings, ADHD, autism, and this list too goes on and on.

For these many reasons high glycemic foods, foods high in Omega-6 fatty acids and low in Omega-3 fatty acids, moderate to high carbohydrate foods, and/or foods already contaminated with mycotoxins from a fungus growth may be inflammatory in spite of their reputations. Therefore the inflammatory potential of a particular food is only one warning flag to watch in order to sort out which foods, even though otherwise nutritious, may be harmful. Even anti-inflammatory foods that have a fungus on them can be inflammatory.

A Medical Doctor's View

Very few medical personnel have even a rudimentary knowledge of fungi and mycotoxins But there are a few around. One I know is Dr. David Holland who is with Concentra at the East El Paso, Texas, location.

I call him a "triple-rated doctor" because his graduate degree is a standard medical doctor's degree. His undergraduate degree is in Microbiology and he has a serious "hobby interest" in mycology and mycotoxicology. And, unlike most medical doctors, he is a student of nutritional science

The number of medical doctors in our country with degrees in Microbiology and an understanding of mycology is probably limited to a few hundred at most. Yet fungi may be responsible for or associated with most chronic diseases. Topping off that deficiency is that what most doctors know about nutrition is what everyone else knows—next to nothing. "Next to nothing" is what everyone has learned about nutrition from their local

THE REAL DIET OF MAN – How to Regain and Maintain Optimal Health with Food Chemistry newspaper's Sunday supplements, various newsstand tabloids, and other toot-fruit media sources including many Internet sites.

So in order to go beyond common knowledge, I asked Dr. Holland to review my food tables and my commentary on fungi He did and provided these additional comments which I think are of utmost importance.

Inflammation Factor: Things to Factor In

Ted, there are some things you hit right on the head. For example, eating a grain food may lead to inflammation because it's "feeding" an underlying yeast overgrowth (in the intestines, etc.); therefore, the inflammation that may be measured in the body is not because of the food, but because of what that food does to fungi. Old studies have already established the fact that yeast overgrowth can be stimulated by simply eating a high carbohydrate diet. Fungi in the body are germs; germs and infections cause inflammation.

One thing that most people are erroneously concluding: That inflammation is the cause of such diseases as Alzheimer's, heart disease, obesity, cancer, etc. They see that, in all of these conditions, there is an underlying level of inflammation. However, the obvious fact remains that inflammation is a reaction to something else. Inflammation can cause swelling, heat, pain, and tissue damage, but back up a minute: what caused the inflammation? The body doesn't get inflamed for just any reason. Something has triggered the immune system such as a poison, infection, trauma, or some outside agent. Inflammation can be good—the reaction recruits white blood cells and increases blood supply to the needed area. So, inflammation is not the bad guy here Whatever triggered the inflammation there's where we need to focus our attention.

Another point: I may be wrong here, but simply eating a food does not cause inflammation (assuming that the food is not contaminated with bacteria, toxins, or mold). A food with high inflammation potential—such as corn—does not trigger inflammation. Rather, it simply supplies the needed precursors that fuel the inflammatory response. Thus, the food does not trigger inflammation, but it does increase the inflammation potential. Next time a germ comes around, the body will react in a manner out of proportion to what it might have, had the person been eating foods lower in omega-3 oils rather than omega-6 (pro-inflammatory) oils. And I don't mean to put down omega-6 oils entirely One of them, arachidonic acid, is an essential nutrient that we must get from our diet.

My case above is supported from this, below, taken right from Wikipedia.

"Arachidonic acid supplementation in daily dosages of 1,000-1,500 mg for 50 days has been well tolerated during several clinical studies, with no significant side effects reported. All common markers of health including kidney and liver function[19], serum lipids[23], immunity[24], and platelet aggregation[18] appear to be unaffected with this level and duration of use. Furthermore, higher concentrations of ARA in muscle tissue may be correlated with improved insulin sensitivity. Arachidonic acid supplementation by healthy adults appears to offer no toxicity or significant safety risk. The safety of arachidonic acid supplementation in patients suffering from inflammatory or other diseased states is unknown, and is not recommended."

This, above, would indicate, again, that merely eating "inflammatory" foods does not, in itself, lead to inflammation.

As well, it just so happens that some of the "inflammatory" foods, high on the negative scale, such as corn and grains, are also more commonly contaminated with fungal toxins. Stored grains are all at risk for fungal contamination. Fungi produce mycotoxins, and mycotoxins have been linked to neurologic damage (gliotoxin), blood vessel damage (Aspergillus fungi), cancer (aflatoxin and others), diabetes (streptozotocin), immune suppression (trichothecene mycotoxins). and a host of so-called, "autoimmune" diseases. Is it the food then, or the hitch-hiking molds and their corresponding mycotoxins? The "pro-inflammatory" foods simply bring along their potential to fuel the inflammatory response ... caused by the molds and their destructive mycotoxins. Thus, the danger in eating grains has little—in my opinion—to do with the fact that it may lead to inflammation in the body and much more to do with the fact that grains are commonly contaminated with powerfully destructive mycotoxins; and, these mycotoxins themselves (not the grains) are at the root of the cause of so many diseases.

As a last note, if you want to lower your chances (and that's what it's all about—reducing the odds of disease coming into your life) of disease, or an overactive immune system, then selecting the best choices of foods should be one of your long-term goals. Just know why you're selecting that food.

Another Mycotoxin Voice

To further underscore the science behind fungi and mycotoxins I will quote a paragraph from a <u>lecture</u> by Dr. George J. Wong, Associate Professor of Botany, University of Hawaii at Manoa, Department of Botany, 3190 Maile Way, Honolulu, HI 96822-2279.

Fungal diseases are common place in plants and animals. In such diseases, the fungi are actively growing on and invading the body of their hosts. There is another means by which fungi can cause harm without invading our bodies. When fungi grow on a living organism or on stored food material that we consume, they may produce harmful metabolites that diffuses into their food. It is believed that fungi evolved these metabolites as a means of protecting their food supply by preventing other organisms from eating it. These metabolites are referred to as mycotoxins, which literally means "fungus poisons." Fungi that produce mycotoxins do not have to be present to do harm. If a fungus was growing in, say a grain storage silo, the environment may have become unsuitable for the fungus and it dies. Even though the fungus is no longer alive, while it was growing, if it produced a mycotoxin, it will have poisoned the grains. So for those of you who are always looking to save a little money by buying cheese that has been contaminated with a fungus and cutting out the part where the fungus is growing, perhaps this is not such a good idea. It is possible that the fungus growing on your cheese has produced a mycotoxin that has diffused throughout the cheese, even though the fungus itself has not. The effects of poisoning by mycotoxin is referred to as mycotoxicoses. The knowledge that mycotoxicoses is the result of fungal actions was a relatively, recent discovery. This is understandable since illnesses in this case are due to consumption of mycotoxins that has been released by the fungus and is not directly caused by the fungus. So demonstrating this would not have been an easy task.

Chemicals That Matter Most

If people have been eating a diversified diet, the primary reasons for most of their chronic diseases will be a combination of mycotoxins from fungi and their damaged immune systems (from foods high in n6 and low in n3 fatty acids). The mycotoxins can be produced within our bodies from fungal infestations and/or they can come from already being in our foods. (Dr. Wong mentioned cheese. Dr. Holland pointed to grains and nuts.) Fungi are 100% organic and natural. Wheat can be organic. Sugar can be organic. In these cases the organic label means nothing in terms of nutritional health and food safety. It is the natural chemical compositions of food, the natural mycotoxin

THE REAL DIET OF MAN – How to Regain and Maintain Optimal Health with Food Chemistry contaminates, and the natural pathogen loads which determines a food's nutritional and food safety status. The chemistry of food, the mycotoxins, and the pathogen loads have far more powerful impacts on our bodies than all other contaminants combined!

Chapter Six

The Atomic Bomb of the American Food System

Ignorance is Bliss

If you asked Joe Sixpack to list off the most nutritionally damaging aspects of our nation's food system he'd probably name off fast food, too much fat, beer drinking, overeating, too much salt, soft drinks, and not exercising enough. If you asked the average Upscale Shopper Betty, she would add to Joe's list agricultural chemicals, Big Business, hydrogenated oils, hormones, antibiotics, red meats, sugar, not enough fruits and veggies in the diet, and GMOs.

For the most part both consumer groups miss the mark by more than a country mile in their beliefs about what is good food and bad food and the reasons why contracting chronic disease these days is "normal." That's why both consumer groups are incurring the same long list of chronic diseases at about the same rate.

For starters, let's give the fast food companies a slight break. Fast food is not always bad food. For instance there are salads. Salads are fast and nutritious and many fast food joints sell salads. How about a grass-fed ground beef patty (without the bun), a simple salad, and a veggie for a hearty lunch? This simple meal can be prepared quickly and served in mass. It is even part of the standard fare in some fast food restaurants, but of course it would be a rare offering in American homes. So fast food in and of itself is not the culprit it's simply the basic type of fresh, whole, and concocted foods people eat that is the problem.

Food Safety

When it comes to food safety, in other words contaminants, just about every food borne illness has an organic source. The most prevalent organic sources are bacteria, viruses, molds, and fungi and they are all as natural as rain. They account for nearly all of the food borne illnesses. When it comes to toxins there are many scientific studies reporting on how our nation's foods are loaded with mycotoxins—not sourced from agricultural chemicals but from fungal contamination.

Every form of contamination in foods we eat, water we drink, air we breath, and objects and soils we come in contact with should be avoided or at least minimized when possible. But there is no such thing as a contaminant free environment. And that goes for man-made and/or natural chemical contaminants of which there are many thousands. That's why all animal bodies are capable of thriving even with a broad spectrum of contaminates within the body. If animal bodies could not tolerate modest levels of foreign contaminants, no animal would have survived because there is virtually an

unlimited number of 100% natural chemical contaminants in the environment along with those that man concocts. And just because contaminants are natural, that doesn't mean they are safe by any means. Many natural contaminants are far worse than man-made contaminants. That's why it's not a given that so-called "organic" foods are better foods. It all depends on the contaminate and the dosage.

Firecrackers vs. Atomic Bombs

The dangers from contaminants—natural and man-made—are relatively insignificant compared to the real dangers created by the atomic bomb of our food system. For many years now my position has been that the common concerns expressed by Joe Sixpack and Upscale Shopper Betty are "Lady Finger Firecrackers" compared to the atomic bomb—and the atomic bomb is GRAIN! It is the grain in our food system that people should fear most! It doesn't matter if grain is milled grain, whole grain, GMO grain, nonGMO grain, organic grain, conventional grain, or grain grown in a bubble—grain is grain.

Grain only exists as a food staple because of man's intervention in nature. Grain is very seasonal. It's a seed of an annual grass plant. Annual grass plants sprout from seed once a year, grow for a few months, mature and produce seeds, then die. Therefore their seeds (grain) are produced only once a year and are available for harvest for only a few weeks at best. For instance, a corn plant (which is a grass) produces at most two ears of seed at one time. Then the plant dies and not until the following year will the seeds that fell to the ground sprout and continue the cycle. So how can corn seeds be a food source for the masses twelve months a year without man being involved? It's impossible. The same goes for the seeds of grasses such as wheat, rye, rice, oats, barley, etc.

Consequently, grain is a foreign food for all animal life because prior to man's invention of grain farming it was not available in abundance even for short periods of time. The reason it can't be found in abundance is because it's merely the reproductive means of the green leaf which is the foundation food for all animal life. For all of time animals of all kinds ate grasses, leaves of trees, bushes, and forbs, and/or other animals that follow the green leaf food chain. They did not sit and wait for seeds to mature once a year. All of the various green plant sourced foods are available in one form or another throughout the year. But what about the seeds? Well, when animals graze grass plants they eat most of the immature green shoots that eventually become the stalks that produce the seeds. If plants did not produce an abundance of seeds, they would soon become extinct.

How Ruminants Graze Green Plants

Let's take a look at a field of wheat grass as it would be in its wild state in the grasslands. Shortly after the seeds laid down the previous year sprout, animals will come by and graze the lush green leaves. By the time wheat plants mature four or five months

after sprouting, very few of them will have actually produced seeds. Consequently the tall stalks topped with seed heads are scattered around here and there in a field of what is now a crop of grass of a different species. So the animals keep grazing the green leaves of the new grasses while ignoring the few standing wheat stalks waving in the breeze with their crowns of seeds. Eventually the seeds drop to the ground and are no longer visible. For a caveman to harvest the seed before the seeds dropped he would have to cover a considerable area and then he'd only end up with maybe a handful of seeds. That would only happen once a year, much like gathering wild persimmons.

And for millions of years that was the way it was. Animals ate green leaves and other animals. They did not eat grain. Consequently, since the chemical makeup of the green leaf differs significantly from that of a seed, animal bodies developed around a nutrient stream that was based exclusively on the nutrients found in green leaves. Interestingly, green leaves are a perfect food source because they can be grazed over and over again and they keep growing back. That makes green leaves a sustainable food source unlike seeds.

Today, as for all of time, all animal bodies are designed to function best with a very specific nutrient stream which is absolutely no more or no less than what is available naturally based on the green plant world. So, when animals, including man, eat grain (corn, oats, barley, whole or milled wheat, brown or white rice, rye, etc.), and other concocted grain-based foods that skew their source of nutrients (including the essential fatty acids in the membranes of all cells) over time their bodies fail in various ways. The failures are called chronic disease and these diseases run the full gamut of both physical and mental illnesses.

Man Changed His Food

After man invented grain farming about 10,000 years ago, grain gained an ever increasing role in his food intake. Grain was then and still is today regarded as a miracle food. It is easy and relatively cheap to produce, portable, easy to store, easy to prepare, and it can be tasty. As man turned to farming he started to live in permanent settlements. This permitted him to grow even more crops. For the most part no one really noticed that the more any society stayed put and relied on grain over those thousands of years, the more chronic diseases people developed. Fortunately, most of the people in the grain producing societies during the past 10,000 years also lived close to nature. Therefore they supplemented their diets with meats from animals that were never fed grain and with vegetables and fruit. Even up through the 1950s here in the United States, although it was on the decline, people for the most part lived in rural settings where they had gardens, fruit trees, and some pastured livestock meat and dairy products therefore grain and grain-based foods were not the mainstay of their diet. But in the past 65 years we've seen grain, grain-based foods and drinks, and grain-fed livestock products become the dominate foods crowding out the foods most needed.

The old USDA Food Pyramid suggesting that grain is the foundation food for optimal health with its seven to eleven servings a day, followed by a smaller number of servings of veggies and fruit, followed by even smaller servings of meat and dairy products was a disaster. Based on that Pyramid grain, grain-based foods and drinks, and grain-fed livestock products became the norm. By the year 2000 the percentage of grain in the American diet totally overwhelmed the small contribution that came from veggies and fruits. The result of these changes in the food mix was an acceleration in incidences of chronic disease to a point where obesity became the norm and other body failings became signs of approaching "maturity" rather than indications something was drastically wrong.

Some of the more "popular" diseases are obesity, heart failure, chronic obstructive pulmonary disease, cancer, diabetes, allergies, arthritis, lupus, mental disorders of all kinds, Crohn's disease, osteoporosis, early maturity in children—and the list goes on and on. Even back in the 19th century livestock textbooks, covering all species of livestock, encouraged the feeding of grain. The benefits were that the animals would grow faster, grow bigger, grow fatter, and mature earlier. Amazingly nutritionists and the medical community have not connected grain's impact on all other animals as being the same on humans and their pets. One needs to look no further than grain for why there is early maturity in our children and many are bigger and fatter.

The medical community continues to assume incorrectly that genetics is the primary culprit for body failures and health problems are merely exacerbated by the same concerns as listed above by Joe Sixpack. In other words, bodies were designed to fail depending on family histories even when eating correctly (following the dietary suggestions of the USDA Food Pyramid?). This is still considered common knowledge because it appears to be correct. But it makes no sense whatsoever. How could it be possible that after four million years of survival of the fittest man's body is "prone" to fail? Why can't people understand that it's the Food Pyramid (now called My Plate) and the composition of the food in it that is the major problem? If that fact were universally accepted, then it would not be a given that bodies will fail, but that by abusing the body with an improper diet it would be prone to fail along historical lines within a family's background.

Back in the 1980s researchers like <u>Artemis Simopoulos, M.D.</u> ran up the warning flags about grain. It was then when people first started hearing more about Omega-3 Fatty Acids. The primary reason you hear about Omega-3 Fatty Acids today is because researchers have since discovered that grain is deficient in that essential fatty acid which is so critical for optimal body function.

Therefore grain is the atomic bomb of the American food system and so far the only response by our government has been the restructuring of the Food Pyramid putting grain on the side with equal footing with veggies, fruits, and meats. It would not be practical for the USDA to come out and condemn grain outright. If it did, there would not be enough "proper" food to go around. Currently, the American food system feeds

316,000,000 people an average of three meals a day. Most of the food is grain, grain-based, and grain-fed livestock products. There is no way a production system this size can turn around overnight. Therefore it will take decades before it becomes common knowledge among the masses that their health will be optimized when grain is no longer in their diet.

You Have a Choice

Unlike the multitude you have a choice. You have learned the A, B, Cs regarding food chemistry which makes it easier to take the necessary steps to assure that you and your loved ones can optimize their physical and mental health. All it takes is will power and the discipline to refuse to follow the masses in their lemming-like drive over the cliff. But many people will refuse to change their ways. They insist on consuming grain, grain-based foods and drinks, grain-fed livestock, and high glycemic foods (sugars). They want the same sensory and social pleasures they have always had and will continue on that path no matter the consequences. This irresponsible behavior cannot be stopped in most cases. I suppose it's like dealing with addicts. Addicts usually continue on their hell-bent paths no matter what until they land in the gutter. And even then, many will not stop. That's just human nature.

Consequently the massive grain-based food system will continue to wrought its destruction on Americans for decades to come as the people blame inconsequential factors that won't even amount to a Lady Finger firecracker compared to the food system's real Atomic Bomb—which is grain. The beat goes on.

Chapter Seven

How To Improve Your Health with Grass-Fed Meats What Do We Mean by "Grass-Fed" Meat?

There are many misleading labels in the food industry. Just because a label states that meat is "free range," "natural," "organic," "lean," "heart friendly," "select," "choice," or "prime" doesn't mean that it's actually grass-fed. The U.S. Department of Agriculture considers grain-fed and organic meat to be "natural" meat. In most cases those nice sounding meats have been grain-fed, grain-supplemented, or grain-finished. All premium meats are also grain-fed. In the same vein, some producers think that if their cattle are on pasture and are fed "only a little" grain as a "supplementation" they still qualify for the grass-fed label. Not so but the USDA's rule book is more lenient.

Other label traps many people fall for are "lean," "free range," "humanely raised," "hormone free," and "vegetable-fed." In terms of nutrition, those labels are meaningless. Of course we all support proper animal handling techniques. But to imply that only Mom-and-Pop outfits provide proper care of animals is slanderous and unprofessional. That's because on average the larger ranches and processing plants have the very best practices in animal handling and care!

The point is, when it comes to food, the most important factor to consider is the nutritional component. In that respect the only important difference between meats is what the animals were fed. All grass-fed, grass-finished meats have 100% of the nutrients required by man in perfect balance. Grain-fed meats, no matter how they are labeled, are anemic and nutritionally deficient. Grass-fed meats are the most perfect food for optimum health. That's what really counts.

All domestic livestock, cattle included, evolved on a diet of green leafy plants (mostly grass). That is God's way. The green plant was the first sustainable life form and animals by themselves are not sustainable. They must eat something and for all of time animals ate virtually no grain. They either ate green plants and/or they ate other animals that ate green plants or other animals. Consequently, the green plant has always been at the bottom of the food chain.

These straightforward points are very important because nutritional scientists report that many of America's leading health problems are caused by diets top heavy in omega-6 fatty acids versus omega-3 fatty acids. Quantities of Omega-6 fatty acids are very high relative to Omega-3 fatty acids in grain, nuts, some fruits, some vegetables, and all grainfed animal products. On the other hand, Omega-3 fatty acids are about evenly balanced with Omega-6 fatty acids in green leafy plants on land and even in the sea.

The science behind fatty acid ratios makes the health benefits of naturally raised, grass-fed beef and other grass-fed livestock rather ironclad. Yet there is much more to the story. Dietitians like CLA (conjugated linoleic acid) because it is a fatty acid that reduces the risk of cancer, obesity, diabetes, and a number of immune disorders such as lupus and arthritis. It too comes from grass, and grass-fed beef can have up to 20 times more CLA than grain-fed beef.

Another factor rarely taken into account is mycotoxins in animal fats. Cattle fed fungi-contaminated grain with high mycotoxin loads will store the mycotoxins in their fat deposits. Mycotoxins are virtually indestructible. Cooking has no impact on them. Therefore it is entirely possible to get mycotoxin loads from eating perfectly normal looking grain-fed meats.

There is no question that livestock are what they eat. Many studies indicate they are healthier when they are raised on lush grasslands rather than grain. Just like livestock, humans are what they eat. This means good health stems from a proper diet and that can lead to reduced healthcare costs, a longer life, improved mental alacrity, feelings of security, better self-esteem, and independence from the medical establishment.

Here are some issues that can be addressed by eating grass-fed meats:

Obesity: Most Americans struggle with obesity. The average American eats 66.5 pounds of beef per year (a paltry sum). A switch from grain-fed beef to grass-fed beef saves 17,733 calories per year. Better yet, obese people who change their diets to foods providing the proper fatty acid ratio can lose weight while consuming the same number of calories. ¹

Diabetes: A diet enriched with omega-3 fatty acids can help prevent insulin resistance in humans for it lowers body weight, blood pressure, and triglyceride levels.²

Heart Disease: After cattle have spent four to six months in a feedlot eating grain, their meat has four to six times more fat, twice as much saturated fat, and as little as 1/10 the quantity of omega-3 fatty acids compared to meat from grass-fed cattle.³ People with diets rich in omega-3 fatty acids are less likely to have high blood pressure or irregular heart rhythms, and are half as likely to die from heart attack or stroke.⁴

Cancer: Heart patients who followed an omega-3-rich diet for three years not only had a 70% reduction in the risk of dying from a heart attack, they had a 61% reduction in the risk of dying from all types of cancer. ⁵

Mental Disorders including Attention Deficit Syndrome and Alzheimer's Disease: Your brain is largely composed of fat, and omega-3 fatty acids are the most important of those fats. That's why a diet with an adequate level of omega-3

fatty acids lowers the risk of mental disorders including depression, aggressive behavior, attention deficit disorder, schizophrenia, and dementia. ^{6, 7}

E. Coli Bacteria Infection: Livestock fed corn silage and animal byproducts are more likely to carry E. coli 0157:H7 than other livestock, such as grass-fed livestock. The gastric juices in the human stomach destroy 99.99% of the normal type of E. coli found in grass-fed livestock. A high percentage of the acid resistant E. coli from grain-fed livestock will survive the same acid bath in the human stomach and can cause major health problems. 9

These are only a few of the health benefits that are gained from eating grass-fed livestock products. Besides health there are additional benefits from raising livestock on lush grasslands; their natural environment. Nutrients are recycled naturally resulting in healthier soils and pastures. The economics of agriculture shifts away from confinement operators back to local producers in the rural communities. And the list benefits goes on.

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Chapter Eight

Food Addictions

Addictions Come in Many Forms

Addiction describes a pathological disorder such as an excessive craving for a substance or activity that when in excess is quite often harmful and/or illegal. Although an activity may not always be harmful, most of us immediately think of alcoholism, smoking, and drug abuse when addictions come to mind. But addictions include other activities such as playing games, sex, working, gambling, shopping, relationships, speeding, stealing, exercising, eating what you've always eaten, and even impulsively eating certain foods.

All of us have experience with addictions. Not only our own, but those of our acquaintances. Some addictions are so commonplace they are accepted as normal activity. But addictions in general are not the focus of this chapter. My focus is on addictive eating habits and there are a surprising number of them.

Food addictions come in diverse forms. Some people can't stop eating and they graze all day. Some people starve themselves, afraid they will gain an ounce. Some overeat at every meal. Nearly everyone craves certain flavors, textures, sweets, salt, crunch, soft drinks, alcoholic drinks, cold, hot, bitter, spicy, convenience, dining out, and/or more. Additionally there are the many social/sporting events, holidays, and traditions that revolve around food preparation and consumption. Could the list of addictions even include mental perceptions or beliefs that proper foods can only be organic, free range, kosher, biblical, fat free, vegetarian, non GMO, gluten free, and/or have other descriptive nomenclatures not associated with the basic A, B, Cs of what is and is not fit to eat?

Mastering the Bliss Point

The idea that people can have food addictions is relatively new in psychiatry yet the food industry has been marketing into food addictions for decades. It's not that the food industry has evil intentions, it merely wants to increase profits by getting consumers to prefer their products over those of the competition. They achieve that by satisfying the consumers' demands. For instance, if consumers preferred grass-fed beef over grain-fed beef, you can rest assured the food industry would flood the market with grass-fed beef overnight!

To determine consumer preferences, all large food companies spend millions of dollars per year on tasting panels and analysts. Each study precisely rates the many variables in one processed food product to determine the "bliss point" in consumer

preference. The analysts make hundreds of minute variations of the same product and then record the responses from their panels. By the end of the study, they know exactly how to tweak the ingredients and cooking methods, packaging, and advertising to "master the bliss point."

When the bliss point for a product is mastered that product is literally designed to make the consumer physiologically and mentally dependent on it. Instead of eating it once a week, it may become a daily event. A daily event may become hourly, and so on. Maybe you remember the Lay's Potato Chips slogan, "Betcha can't eat just one."

Are You a Food Addict?

To determine if you are a food addict, a psychiatrist would ask the following questions:

- Do you eat differently in private than when with others?
- Do you eat in secret?
- Do you eat or snack even when you're not hungry?
- Do you want to eat when you are depressed or feel out of sorts?
- Do you eat large meals and then purge by vomiting or by taking laxatives?
- Do you eat foods that will cause your body to have a negative reaction?
- Do you eat foods that you know are unhealthy over the long term?
- Do you have feelings of guilt after you eat?

All addictions involve loss of control. Addictions are both physiological and psychological. So if you have answered "yes" to even just one question, the psychiatrist would consider you to be a food addict!

Strangely enough, people with food sensitivities have cravings for the very foods that cause their negative mental and physical symptoms. For example, diabetics and people with bipolar disorder, depression, and loneliness often crave sugar. Obese people crave foods with all the wrong fats, and so on. When these people eat sweets or a bag of potato chips they get a high. But soon after they suffer feelings of guilt which is even more depressing. In turn that means they eat more of the same to restore the lost high. They are out of control.

No one class, sex, or age of person is immune to food addiction. It may be overeating, craving for sweets, salt, crunch, or a compulsion to count calories that is the addiction. Beyond that, nearly everyone is addicted to the foods they have been eating. It is this addiction that keeps nearly 100% of all the people who have heard of "The Real Diet of Man" from changing to it even when they know that decision may represent the difference between life or death. Most people are hung up on the same flavors, same

foods, same appearances, same levels of convenience, same restaurant fare, and same aromas regarding the foods they've been eating during the past year or more.

Is There Any Hope?

Yes, but like dealing with any addiction, breaking a food addiction is not easy and it always starts with recognizing and accepting the fact that there is a problem. Then one must exercise tremendous discipline. The proper diet must be identified. Then a manageable program must be initiated. It is a rare individual who can change abruptly. Most people will have to set out a plan whereby new foods are introduced and over a period of weeks the consumption of old improper foods are slowly eliminated. It also helps to participate in some physical exercise.

To implement a habit change ask yourself these three specific questions:

- 1) "What do I need to do?"
- 2) "When should I start?"
- 3) "What am I going to change and how will I make that change?"

This is not just a mental exercise. Write the questions down with your answers below each question. Carry the piece of paper with you. Refer to it as often as necessary to stay the course. After 30 days start over by writing down the questions and answers once again. Repeat this process until the new habit is formed.

The time it takes to break addictions varies. For heroin and other opiates it can take over 150 days. Most people take 90 to 120 days to break serious addictions. Luckily, the palate can adjust quicker than that. An old saying is you won't really like a food until you've eaten it 21 times. I don't know how true that is, but for sure in time your mind will recognize real food as good tasty food if you eat it numerous times without reintroducing the old food it replaced. Sure, you'll fondly remember the old foods, but by exercising discipline and being proud of your new-found appreciation of the better foods you can whip your food addictions.

Chapter Nine

Let's Blame Modern Agriculture for Our Diseases

Who Is Responsible for Food Safety and Nutrition?

Americans are sick, sick, sick. Most of their diseases—mental and physical—are chronic diseases which are body failures. Nearly 100% of all body failures can be attributed to eating "bad" foods.

As the realization has sunk in over the years that the cause of chronic disease is a result of eating improper food, the mob has chosen to strike out at the source—modern agriculture. The masses in their ignorance blame most, if not all, of the highly sophisticated practices utilized by modern farmers and ranchers as reasons for the explosion of chronic diseases.

This lynch-mob-like reaction doesn't even begin to take into account that there's just a tiny fraction of the total citizenry employed in agriculture today and they produce enough food to feed 318,000,000 people here in the United States alone with an average of three meals a day. And they are doing it with fewer land resources per person fed than at any time since the dawn of agriculture. The food produced in the United States still ranks as among the safest in the world and its cost is the lowest in the world in terms of disposable income. Instead of recognizing the miracle of modern agricultural, the mob wants to destroy it in their misguided quest to improve the fundamental nutrition of the grain-based food supply.

This insanity, yes insanity, is typical of a mob. Instead of changing the foods they eat, they demand to eat the same foods but insist that their favorite foods be produced in a completely different way, one that will supposedly make the same foods more nutritious. This high level of ignorance and outright stupidity is really appalling, but that's the mob in action.

I call this insane movement for more nutritious and safer food *The War on Modern Agriculture*.

The War on Modern Agriculture

Why do I think this movement is insane? Well, for starters the nutritional characteristics of grain-fed meats, vegetables, grains, fruits, and nuts are based on the fundamental chemical characteristics of the products themselves, not on how they are raised or grown. Plants do not know the difference between so called man-made fertilizers and cow poop—therefore the type of fertilizer has absolutely no bearing on the plants' nutritional characteristics. Agricultural chemicals are designed to be used in food production and when used properly they are safe. In other words, organic tomatoes may

not be as safe as "regular" tomatoes that were sprayed with a fungicide! That's because fungus on a tomato produces mycotoxins! Some mycotoxins a very dangerous "organic" poisons.

The greatest chemical contamination on and in our foods is mycotoxins produced by naturally occurring organic fungi and molds! And yes again, some of the other food safety threats come from fecal contamination. That kind of contamination can be sourced to organic fertilizers, unwashed hands, and poor food handling techniques in the modern kitchen. Sure there are other sources of food borne illnesses, but by and large even if all incidences of food poisonings are taken into account their total impact on public health is minuscule compared to the number of people who are literally suffering big time from chronic diseases.

So what is the cause of all these chronic diseases? Well, since all chronic diseases are body failures they can be blamed on eating bad foods. That's because our bodies are built with the chemical properties of the various foods we eat. And the worst foods are grain, grain-based foods, grain-fed livestock, and high glycemic foods. This means that if Americans changed their eating habits by avoiding those foods they could greatly reduce the prevalence of chronic disease. If people made those changes, as the demand for different foods increased you can bet your bottom dollar that the highly efficient and motivated agricultural industry would respond by delivering the new food products people wanted.

The war on modern farming and ranching is not only a hardship on everyone in the food business from producers to processors to retailers, but it also negatively impacts Slanker Grass-Fed Meat and other grass-fed meat marketers. Here we all are not only providing the proper food for man but we're also trying mightily to teach the masses what is and is not nutritious food. The reason we are negatively impacted is that blanket criticism and negative articles about production and processing practices and even professional animal husbandry methods keep pouring forth from the drive-by media as they take direct aim at modern agricultural production techniques.

As a rancher, I along with other grass-fed producers, are members of the modern agricultural establishment. If we weren't we'd be operating in the 21st century with 18th century technology. And let me tell you, there's been nearly as much advancement in agricultural in the past 100 years as there has been in space technology. In fact, modern agricultural is highly dependent on space technology! So if we turned our backs on technology, as the grass-fed industry grew, the more sophisticated livestock producers who switched from grain-fed livestock production to grass-fed production would immediately have a tremendous financial advantage over those who did not "keep up with innovation." That means they would wipe out the less innovative, higher cost operators in short order.

But the negative impact on us doesn't stop there. The vast majority of agricultural

producers are trying to do the right thing in spite of what the public is being told. They are producing what people want and selling it to them at the lowest price possible. They take great pride in food safety. They take great pride in animal husbandry. They take great pride in the quality of the food they produce. So the sensational stories that use words that sound horrible and make insinuations of deliberately irresponsible actions by the majority of cattlemen are slanderous at best and deception and out right lies at worst. And all producers get painted with the same brush!

This brings me to a popular slam on ground beef. It's <u>an article by Michael Moss</u> published October 3, 2009 in *The New York Times* titled "E. Coli Path Shows Flaws in Beef Inspection." It contains facts, yes. But many of the facts are slanted to leave bad impressions of what are good, well-intentioned practices.

To me the article implies that the profit motivated meat industry doesn't care about E. coli O157:H7 contamination. He says the USDA Food Safety and Inspection Service (FSIS) doesn't care enough about E. coli O157:H7 risks to either clamp down on violators or increase regulatory surveillance. He also claims the method big companies use to make ground beef invites contamination because they don't use whole cuts of meat. Instead he says they use low value meat scraps, some imported from poor countries, that are not even fit for a dog.

In response to his criticism, when it comes to making hamburger nobody in their right mind would grind up a tenderloin roast to make hamburger. But guess what? Some of the bits of meat scraps from trimmings around bones and such are actually tenderloin! Therefore some of the "low value" trimmings are small pieces of the highest grades of meat.

Actually, all meat companies, large and small, fear E. coli O157:H7 contamination in their products. Having to recall a meat product can be ruinous. Quite a few companies have been forced to close their doors for good because of recalls. Consequently there is a "fear of death" motivation for meat processing companies to go the extra mile in assuring that their meats are safe. (The E. coli O157:H7 strain of E. coli is thought by some scientist to be primarily a grain-fed problem. That's because E. coli O157:H7 strain can live in an acidic stomach. Livestock that are fed grain develop acidic digestive tracts. 100% grass-fed animals are less likely to host the E. coli O157:H7 strain. That's why for all of time E. coli was not a major problem. Did this problem surface because of the invention of feeding grain to livestock?)

For years the USDA's Food Safety and Inspection Service has been working to minimize if not eliminate E. coli O157:H7 contamination. There are numerous regulations in place and inspectors have been known to be over-zealous in their efforts. Cleanliness is one of the main focal points of the regulations and that's why most meat plants are substantially cleaner than most private kitchens.

Food Safety Scares in Perspective

Let's move beyond hamburger scares to a <u>report</u> by the Center for Science in the Public Interest regarding the top ten most dangerous foods in terms of food safety for the period 1990 to 2006. Interestingly, no beef products were in the top ten! Let me quote part of the report.

Illnesses caused by these ten foods may be as minor as stomach cramps and diarrhea for a day or two, or as serious as kidney failure or death. Notably, pathogens most commonly associated with meat and poultry—such as Salmonella2 and E. coli O157:H73—also have been repeatedly linked to these food items. In fact, Salmonella was identified as the cause in 33 percent of the outbreaks from the FDA Top Ten. Other pathogens causing the outbreaks associated with these foods include Campylobacter, Scombrotoxin, Norovirus, and Vibrio.

LEAFY GREENS: 363 outbreaks involving 13,568 reported cases of illness

EGGS: 352 outbreaks involving 11,163 reported cases of illness

TUNA: 268 outbreaks involving 2341 reported cases of illness

OYSTERS: 132 outbreaks involving 3409 reported cases of illness

POTATOES: 108 outbreaks involving 3659 reported cases of illness

CHEESE: 83 outbreaks involving 2761 reported cases of illness

ICE CREAM: 74 outbreaks involving 2594 reported cases of illness

TOMATOES: 31 outbreaks involving 3292 reported cases of illness

SPROUTS: 31 outbreaks involving 2022 reported cases of illness

BERRIES: 25 outbreaks involving 3397 reported cases of illness

Note that it was primarily pathogens rather than any mention of agricultural herbicides, insecticides, and fertilizers involved in any of the top ten food safety issues. Pathogens are the primary culprits in food safety and they are natural and organic. This does not mean agricultural applications can never be an issue, but we need to focus on the big picture. So-called organic applications can actually be hazardous and many organic food products were involved in the issues above. I also believe that too often what is blamed on agricultural applications may actually be reactions to mycotoxins, pathogens, a body's own damaged immune system from inflammatory n6 overloads, and other nutritional deficiency issues rather than the applications themselves. Until the nation eats more nutritious foods and everyone is healthier, the agricultural application debate cannot be properly evaluated.

Food Safety Issues Are Not the Major Problem

Food safety in the United States is not a big issue. The 48,206 cases reported for the top ten products for food poisonings are from 1990 to 2006. That's 17 years of accumulated data representing about six trillion meals. Of course, for every reported case there may be many more unreported cases. But still, the food safety risks pale into insignificance compared to cases of chronic disease from eating improper foods.

Naturally the industries with products in the top 10 did respond and just some of their comments follow:

Julia Stewart, Produce Marketing Association's (PMA) public relations director, said the study didn't discuss what the industry and regulators are doing to assure safe foods. "They are blaming the food itself, when food handling is the cause of related outbreaks," Stewart said. "Food safety legislation is imminent. They don't need to try to scare the public in an effort to influence that process."

Stewart said the produce industry prefers to collaborate with legislators and regulators on the proposals. She also said the industry has been working with Congress and agencies for more than a year to educate them on specific food safety challenges so lawmakers can regulate produce to help promote produce safety and public health.

The potato industry issued a response and included safe handling recommendations in an October 6 news release. The Denver-based U.S. Potato Board said naming potatoes on the list requires some clarification to avoid raising unnecessary alarm or consumer confusion. "Potatoes are inherently healthy and are not an inherently risky food and they should not be on this list at all," said Tim O'Connor, the board's president and chief executive officer, in a news release. "The issue is cross-contamination, not the potato itself."

The responses go on in a similar vein across the board, so you get the idea. Food safety is a concern for everybody in the food production, processing, delivery, and retail chain. Nobody takes it lightly. But over all, if in 17 years the top ten worst foods caused 48,206 cases of reported illnesses, that's only 2,836 cases per year on average. If 20 times that number actually fell ill, that's still only 56,713 cases per year. That number is just slightly higher than the number of people killed every year in automobile accidents and there's a big difference between an illness and death!

For sure it would be better if the annual number of food poisonings was zero. That is a notable goal and I applaud all efforts to achieve it. But I've boiled this analysis down to numbers so the popular food problems blamed on safety issues and production methods can be compared with the consequences of eating foods that the human body should not ingest. This brings me back to my initial point. The worst foods are grain, grain-based foods, grain-fed livestock, and high glycemic foods. They destroy immune systems, create imbalances in the important essential fatty acids in the membranes of all cells,

cause vitamin deficiencies, and as a result are a source for nearly all chronic diseases. Consequently, at this very moment probably 200,000,000 Americans are suffering with a chronic disease that was brought on by eating the wrong kinds of foods. On the other hand, a relative handful are suffering because of food safety issues and production methods.

Chapter Ten

Is Organic the Answer?

What is Toxic and What is Not?

What would it be like if for the past 65 years all the food in the world was organic and people had been eating it exclusively? Then let us assume everyone ate precisely the same varieties of plant-based foods and grain-fed livestock products they actually did eat during those 65 years. Would the burden of chronic diseases everyone is experiencing today be the same? Would food safety issues be the same? I contend that the record for health and food safety issues would be almost identical.

For all of time the answer for nutrition lies in the inherent fundamental chemistry of the selected food items—not in how they were raised or how they were bred. Food safety is primarily a pathogen problem and all pathogens are natural and organic. Secondarily, as a problem food safety involves toxins. Toxic chemical contaminants have always been with man and the entire animal kingdom. Just because certain toxic chemicals are natural in the environment, that in no way diminishes their impact. The key therefore lies in dosage.

Toxins are toxins plain and simple. Consequently, for survival overtime all animals had to have been capable of withstanding certain toxic loads and still function normally. This is what the science of toxicology is all about. There is a standard measurement of acute toxicity that is stated in milligrams (mg) of chemical toxins per kilogram (kg) of body weight. It is called LD₅₀ and represents the individual dose required to kill 50 percent of a population of test animals (e.g., rats, fish, mice, cockroaches). Even water in excess is toxic.

The <u>science of toxicology</u> is very advanced as are all sciences. Yet, as with all fields of endeavor the limits of knowledge are still growing. But the idea that if man creates a chemical compound and that alone makes it dangerous, while the exact same compound found in nature is not dangerous, is a certified myth. In addition, to believe that dangerous levels of toxins are allowed in our food supply as a matter of course, that too is a myth.

The man-made "agricultural poisons" some consumers greatly fear are actually minuscule fractional hazards compared to the inherent chemical composition of the foods they choose to eat. For instance, in quick instant oatmeal cereal 2.2% of it by weight is inflammatory Omega-6 fatty acids. Compare that massive dosage with "alarming" reports of a few parts per billion for a "toxic poison." Or compare a few parts per billion

THE REAL DIET OF MAN – How to Regain and Maintain Optimal Health with Food Chemistry of a toxin the body can tolerate with a small pathogen contamination that causes illness in a matter of minutes.

Religious Fervor

The confusion about nutrition and food safety arises with what the public does not know and yet believes with all their heart. No one, not even those with PhDs in agricultural production, fully understands all the nuances of the various agricultural practices. But the general public, which is in no way connected to agriculture, seems to have very certain and fixed opinions on all of the agricultural practices as if they wrote all the textbooks. They just don't realize that what they don't know would nearly fill all the agricultural textbooks now in print.

Yet in their ignorance they think they know it all. So these citified "experts" approach ranchers and farmers, grilling them on their management practices and judging their products based on their answers. Most ranchers and farmers (the professional ones anyway) are dumbstruck with the consumer's religious-like unfounded beliefs. Everyone knows their concerns have to do with health and well-being, but for over 15 years I've gotten thousands of questions from people who's fears are totally baseless. The questions make no sense, yet they want me to babble back nonsensical answers to their nonsensical questions. I refuse to do that, yet many farmers do and laugh all the way to the bank. I must not be as smart because I try to educate people rather than misguide them. Some days I wonder why I persist in this effort.

Most of the mythical problems come about from what people are told by others with agendas. Jeffery Smith, the leading anti-GMO guru has <u>no credentials in genetics</u> and no scientific credibility. He is a charlatan plain and simple who has gotten rich writing books based on discredited science. But some people worship the ground he walks on.

Authors Eric Schlosser and Michael Pollan gave consumers a damning critique of the American food industry in their movie *Food Inc*. I <u>reviewed the movie</u> and it offered no solutions for the nutritional problems plaguing Americans and focused on deception and outright lies to make their points that consumers are victims. They made a lot of money off their copyrighted movie and books while damning many progressive businesses with falsehoods.

Why Question the Farmer but Not the Grocer?

Questions range the gamut. They are about fertilizers, insecticides, herbicides, hormones, antibiotics, vaccinations, health programs, pasture management, pasture grasses, grazing management, cattle breeds, soil microbes, breeding, size of ranch, number of cows, processor, and on and on. Ironically people ask us these questions yet they have been purchasing food from grocers and restaurants for decades without asking the same questions and demanding answers before they would buy anything.

One often-asked question is about the impact fertilizer has on plants. Also, just what is fertilizer? In ALL cases the folks asking these questions know so little about soil and plant science that they can be told anything in a fear-based marketing program and they'll believe it. They have been literally brainwashed by fear-mongering marketing websites, fear-mongering publishers, and fear-mongering media types of all stripes whose agendas are not supported by peer-reviewed science. So they come to me with misguided beliefs and ask questions expecting me to answer with appropriate feel good myths. If I don't do that they think I'm either very ignorant or I'm deliberately poisoning the world. I've had people tell me that oxygen in nature is not the same as when it's captured in a bottle via electrolysis. They believe that anything man refines becomes poison. Yet they have all this man-made stuff on their person and in their homes.

Much of the info about agricultural practices in the "popular media outlets" (which includes many feel good websites) is partially or totally bogus. Consequently many people who are striving to educate themselves in better nutritional practices end up believing in myths. Then they end up going to small producers demanding answers to questions (some that are personal) they would never ask grocery stores or restaurants.

For instance I've had consumers asked for "my" fertilizer ingredient list. Well, what if the answer is various pounds of nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), sulfur (S), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), boron (B), silicon (Si), cobalt (Co), vanadium (V), plus rare mineral catalysts per ton?

That's how professionals discuss fertilizer whether it's cow manure, chicken manure, fish meal, decaying plant matter, or so-called "chemical" fertilizer. Since I'm a professional in the business, I don't know how to tell people totally bogus feel good stuff about how we are "protecting" the environment and the food they eat by not applying chemicals because we are applying something that is supposedly "organic" (non chemical?) such as "manure tea." I just can't stoop that low because I know that if the organic fertilizer is not made up of all or some of the aforementioned chemical elements required to be fertilizer, it will be worthless for growing plants.

So, understanding agricultural practices all boils down to facts and then interpretations of facts. When ranchers use fertilizers they are applying chemicals to the soils. They waste money applying chemicals that are not needed or too much of a good thing. They make more money and do more good for the health of the planet when they apply just the right chemicals in the proper amounts needed to grow their pastures or crops. If the required chemicals come from a fertilizer buggy or cow manure the plants do not know the difference and neither do the soil bacteria. Plants take up nutrients (atoms) from the soil by <u>cation exchange</u>. The myth some people believe which is that an atom from one source is poison while the same atom from another source is not poison is not a physical reality. So these concerns are ridiculous if one understands how plants take up nutrients.

Nobody in agriculture heavily sprays their pastures with pesticides (unless they want to destroy themselves financially). The monetary restraints disappear with city folks who regularly over apply applications on their yards and gardens. City folks make applications that are excessive because they do not operate under the natural forces that saddle all ranchers and farmers which is to be economically and environmentally sustainable. Plus city folks do not have to be licensed nor are they monitored. Additionally, ag chemicals are intended to be used in food production. They have short half lives and break down in the environment. There are virtually no reports at the CDC for poisonings from ag chemicals on food stuffs, but there are tens of thousands annually from people getting sick from eating foods contaminated with 100% natural, organic contaminants.

In the years since late 1999 I've been selling grass-fed meats, I've had to deal with this knowledge-gap problem. The same is true more recently with <u>GMO</u>. What the general public knows about biology, genetics, chemistry and such is really behind the curve in what is actually known. And unfortunately the public is inundated with all these fear-based stories that are mostly meaningless. The absolute loathing for GMO is interesting. The utterly senseless war on red meat is really frustrating.

As for hormones, even spinach has hormones. Every living thing has hormones. Soy has hormones. Most ranchers, including me, do not implant cattle with hormones. Most ranchers, including me, do not feed subtherapeutic antibiotics. But contrary to popular beliefs, in terms of nutrition and food safety, those issues in food are actually like lady-finger fire crackers compared to the atomic bomb. They are virtually meaningless when compared to the fundamental basic chemistry of food selections people make. Glycemic levels, fatty acid profiles, and total nutrient loads are food's critical factors. They are far more meaningful to human health than anything else.

Beyond Organic

It's the basic chemistry of the food items that can be either beneficial or destructive and the quantity of food ingested is HUGE compared to whatever else enters the body. But the mob blames all its health problems on everything except the basic chemistry of the food it demands to eat. The public votes with its dollars and people insist on eating the foods they want. Nobody forces them to eat any food.

Many people have autoimmune disorders and for over three decades now scientists have been saying that the omega-3 deficiency that plagues all Americans can literally destroy the immune system. Additionally, immune system dysfunction can be exacerbated by toxins—mycotoxins produced by fungi within and outside our bodies. And many scientists admit that the greatest toxic load in our foods is the 100% organic mycotoxins from fungi and molds. The toxicity of agricultural chemicals don't even measure in comparison.

When people in agriculture say they are "beyond organic" that literally means they are addressing real issues rather than false issues. Organic is by no means an answer to any chronic disease. Now everyone can believe whatever they want, but if their immune system is damaged, they can be allergic to 100% natural things that in no way a human should react to. For instance, hay fever, which plagued me for decades, had my body reacting negatively to natural grass pollen as if they were toxic chemicals. After I learned how to eat proper foods and my Omega-3 deficit disappeared, my hay fever symptoms did not stop but they did diminish significantly. Was it because I no longer exposed myself to the pollen? No. It was because my immune system functions better now than it has for decades.

In the big picture organic is basically meaningless as related to nutrition and food safety. If our nation's entire food system was organic today, the number of food safety issues would be exactly the same and the incidences of chronic disease would also be exactly the same. So, one can either follow a false pied piper in an attempt to be healthy, or go after the real basic issues of the chemistry of the food itself. In the latter case the only way one can get it right is to eat the foods that meet the A, B, C criteria as set by "The Real Diet of Man." For those of us who take this approach the results are astounding.

The height of this folly may be best illustrated by these products: organic sugar, organic corn, organic cigarettes, organic wine, organic tequila, organic dates, organic potatoes, organic peanuts, organic cheese crackers, organic grain-fed meat, organic bread, organic corn syrup, and the list goes on and on.

Chapter Eleven

The War on Red Meat

Is This or Is This Not Total Insanity?

It's literally mind boggling. The Veggie/PETA crowd, the conventional mythical wisdom nutritional/medical crowd, and even the nutritionists in the USDA have joined forces! As usual most media/Internet outlets embrace their stories without investigating the allegations and are enthusiastically spreading their over 100-year-old myths far and wide. The consequences of their combined misguided efforts will be an acceleration of chronic disease, misery, and suffering for billions of people worldwide along with accelerating the pace of global warming and desertification of the planet.

The myths they push address two aspects of grass-fed meats. One states unequivocally that eating red meat causes a whole host of chronic diseases and is cruel to animals. Read an example here. The other is that raising domestic livestock causes global warming, saps the earth's diminishing resources, destroys the land, and negatively impacts wildlife. Read an example here.

The recently reignited war against red meat is so relentless and ubiquitous today that nearly everyone hesitates at least a little every time they think of eating meat. There is no question that these very old bogus concepts are negatively influencing the dietary decisions of a couple hundred million consumers here in the USA and maybe a billion or more abroad.

Truth Tells a Different Story

Below are many points that provide perspective between the commonly accepted myths and fundamental truths. Accompanying them is a recommended video that is riveting, inspiring, and right on target. Keep in mind that as a professional in agriculture with many decades of living daily in the "wilds" from boy scouting to ranching, I do not have a citified viewpoint. In fact, over the years there were scores of times I walked on the ranch and imagined what it would have been like to be an Indian and live off the land. It was always with wonderment because unless the neighboring land was farmed with crops, the only food I could see for miles around, 365 days a year, was an animal. Sure there were always green plants, but most of them I couldn't eat. Seasonally, which meant for only a few weeks a year, there were a few edible fruit and nuts.

As a rancher my main job is to grow grass and lots of it. Grass is the least expensive and most nutritious feed for cattle. The science and art of growing pasture grasses are critical in the economics and sustainability of every cattle operation. Knowing about plants, the soil, and how cattle interact with nature is fundamental to managing a ranch.

Grass-Fed Red Meat is a Nutrient Dense, Health Food

Eating grass-fed meat is very advantageous for health.

- A) Grass-fed meats are <u>nutrient dense and nutrient diverse</u>;
- B) Grass-fed meats have n6 to n3 ratios between 0.8:1 to 2:1;
- C) Grass-fed meats have zero glycemic indexes and loads;
- D) Grass-fed meats are easily digested;
- E) Grass-fed meats have the same spectrum of nutrients the body requires.

No other food offers all of the advantages of eating the meat of a grass-fed animal. Yet for those of you who are still skeptical, consider all the relevant factors.

The composition of the human body is basically the same as all other mammals. Man is a red meat animal himself with muscles, bones, nerves, tendons, joints, heart, brain, eyes, spleen, and liver similar to other mammals. All animals require basically the same balance of nutrients for optimal brain and body function. In all cases of the animal kingdom, the green leafy plant is the foundation food for life itself. The body of an animal that eats a varied diet of green leafy plants (or other animals that have the green leaf at the bottom of their food chain) will have all of the nutrients required by man in almost perfect balance

Man's stomach is an acid bath which is better suited for digesting meat than grain, vegetables, fruit, and nuts. Stomach acid breaks down the meat into its various nutrients, and many nutrients are absorbed in the stomach and the remainder are absorbed in the small intestine. However, it takes bacteria to break down fiber from plants. Therefore plant material is broken down by bacteria by literally rotting in the colon similar to how a cow's rumen functions.

Blood clots, heart disease, diabetes, and cancer (all chronic diseases) are primarily the body's reaction to a poor diet. These chronic diseases are always associated with highly skewed Omega-6 to Omega-3 ratios and high glycemic foods (sugar). Cancer and fungi infestations require sugar to live and grow. High Omega-6 levels accelerate cancer growth. High levels of Omega-6 versus Omega-3 are inflammatory and cause autoimmune disorders. Sugar causes fungi to spew out mycotoxins that damage body function. (See Am J Clin Nutr 1991:54:438-63. *Omega-3 Fatty Acids in Health and Disease and in Growth and Development* and Fungus.)

Grass-fed red meats of all kinds have properly balanced essential fatty acids (EFAs) and zero glycemic levels. They build heart health, strong immune systems, and all around mental and physical health. Of course, when foods such as grass-fed beef with properly balanced EFAs are mixed with foods that are highly skewed, little benefit is gained. The benefit comes from eating only proper foods not just some proper foods now and then.

Many studies show that grain-fed deli meats, especially those cured with sugar, can contribute to heart disease, cancer, diabetes, and other maladies because they have highly skewed EFAs and are high glycemic. Also, any meat that is charred is carcinogenic. This is why I do not recommend the searing of meat or the overcooking of it with high heat. It's also why my company does not cure deli meats with sugar.

Many people wonder if eating high protein is good or bad for bone health. Protein has been identified as being both beneficial and detrimental to bone health, depending on the study. Long-term studies on meat eating show that a high protein intake is linked to improved bone density and a lower risk of osteoporosis and fractures. All red meats have the 20 essential nutrients for proper bone growth. And all animals that are exclusive meat eaters have extremely strong bones and teeth.

While man can live without eating grass-fed meat, it is more difficult to gain optimal health and brain function when the diet limited to green leafy plants. It is true that green leafy plants are the world's only sustainable life form and they are usually nutrient dense, have properly balanced EFAs, and are low glycemic sources for 100% of the nutritional requirements of man. But because grass-fed meat with all the nutrients that come from green plants is easier to digest, all of its nutrients are readily available to man. Because the green leaf is at the bottom of the food chain man can live on grass-fed meat exclusively and still exhibit optimal physical and mental heath.

Grass-Fed Meat is a super brain food because:

- Grass-fed meats (and also wild-caught seafood) provide healthy balances of Omega-6 to Omega-3 acids which are critical for proper functioning of the brain, nerves, and immune systems. Vegetarians with their diets of grain, nuts, and fruit are often deficient in Omega-3.
- Vitamin B12, primarily found in animal foods, is critical for the health of the brain and nervous system.
- Quite often vegetarians have a Creatine deficiency that adversely impacts their muscle and brain function. The human body produces Creatine from three amino acids—arginine, glycine and methionine and stores it in the muscles. But body production is not as efficient as getting it from grass-fed meat. Once acquired and stored, Creatine can be converted into phosphocreatine and used for energy. The brain consumes about 20% of the body's energy therefore a proper Creatine supply is required for optimal brain function.
- Vitamin D3 deficiency can cause depression and other diseases. Vitamin D3 is only found in animal foods or absorbed into the body by exposure to the sun.
- Carnosine is found only in animal tissues. It reduces damage caused by elevated blood glucose and is thought to be a natural anti-aging nutrient.

How Sustainable Are Crops?

<u>Beef Magazine</u> erroneously claims that grain-fed cattle are more efficient than grass-fed cattle as a food source. But during the 160 days grain-fed cattle spend in a feedlot, 80% of the feed they eat is mostly corn (or another grain), which is farmed. In terms of environmental impact, farming the land is the harsh opposite of the natural act of grazing cattle on pastures.

On its website, *National Geographic* says "We pay a steep price for our reliance on grains." The roots of annual grass plants (grains are large seeds of annual grasses) do not penetrate laterally or as deep into the soil as perennial plants. Annual grain plants require more fertilizer and herbicides to maintain high yields. Tillage leaves the ground bare much of the year. Plowing erodes the soil. "Unless this disease on the land (growing of grain with annual plants) is checked, the human race will wilt like any other crop."



Typical Midwest Wheat Field in the Winter—No Cover



Typical Texas Corn Field in March that has been bare for months.

About 45.1% of our nation's <u>corn crop</u> goes to livestock feed and residual use, 43% to ethanol, and 11.8% for human food, seed, and industrial uses. Ethanol is an unsustainable fuel in that it exists only because it is subsidized by taxpayers

In the United States 90 million acres are devoted to growing corn. The soil fertility (productivity) of farmland is generally far superior compared to pasture and rangeland.

Very conservatively speaking, the 90 million acres of land used for growing corn may be equal to 270 million acres of what is now pasture and rangeland. It may be equivalent to many more acres. It takes two feet of water to raise a corn crop. That's 650,000 gallons of water per acre. Ninety million acres of corn requires 58,500,000,000,000 gallons of water. That's 58.5 trillion gallons of water during just the 140-day growing season plus a lot of farming. Corn requires 125 times more water on its 90 million acres than *Beef Magazine*'s theoretical "extras" of 468 billion gallons of water on 131 million acres for grass-fed cattle.

If people do not eat meat, they eat crops. There is no other option. The crops are mostly grain, followed by vegetables, fruit, nuts, and cotton. Nearly all crops, other than orchard crops (nuts and some fruit), require intensive farming practices. Vegetables, cotton, rice, and grains are the most intensively farmed crops. Intensive farming means fields are disced up and laid bare without any plant life for extended periods of time. Plowing turns over the soil and aggressively aerates it causing extreme carbon loss into the atmosphere. Erosion of plowed fields releases nitrogen into the downstream flow of water that eventually ends up in lakes and oceans. In contrast, because green plants absorb carbon from the atmosphere when they breathe, permanent pasture and rangeland grasses are carbon sinks that resist erosion.

How much water does it take to grow vegetables? I would think any serious environmentalist or vegan would want to know. But they never seem to ask that question about the most nutritious food they should eat. How about an inch of water a week! An acre inch of water is 27,154 gallons times 52 weeks is 1.4 million gallons. In the USA there is slightly less than two million acres planted to fresh vegetable production every year. These crops may require up to 2.8 trillion gallons of water. Vegetable production requires six times more water on two million acres than cattle require on *Beef Magazine*'s theoretical 131 million acres. The only good news is that even though it drinks a lot of water, lettuce is a perfect food for man whereby corn is famous for causing chronic disease because it is high glycemic, low in overall nutrients, and has a very skewed EFA profile. In other words, vast resources of our country are devoted to growing vegan-recommended crops that are known to be detrimental for not only human health but animal health and the plant's health!

How Sustainable Are Livestock?

Just how much water do <u>cattle drink</u>? A mature beef cow drinks about 16 gallons a day on average, more in the summer and less in the winter. In its <u>feces and urine</u> a cow will produce eight gallons of water that is put back on the pasture as fertilizer and water for the pasture grasses. In pastures with average soils, the stocking rate is about one cow to two acres. On rangeland it might be one cow for 20 or even 40 acres. Many ranchers dig ponds that gather rainfall runoff to provide drinking water for their cattle. If the rainfall is 30 inches per year, that is 814,627 gallons of water on one acre and 1.63

million gallons on two acres. In more arid areas the rainfall may be only 10 inches per year. In Nevada and similar areas the rainfall is five inches per year. One cow on two acres drinks about 5,840 gallons of water a year.

Obviously ruminant livestock, just like all the wild game animals of yesteryear, are quite sustainable in terms of water consumption and in giving back to the land. Unless cattle are mismanaged, they never overgraze the land. They require far less water than crops. Animals breathe in oxygen and exhale carbon dioxide. Plants breathe in carbon dioxide and exhale oxygen. Ruminants eat grass and recycle the nutrients in the form of organic matter that feeds soil bacteria forming a natural symbiotic relationship between ruminants, pasture grasses, and soil bacteria. In terms of water consumption ruminants are very thrifty, especially when compared with crops. Because of their unique rumens (stomachs) they eat grasses, forbs, and leaves of trees; food stuffs man cannot digest. Therefore, for the benefit of man, livestock eat inedible food and in turn become a perfect food for man.



Cattle grazing a fall pasture as summer grasses go dormant. Soon the winter grasses take over and its green again..

Is Methane from Livestock a Problem?

Many people complain about methane gas from livestock. Details on the sources of methane can be found on the EPA's website under <u>climate change</u>. Yes, ruminants such as cattle have been producing methane gas since long before man existed. The quantity of methane produced from livestock and wild animals today is probably less than it was a million years ago because there were more animals then than now. Another significant historical source of methane is natural wetlands which have remained relatively constant over time. Other natural sources that are minor in comparison include termites, sediments, volcanoes, wildfires, and oceans. Most of the other major methane sources are new because they are man-made! There are wetlands (rice farming), reservoirs, petroleum production, landfills, coal mining, and the plowing (incorporating) of crop residue into the soil and leaving it bare.

When vegetation rots down into organic matter methane gas is released. When dams are built the flooded plant material rots in anaerobic conditions producing methane gas. Rice production creates methane gas. Bacteria in the soil or any decaying matter in an anaerobic condition buried in the soil produces methane gas. When ruminant animals digest grass, it's in an anaerobic condition (in the stomach) therefore methane gas is

produced. When farmers plow the ground the bare soil releases gases (carbon dioxide and methane). Vegetable farming requires considerable bare soil in order to optimize vegetable production. Grain farming requires soils to be barren for several months of the year.

What if there were no cattle or wild livestock? If livestock did not eat most of the grass, after the grass matured it would die back, lodged in a heap, and the dead grass on the bottom of the pile would rot in an anaerobic condition creating methane gas. Seasonally it might be less than the amount of methane gas belched up livestock. When cattle graze, grass grows back and absorbs carbon from the atmosphere.

Emissions and Trends

Methane does not hold a candle to carbon dioxide in terms of its impact on the planet. <u>NASA's website</u> has considerably more information about the carbon cycle that supports this statement.

Because scientists know which wavelengths of energy each greenhouse gas absorbs, and the concentration of the gases in the atmosphere, they can calculate how much each gas contributes to warming the planet. Carbon dioxide causes about 20 percent of Earth's greenhouse effect; water vapor accounts for about 50 percent; and clouds account for 25 percent. The rest is caused by small particles (aerosols) and minor greenhouse gases like methane.

In spite of methane not being the huge problem some claim, additional discussion of methane and cattle is in order. Among animals, ruminates produce the most methane gas during the digestion process. But even nonruminants such as horses, pigs, elephants, and people can produce some methane gas. About 10% of the gas produced by human digestion is methane.

There are <u>164 living species of ruminants</u> in the world. They range from musk deer, deer, giraffes, cattle, antelopes, sheep, goats, camels and on and on. Before the colonization of America there were probably more than 250 million ruminants of various species roaming all of North America.

In 1500 there were 30 million deer, 50 million pronghorn antelope, 10 million elk, and about 60 million Bison grazing the prairies of the United States. By 1900 the deer, bison, elk, moose, and antelope populations had been nearly totally wiped out. Due to proper hunting management the population of deer in the US is back up to 30 million. Elk, bison, moose, and antelope populations are all much higher than in 1900 and are being actively hunted today. Not counting calves the domestic cattle population was 53 million in 1900. Today's US cattle herd is approximately 90 million. The US population in 1900 was 76.2 million. Today it is 318.9 million.

Since 1900 the increasing number of domesticated livestock has gone hand in hand with increasing numbers of elk, deer, bison, and antelope. Pastures and rangelands have actually improved with modern livestock management methodology. This has improved the habitat for wildlife and those trends are continuing. The increasing wildlife numbers occurred in spite of a tremendous increase in farming, real estate development on prime land, and greater numbers of grazing cattle.

Strangely, most folks want to protect the horse population. Most horses are domestic livestock no different from cows, sheep, goats, etc. There are 50,000 wild horses and 10.1 million domestic horses in the United States and no one is allowed to eat them. They are more protected than the wildlife yet they eat the same food as the wildlife.

A Crucial Educational Video

Alan Savory, who is a biologist from South Africa, is the founder of the <u>Savory Institute</u>. The Alan Savory <u>TED Talk</u> video is a must-see explanation of livestock sustainability and why it's good for the planet. His story is riveting.

Position Summary

- The anti-grass-fed red meat myths are just what they are—myths. The facts are just the opposite of what the vegans and environmentalists claim.
- Grass-fed meat is a super health food.
- Grass-fed meat does not cause chronic disease.
- Grass-fed meat will sustain a healthy life when eaten exclusive of all other foods.
- Livestock have a symbiotic relationship with soils and plants which when properly managed prevents desertification.
- Livestock requires far fewer resources for sustainable production than do crops.
- Wildlife thrives when domestic livestock are used to manage pastures and rangelands.
- Methane gas emissions from domestic livestock today is probably less than was produced by all wildlife 500 years ago.
- Farming of crops is detrimental to the health of soils and causes greenhouse gas emissions.
- Farming consumes huge resources and is less sustainable than raising livestock on grasslands.
- Most of the farmed crops are detrimental to the health of those who eat them.

Chapter Twelve

Wrap Up

Nutrition is all about chemistry. The foundation food for the animal kingdom has always been the sustainable green leaf. The chemistry of the green leaf provides 100% of the ingested nutrient needs of animals. The greatest chemical load we put in our bodies comes from the chemistry of the foods we eat and the air we breathe.

With the invention of agriculture man "invented" new foods starting with grain. Although grain seemed to have many advantages and helped domesticate the world, its chemistry is foreign to animal life. It is so foreign it runs counter to all of the A, B, Cs required to support optimal body function.

Man's invention of agriculture also created an abundance of plant-based foods, many of which are high glycemic. In some cases the abundance permitted year-round consumption of food stuffs that in earlier times were only seasonally available.

Remember the fundamental A, B, Cs of "The Real Diet of Man" are:

- A. Eat low glycemic foods
- B. Eat foods balanced 1:1 in Omega-6 fatty acids and Omega-3 fatty acids
- C. Eat nutrient dense foods

Grain does not meet even one requirement. Many other foods are only marginal. Some are worse than grain. Also, nearly all of the meats produced in the world today are grain-fed. This has resulted in a whole host of chronic diseases that are becoming ubiquitous in not only our country, but all over the world. The result is soaring healthcare costs which now consume a full 18% of our nation's GNP. This is a hidden tax that is crippling our nation financially while also contributing to the desertification of the planet.

People demand traditional foods. But traditional foods themselves are the problem. Without changing the foods consumed, people cannot expect to turn around the accelerating rate of chronic disease in the society.

Are there food choices you can make that avoid this problem? Yes! Amazingly, REAL FOOD is readily available and humans always respond positively when they eat "The Real Diet of Man." Therefore the choice for optimal health is yours. Welcome to my healthy world.

Here's to Healthy Days for You and Yours! It's your choice to make.

APPENDIX

Food Analysis Tables: Good

The first set of tables presents foods with the best chemical compositions for optimizing health and well-being. Note, that as the food lists transition from "Good" down to "Avoid," the glycemic indexes, Omega-3 deficiencies, and nutrient densities get worse.

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Good Meats/Seafood	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Catfish (Wild)	0	0	114.8	606.9	492.1	0.0%	100%*	0.19 : 1.00
Dolphinfish	0	0	40.8	138.4	97.6	0.0%	100%*	0.29 : 1.00
Dungeness Crab	5	1	0.0	359.7	359.7	0.0%	100%*	0.00 : 1.00
Grass-Fed Beef	0	0	60.1	79.4	19.3	0.0%	100%*	0.76 : 1.00
Halibut, Alaska	0	0	31.8	768.9	737.1	0.0%	100%*	0.04 : 1.00
King Crab (Steamed)	5	0	22.7	519.6	496.9	0.0%	100%*	0.04 : 1.00
Lobster (Steamed)	0	3	19.3	605.3	586.0	0.0%	100%*	0.03:1.00
Omega-3 Chicken Slanker Select	0	0	1,693.0	838.0	-855.0	0.0%	100%*	2.02 : 1.00
Oyster, raw	0	4	65.8	762.2	696.4	0.0%	100%*	0.09 : 1.00
Pollock, Walleye	0	0	10.2	438.8	428.6	0.0%	100%*	0.02 : 1.00
Sardines, (Drained Tomato S.)	0	0	139.5	1,920.1	1,780.6	0.0%	100%*	0.07 : 1.00
Salmon (Sockeye)	0	0	90.7	1,281.4	1,190.7	0.0%	100%*	0.07 : 1.00
Shrimp	0	1	31.8	612.4	580.6	0.0%	100%*	0.05 : 1.00
Smelt	0	0	51.0	861.8	810.8	0.0%	100%*	0.06:1.00
Trout (Wild)	0	0	271.0	920.8	649.8	0.0%	100%*	0.29 : 1.00
Tuna, canned in water	0	0	62.4	1,078.6	1,016.2	0.0%	100%*	0.06 : 1.00
Tuna, fresh Bluefin	0	0	60.1	1,471.9	1,411.8	0.0%	100%*	0.04 : 1.00
* Estimated								
Meat Averages	0.6	0.6	162.6	780.2	617.6	0.0%	100.0%	0.21 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Good Vegetables	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Cabbage, Chinese (pak-choi)	10	1	47.7	62.4	14.7	1.2%	100%	0.76 : 1.00
Broccoli Flower	15	3	43.1	146.3	103.2	0.0%	100%	0.29 : 1.00
Broccoli Stalks	15	4	43.1	146.2	103.1	0.0%	100%	0.29 : 1.00
Brussel Sprouts	15	3	51.0	112.3	61.3	2.0%	100%	0.45 : 1.00
Cabbage, savoy, boiled	15	2	20.4	26.1	5.7	2.0%	100%	0.78 : 1.00
Cauliflower	15	3	12.5	42.0	29.5	2.4%	90%	0.30 : 1.00
Collards	20	2	93.0	122.5	29.5	0.0%	100%	0.76 : 1.00
Cucumber (Peeled)	15	1	2.3	2.3	0.0	1.5%	84%	1.00 : 1.00
Kale	15	5	156.5	204.1	47.6	0.0%	100%	0.77 : 1.00
Kohlrabi, cooked, boiled		3	24.9	31.8	6.9	3.0%	86%	0.78 : 1.00
Leeks	15	6	75.9	112.3	36.4	4.0%	100%	0.68 : 1.00
Lettuce (Iceberg)	10	1	23.8	58.9	35.1	2.0%	98%	0.40 : 1.00
Lettuce (Romaine)	10	1	53.3	128.1	74.8	1.0%	100%	0.42 : 1.00
Mint (Spearmint)		2	61.2	383.3	322.1	0.0%	100%	0.16:1.00
Mustard Greens		2	22.7	20.4	-2.3	2.0%	100%	1.11 : 1.00
Onions	15	3	17.4	4.5	-12.9	4.4%	70%	3.87 : 1.00
Pickles (Dill)	15	1	27.2	36.3	9.1	1.3%	82%	0.75 : 1.00
Pickle (Relish, Sweet)		16	67.1	71.3	4.2	29.0%	34%	0.94: 1.00
Pickles (Sweet)		15	52.2	68.0	15.8	26.9%	46%	0.77 : 1.00
Rapini (Broccoli) raw	10	0	19.3	128.1	108.8	0.0%	100%	0.15 : 1.00
Radish		1	19.3	35.2	15.9	1.7%	82%	0.55 : 1.00
Red Peppers (Sweet)	15	2	51.0	28.3	-22.7	4.0%	94%	1.80 : 1.00
Squash (Spaghetti)	20	2	53.3	88.5	35.2	2.6%	88%	0.60 : 1.00
Squash, Zucchini w/skin (Boiled)	10	2	9.1	14.7	5.6	1.7%	100%	0.62 : 1.00
Spinach	15	2	29.5	156.4	126.9	0.3%	100%	0.19 : 1.00
Turnips (Boiled)	30	2	10.2	36.3	26.1	3.2%	80%	0.28 : 1.00
Turnip Greens (Boiled)	10	1	31.7	72.5	40.8	0.7%	100%	0.44 : 1.00
Watercress	10	1	13.6	26.1	12.5	0.0%	100%	0.52 : 1.00
Vegetable Averages	15	3	40.4	84.5	44.0	3.5%	90.5%	0.48 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Acceptable Fruit	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Applesauce, no sugar	35	2	13.6	3.4	-10.2	9.4%	46%	4.00 : 1.00
Cranberries	25	2	37.4	24.9	-12.5	3.6%	66%	1.50 : 1.00
Cherries (Sweet)	22	6	30.6	29.5	-1.1	13.0%	62%	1.04 : 1.00
Grapefruit	25	2	21.5	5.7	-15.9	7.0%	76%	3.80 : 1.00
Lemon	20	2	71.7	29.5	-42.2	2.4%	84%	2.43 : 1.00
Lime		2	40.8	21.5	-19.3	2.0%	90%	1.90 : 1.00
Plum	24	3	49.9	0.0	-49.9	9.7%	70%	1.00:0
Strawberries	32	2	102.0	73.7	-28.3	4.8%	78%	1.38 : 1.00
Fruit Averages	26	3	45.9	23.5	-22.4	6.5%	71.5%	1.95 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-	-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omeg	a-3
Acceptable Legumes	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio	0
Beans (Navy, boiled)	30	9	154.5	200.6	46.1	0.5%	86%	0.77	: 1.00
Beans (Pinto, boiled)	39	10	111.4	155.2	43.8	0.6%	82%	0.72	: 1.00
Beans (Black, boiled)	30	9	143.1	119.3	-23.8	0.0%	82%	1.20	: 1.00
Green Beans (boiled)	30	4	63.5	100.7	37.2	1.6%	100%	0.63	: 1.00
Refried Beans	40	6	229.2	146.3	-82.9	0.4%	80%	1.57	: 1.00
Legumes Averages	33.8	7.6	140.3	144.4	4.1	0.6%	86.0%	0.97	: 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Good Seeds	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Chia Seeds	1	2	6,560.2	19,904.0	13,343.8		68%	0.33 : 1.00
Flaxseed Seeds	5	0	6,703.4	25,869.4	19,166.0	1.8%	76%	0.26 : 1.00
Seed Averages	3	1	6,631.8	22,886.7	16,254.9	1.8%	72.0%	0.29 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Good Oils	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Fish Oil (cod liver)		0	1,060.1	22,380.4	21,320.3	0.0%	26%	0.05 : 1.00
Fish Oil (herring)		0	1,303.1	13,450.9	12,147.8	0.0%	12%	0.10 : 1.00
Fish Oil (sardine)		0	2,283.6	27,321.6	25,038.0	0.0%	12%	0.08 : 1.00
Fish Oil (salmon)		0	1,749.9	40,042.2	38,292.3	0.0%	12%	0.04 : 1.00
Flaxseed Oil		0	14,403.4	60,446.4	46,043.0	0.0%	30%	0.24 : 1.00
Oil Averages	0	0	4,160.0	32,728.3	28,568.3	0.0%	18.4%	0.13 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6	6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega	ı-3
Acceptable Spices	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio)
Cinnamon		11	49.9	12.5	-37.4	2.0%	92%	3.99 :	: 1.00
Mustard (Prepared)	35	2	516.0	553.3	37.3	0.8%	74%	0.93 :	: 1.00
Pepper (Black)	15	19	1,100.0	181.4	-918.6	1.0%	100%	6.06 :	: 1.00
Sage		9	601.0	1,394.8	793.8	2.0%	100%	0.43:	: 1.00
Salt (Table)		0	0.0	0.0	0.0	0.0%	38%	0 :	: 0
Spices Averages	25	8.2	453.4	428.4	-25.0	1.2%	80.8%	1.06 :	: 1.00

THE REAL DIET OF MAN — How to Regain and Maintain Optimal Health with Food Chemistry Food Analysis Tables: Bad

This next set of tables is made up of borderline foods. Not the best for sure.

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-	6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omeg	a-3
Borderline Meats/Seafood	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio	0
Tilapia (Farmed)	0	0	238.1	249.5	11.4	0.0%	100%*	0.95	: 1.00
Trout (Farmed)	0	0	805.1	1,118.1	313.0	0.0%	100%*	0.72	: 1.00
Catfish (Farmed)	0	0	993.5	522.1	-471.4	0.0%	100%*	1.90	: 1.00
Sardines, (Drained Oil)	0	0	4,018.5	1,678.2	-2,340.3	0.0%	100%*	2.39	: 1.00
* Estimated									
Meat Averages	0.0	0.0	1,513.8	892.0	-621.8	0.0%	100.0%	1.70	: 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Borderline Vegetables	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Artichokes, Globe	20	3	178.2	66.9	-111.3	0.8%	92%	2.66 : 1.00
Asparagus	15	2	86.2	32.9	-53.3	2.2%	100%	2.62 : 1.00
Bamboo shoots, raw	20	4	129.2	22.7	-106.5	3.3%	92%	5.69 : 1.00
Beet Greens	20	1	46.5	4.5	-42.0	0.0%	100%	10.33 : 1.00
Celery (raw)	0	1	89.6	0.0	-89.6	1.8%	90%	1.00 : 0
Cucumber (w/skin)	15	1	31.8	5.7	-26.1	1.7%	92%	5.58 : 1.00
Eggplant (Boiled)	15	2	88.4	17.0	-71.4	3.0%	68%	5.20 : 1.00
Green Peppers (Sweet)	15	2	61.3	9.1	-52.2	2.7%	100%	6.74 : 1.00
Okra (raw)	15	3	29.5	1.1	-28.4	1.0%	100%	26.82 : 1.00
Parsley	5	3	130.4	9.1	-121.3	1.0%	100%	14.33 : 1.00
Vegetable Averages	14	2	87.1	16.9	-70.2	1.75%	93.40%	5.15 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omeg	ja-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Ome	ega-3
Borderline Fruit	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ra	atio
Apple with Skin	38	3	48.8	10.2	-38.6	10.0%	54%	4.78	: 1.00
Apple without Skin	38	3	35.2	7.9	-27.3	10.2%	48%	4.46	: 1.00
Apple Juice, unsweetened	41	3	37.4	7.9	-29.5	10.0%	32%	4.73	: 1.00
Apricots	20	4	87.3	0.0	-87.3	9.0%	82%	1.00	: 0
Blackberries	32	3	211.1	106.3	-104.8	4.9%	92%	1.99	: 1.00
Blueberries	40	5	99.6	65.7	-33.9	10.0%	62%	1.52	: 1.00
Orange	43	4	20.4	7.9	-12.5	9.4%	78%	2.58	: 1.00
Peach	42	3	95.3	2.3	-93.0	8.4%	78%	41.43	: 1.00
Pear, Asian	36	2	61.3	1.1	-60.2	7.4%	54%	55.73	: 1.00
Pomegranates, raw	35	7	89.7	0.0	-89.7	13.8%	62%	1.00	: 0
Raspberries	32	3	282.4	142.8	-139.6	4.5%	80%	1.98	: 1.00
Tomato	38	2	90.6	3.4	-87.2	2.7%	98%	26.65	: 1.00
Fruit Averages	36	4	96.6	29.6	-67.0	8.4%	68.3%	3.26	: 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Borderline Legumes	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Green Peas (boiled)	48	6	92.8	21.5	-71.3	5.6%	92%	4.32 : 1.00
Kidney Beans (boiled)	25	10	122.4	192.8	70.4	0.6%	84%	0.63 : 1.00
Lentils (boiled)	37	8	155.2	42.0	-113.2	2.0%	82%	3.70 : 1.00
Lima Beans (boiled)	32	9	133.9	59.0	-74.9	2.7%	76%	2.27 : 1.00
Split Peas (boiled)	45	8	155.6	31.8	-123.8	3.1%	72%	4.89 : 1.00
Legumes Averages	37.4	8.2	132.0	69.4	-62.6	2.8%	81.2%	1.90 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Borderline Nuts	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Coconut (raw)	10	2	415.0	0.0	-415.0	6.3%	40%	1.00:0
Macadamia (roasted)	10	0	1,477.6	222.5	-1,255.1	3.8%	40%	6.64 : 1.00
Nut Averages	10.0	1.0	946.3	111.3	-835.1	5.0%	40.0%	8.51 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Borderline Seed	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Mustard Seed		10	2,937.1	3,039.1	102.0	7.0%	84%	0.97 : 1.00
Seed Averages	0	10	2,937.1	3,039.1	102.0	7.0%	84.0%	0.97 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to	
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3	
Borderline Oils	Index	in 4 Ozs.	0 0		Surplus/Deficit	Sugars	Load	Ratio	
Coconut Oil		0	2,040.7	0.0	-2,040.7	0.0%	22%	1.00:0	
Macadamia Nut Oil		0	2,440.8	180.8	-2,260.0	0.0%	28%	13.50 : 1.00	
Olive Oil		0	11,071.2	863.1	-10,208.1	0.0%	28%	12.83 : 1.00	
Sunflower, high oleic (70%+)		0	4,088.6	218.0	-3,870.6	0.0%	30%	18.76 : 1.00	
Oil Averages	0	0	4,910.3	315.5	-4,594.9	0.0%	27.0%	15.56 : 1.00	

THE REAL DIET OF MAN - How to Regain and Maintain Optimal Health with Food Chemistry Food Analysis Tables: Ugly

Here are the high glycemic, Omega-3 deficient, nutrient light foods to shun.

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-	-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omeg	a-3
Meats/Seafood to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio	
Chicken Breasts (Conv.)	0	0	1,973.2	136.1	-1,837.1	0.0%	100%*	14.50	: 1.00
Grain-Fed Beef	0	0	234.9	12.5	-222.4	0.0%	100%*	18.81	: 1.00
Pork Fresh (Conventional)	0	0	2,446.6	203.8	-2,242.8	0.0%	100%*	12.00	: 1.00
Turkey, Ground (Conv.)	0	0	2,038.7	124.6	-1,914.1	0.0%	100%*	16.36	: 1.00
Turkey, w/Skin (Conv.)	0	0	1,678.3	136.1	-1,542.2	0.0%	100%*	12.33	: 1.00
* Estimated									
Meat Averages	0.0	0.0	1,674.3	122.6	-1,551.7	0.0%	100.0%	13.65	: 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-	-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omeg	a-3
Vegetables to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio	
Beets (Boiled)	64	5	65.8	5.7	-60.1	6.6%	74%	11.54	: 1.00
Carrots (raw)	47	3	130.2	2.3	-127.9	4.7%	84%	56.61	: 1.00
Carrot Juice	45	4	69.2	10.2	-59.0	3.8%	86%	6.78	: 1.00
Garlic	30	18	259.3	22.7	-236.6	0.7%	92%	11.42	: 1.00
Parsnips	97	6	46.5	3.4	-43.1	4.5%	78%	13.68	: 1.00
Pickle (Relish, Sweet)		16	67.1	71.3	4.2	29.0%	34%	0.94	: 1.00
Pickles (Sweet)		15	52.2	68.0	15.8	26.9%	46%	0.77	: 1.00
Potatoes, Russet (baked)	75	11	36.3	11.3	-25.0	1.0%	80%	3.21	: 1.00
Pumpkin (Boiled)	75	2	2.3	2.3	0.0	0.8%	100%	1.00	: 1.00
Rutabagas (Boiled)	72	4	43.1	64.7	21.6	5.8%	84%	0.67	: 1.00
Squash, Acorn (Baked)	50	4	24.9	42.0	17.1	0.0%	100%	0.59	: 1.00
Squash, Butternut (Baked)	50	4	15.9	27.2	11.3	2.1%	90%	0.58	: 1.00
Squash, Hubbard (Baked)	50	6	110.1	183.7	73.6	0.0%	90%	0.60	: 1.00
Sweet Potato (Baked)	54	10	68.0	4.5	-63.5	6.5%	90%	15.11	: 1.00
Vegetable Averages	65	8	70.8	37.1	-33.7	6.61%	80.57%	1.91	: 1.00

			4 Oz Serv.				Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Fruit to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Avocado	5	2	1,916.0	124.7	-1,791.3	0.9%	70%	15.36 : 1.00
Banana	62	9	51.9	30.6	-21.3	12.4%	56%	1.70 : 1.00
Cantaloupe	65	3	39.6	52.2	12.6	7.9%	78%	0.76 : 1.00
Dates (Deglet Noor)	103	44	18.1	3.4	-14.7	63.3%	40%	5.32 : 1.00
Figs (Dried)	61	33	391.2	0.0	-391.2	47.7%	54%	1.00 : 0
Cranberry Juice, unsweetened	56	4	47.5	31.7	-15.8	12.3%	48%	1.50 : 1.00
Grapefruit Juice, unsweetened	48	3	20.4	5.7	-14.7	8.9%	48%	3.58 : 1.00
Grapes, American Type	43	7	89.6	27.2	-62.4	16.0%	56%	3.29 : 1.00
Honeydew Melon	60	3	29.5	37.4	7.9	8.1%	62%	0.79 : 1.00
Kiwi	52	5	278.7	47.6	-231.1	9.0%	80%	5.86 : 1.00
Mango	55	6	15.9	42.0	26.1	14.5%	68%	0.38 : 1.00
Orange Juice	52	4	32.9	12.5	-20.4	8.5%	62%	2.63 : 1.00
Olive (Green)	15	1	1,377.8	104.3	-1,273.5	1.0%	40%	13.21 : 1.00
Olive (Ripe)	15	1	960.5	72.6	-887.9	0.0%	58%	13.23 : 1.00
Papaya	58	3	6.8	28.3	21.5	6.1%	78%	0.24 : 1.00
Peaches, canned syrup drained	55	7	23.8	0.0	-23.8	17.6%	60%	1.00 : 0
Pineapple	66	4	26.1	19.3	-6.8	9.8%	66%	1.35 : 1.00
Pineapple Juice, unsweetened	46	5	27.2	20.4	-6.8	10.0%	52%	1.33 : 1.00
Plantains, raw	40	15	48.6	28.3	-20.3	10.0%	68%	1.72 : 1.00
Pomegranate juice	67	4	56.5	0.0	-56.5	12.9%	32%	1.00 : 0
Raisins, golden seedless	64	52	118.2	35.2	-83.0	59.4%	44%	3.36 : 1.00
Watermelon	72	2	56.7	0.0	-56.7	6.2%	76%	1.00 : 0
Fruit Averages	53	10	256.1	32.9	-223.2	15.6%	58.9%	7.79 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Legumes to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Chickpeas (garbanzo beans)	28	12	1,261.9	48.7	-1,213.2	4.9%	76%	25.91 : 1.00
Edamame (prepared)	18	4	2,034.6	409.7	-1,624.9	1.9%	90%	4.97 : 1.00
Peanuts (dry roasted)	14	0	17,793.7	3.4	-17,790.3	4.1%	52%	5,233.44 : 1.00
Peanut Butter (smooth)	23	3	12,793.1	58.0	-12,735.1	6.6%	40%	220.57 : 1.00
Soybeans (boiled)	25	4	5,064.1	678.4	-4,385.7	2.9%	82%	7.46 : 1.00
Legumes Averages	21.6	4.6	7,789.5	239.6	-7,549.8	4.1%	68.0%	32.50 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-	-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega	a-3
Nuts to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio	o
Acorn Flour		39	6,591.9	0.0	-6,591.9		42%	1.00	: 0
Acorns (Dried)		37	6,861.8	0.0	-6,861.8		42%	1.00	: 0
Almonds (roasted)	10	0	14,343.5	0.0	-14,343.5	5.1%	64%	1.00	: 0
Brazilnuts (dried)	10	0	23,319.5	20.4	-23,299.1	2.3%	48%	1,143.11	: 1.00
Cashews (roasted)	22	12	8,687.1	182.9	-8,504.2	5.1%	50%	47.50	: 1.00
Chestnuts (dried, peeled)		65	1,566.1	187.1	-1,379.0	5.1%	60%	8.37	: 1.00
Hazelnuts or Filberts		0	8,881.7	98.6	-8,783.1	4.4%	58%	90.08	: 1.00
Pecans	10	0	23,394.7	1,118.4	-22,276.3	3.7%	44%	20.92	: 1.00
Pine Nuts	10	0	38,110.0	126.8	-37,983.2	3.7%	52%	300.55	: 1.00
Pine Nuts (Pinyon)	10	0	28,212.8	892.5	-27,320.3		48%	31.61	: 1.00
Pistachios (roasted)	18	4	15,463.0	296.9	-15,166.1	8.1%	58%	52.08	: 1.00
Walnuts (English raw)	18	0	43,195.7	10,296.1	-32,899.6	2.5%	48%	4.20	: 1.00
Nut Averages	12.0	13.1	18,219.0	1,101.6	-17,117.3	4.4%	51.2%	16.54	: 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Seeds to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Breadfruit Seeds		15	2,596.9	779.1	-1,817.8		82%	3.33 : 1.00
Cottonseed (kernels)		7	20,259.0	78.4	-20,180.6		68%	258.41 : 1.00
Pumpkin Seed (kernels)	25	2	27,618.6	241.7	-27,376.9	0.7%	64%	114.27 : 1.00
Safflower Seed (kernels)		18	31,846.1	125.9	-31,720.2		56%	252.95 : 1.00
Sesame Seeds	35	0	24,236.1	426.0	-23,810.1	0.0%	76%	56.89 : 1.00
Sunflower Seeds (kernels)	18	0	26,137.1	84.2	-26,052.9	2.9%	66%	310.42 : 1.00
Watermelon Seed (kernels)		2	31,856.0	0.0	-31,856.0		50%	1.00:0
Seed Averages	26	6	23,507.1	247.9	-23,259.2	1.2%	66.0%	94.82 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Oils to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Almond Oil		0	19,732.6	0.0	-19,732.6	0.0%	30%	1.00:0
Avocado Oil		0	14,210.4	1,085.1	-13,125.3	0.0%	28%	13.10 : 1.00
Canola Oil		0	21,272.9	8,659.0	-12,613.9	0.0%	32%	2.46 : 1.00
Corn Oil		0	60,679.9	1,316.6	-59,363.3	0.0%	28%	46.09 : 1.00
Palm Oil		0	10,319.4	226.8	-10,092.6	0.0%	24%	45.50 : 1.00
Peanut Oil		0	36,293.8	0.0	-36,293.8	0.0%	26%	1.00:0
Soybean Oil		0	57,179.1	7,698.7	-49,480.4	0.0%	28%	7.43 : 1.00
Sunflower, linoleic (65%)		0	74,506.4	0.0	-74,506.4	0.0%	30%	1.00:0
Walnut Oil		0	59,982.4	11,794.6	-48,187.8	0.0%	30%	5.09 : 1.00
Oil Averages	0	0	39,353.0	3,420.1	-35,932.9	0.0%	28.4%	11.51 : 1.00

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6 Omega-3 M		Mg of Omega-3	Percent	Nutrient	Omega-3
Spices to Avoid	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Sugar (Brown)	70	77	0.0	0.0	0.0	96.8%	24%	0:0
Sugar (Granulated)	70	79	0.0	0.0	0.0	100.0%	22%	0:0
Spices Averages	70	78.0	0.0	0.0	0.0	98.4%	23.0%	0:0

THE REAL DIET OF MAN — How to Regain and Maintain Optimal Health with Food Chemistry Food Analysis Tables: Nutrient Comparison

The first list below compares the A, B, Cs of popular food products. Some are outstanding, some are horrible. Do you know which ones are which and why? The second list on the next page compares the nutrients of seven food items illustrating how they vary in nutrient composition.

By using the A, B, C guidelines a person can lose weight, possibly stop or suppress considerably the symptoms of chronic disease, and significantly strengthen their immune system. But each time one deviates there can be consequences. For instance, for some all it takes is one helping of a high glycemic food to unleash a wave of mycotoxins within the body that may take up to nine days to heal. Therefore, with what would seem like minor weekly deviations they never learn what it's like to be healed. Once they are healthy, then when they deviate and feel the consequences they understand the absolute power in the fundamental chemistry of each food choice.

		Glycemic	4 Oz Serv.	4 Oz Serv.	4 Oz. Serv.		Percent	Omega-6 to
	Glycemic	Load	Omega-6	Omega-3	Mg of Omega-3	Percent	Nutrient	Omega-3
Miscellaneous	Index	in 4 Ozs.	Mg	Mg	Surplus/Deficit	Sugars	Load	Ratio
Bread (White)	73	34	1378.9	157.6	-1,221.3	4.0%	52%	8.75 : 1.00
Bread (Whole Grain)	71	22	650.9	28.4	-622.5	6.0%	58%	22.92 : 1.00
Cassava	46	22	36.3	19.3	-17.0	1.9%	58%	1.88 : 1.00
Cider Vinegar	5	0	0.0	0.0	0.0	0.4%	46%	0:0
Cheerios (Gen Mills)	74	49	2,131.9	100.9	-2,031.0	4.0%	100%	21.13 : 1.00
Cheese (Blue)		2	608.2	299.0	-309.2	0.7%	38%	2.03 : 1.00
Cheese (Cheddar)		1	654.6	414.1	-240.5	0.8%	40%	1.58 : 1.00
Cheese (Cottage)		4	119.0	19.2	-99.8	2.7%	34%	6.20 : 1.00
Chocolate (baking)	70	0	1,629.7	132.3	-1,497.4	0.8%	62%	12.32 : 1.00
Coca Cola	53	2	0.0	0.0	0.0	10.9%	22%	0:0
Coffee	0	0	1.1	0.0	-1.1	0.0%	42%	1.00 : 0
Corn Flakes	81	69	340.2	22.7	-317.5	11.0%	66%	14.99 : 1.00
Corn Syrup	100	50	0.0	0.0	0.0	26.5%	22%	0:0
Egg (Christopher) one egg	0	1	660.0	660.0	0.0	0.8%	52%	1.00 : 1.00
Egg (350 mg Omega-3) one egg	0	1	660.0	350.0	-310.0	0.8%	52%	1.89 : 1.00
Egg (regular) one egg	0	1	660.0	42.5	-617.5	0.8%	52%	15.53 : 1.00
Ice Creams (vanilla)	87	14	311.9	201.9	-110.0	21.0%	24%	1.54 : 1.00
Grape-Nuts Cereal (Post)	71	56	917.4	70.3	-847.1	13.0%	68%	13.05 : 1.00
Ketchup (w/sugar)	55	12	137.0	4.5	-132.5	22.9%	52%	30.44 : 1.00
Honey	61	57	0.0	0.0	0.0	82.0%	22%	0:0
Maple Syrup	65	44	113.4	0.0	-113.4	59.6%	32%	1.00 : 0
Margarine, 60% fat	0	0	26,998.6	3,034.6	-23,964.0	0.0%	34%	8.90 : 1.00
Margarine, fat-free	0	0	426.3	52.1	-374.2	0.0%	22%	8.18 : 1.00
Marshmallows	62	61	51.0	1.1	-49.9	58.0%	22%	46.36 : 1.00
Milk (3.25% milkfat)	27	5	160.0	100.0	-60.0	5.3%	36%	1.60 : 1.00
Molasses	55	52	56.5	0.0	-56.5	55.5%	48%	1.00 : 0
Mushrooms (Enoki, raw)		3	124.7	17.0	-107.7	0.0%	84%	7.34 : 1.00
Mushrooms (Italian, Crimini raw)		3	45.4	0.0	-45.4	2.0%	80%	1.00 : 0
Mushrooms (Portabella, raw)		3	85.1	1.1	-84.0	2.0%	80%	77.36 : 1.00
Mushrooms (Portabella, grilled)		3	266.8	0.0	-266.8	0.0%	84%	1.00 : 0
Mushrooms (Shiitake, cooked)		7	41.4	4.0	-37.4	3.4%	58%	10.35 : 1.00
Mushrooms (White, raw)		2	157.6	0.0	-157.6	2.0%	90%	1.00 : 0
Mushrooms (White, stirfried)	15	2	213.7	0.0	-213.7	0.0%	84%	1.00 : 0
Oatmeal (Cooked)	66	7	613.5	20.4	-593.1	0.4%	68%	30.07 : 1.00
Shredded Wheat Miniatures	67	51	1,518.4	69.2	-1,449.2	0.4%	74%	21.94 : 1.00
Spaghetti, cooked	41	19	334.5	27.2	-307.3	0.7%	56%	12.30 : 1.00
Spaghetti, whole-wheat, cooked	37	12	230.0	11.3	-218.7	0.7%	66%	20.35 : 1.00
Tapioca, pearl, dry	56	70	2.2	1.1	-1.1	3.3%	38%	2.00 : 1.00
Yogurt	14	4	18.2	7.6	-10.6	4.5%	34%	2.39 : 1.00
Miscellaneous Averages	44	18.7	1,078.3	150.3	-928.0	10.7%	52.6%	7.17 : 1.00

THE REAL DIET OF MAN - How to Regain and Maintain Optimal Health with Food Chemistry

Nutrient Comparisons Amounts Per 100 g Serving	Lettu		Lettu Cos/Roi		Broc Flov		Spina	ch	Kal	е	Rap Broc		Oat	S
Protein & Amino Acids														-
Protein	0.9	a	1.2	a	3	g	2.9	a	3.3	a	3.2	a	16.9	a
Tryptophan		mg		mg		mg		mg		mg		mg		mg
Threonine		mg		mg		mg		mg		mg		mg		mg
Isoleucine		mg		mg		mg		mg		mg		mg		mg
Leucine		mg		mg		mg		mg		mg		mg	1284	
Lysine		mg					174			mg		mg		mg
				mg	141									
Methionine		mg		mg		mg		mg		mg		mg		mg
Cystine		mg		mg		mg		mg		mg		mg		mg
Phenylalanine		mg		mg		mg		mg		mg		mg		mg
Tyrosine		mg		mg		mg		mg		mg		mg		mg
Valine		mg		mg		mg		mg		mg		mg		mg
Arginine		mg		mg		mg	162			mg		mg	1192	
Histidine		mg	21	mg	50	mg	64	mg	69	mg		mg	405	mg
Alanine	25	mg	56	mg	118	mg	142	mg	166	mg	124	mg	881	mg
Aspartic acid	125	mg	139	mg	213	mg	240	mg	295	mg	360	mg	1448	mg
Glutamic acid	194		178	mg	375	ma	343	mg	374	mg	549	mg	3712	ma
Glycine		mg		mg		mg		mg		mg		mg		mg
Proline		mg		mg	114			mg		mg		mg		mg
Serine		mg				mg				mg		mg		mg
	25 ~			mg 0		0		mg 0	139			0		0
Hydroxyproline	~	U	- ~	U	-~	U	0	U	- ~	U	- ~	U	~	U
Vitamins														
Vitamin A	502		8711		3000		9376		15376		2622			IU
Retinol		mcg		mcg		mcg		mcg		mcg		0		mcg
Retinol Activity Equivalent		mcg		mcg		mcg		mcg		mcg		mcg		mcg
Alpha Carotene		mcg		mcg		0		mcg		mcg		mcg		0
Beta Carotene	299	mcg	5225	mcg	~	0	5626	mcg	9226	mcg	1573	mcg	~	0
Beta Cryptoxanthin	0	mcg	0	mcg	~	0	0	mcg	0	mcg	0	mcg	~	0
Lycopene		mcg		mcg	~	0		mcg		mca		mcg	~	0
Lutein+Zeaxanthin		mcg		mcg		0	12197		39551	-	1121			0
Vitamin C		mg		mg	93.2		28.1			mg	20.2			mg
Vitamin D	~	0		0	>55.2	0		0	~		~			0
												_		_
Vitamin E (Alpha Tocopherol)	0.2			mg	~	-		mg	~	_		mg		0
Beta Tocopherol		mg		mg		0		mg		0		mg		0
Gamma Tocopherol		mg		mg		0		mg		0		mg		0
Delta Tocopherol		mg	0	mg	~	_	0	mg	~	0	0	mg		0
Vitamin K	24.1	mcg	103	mcg	~	0	483	mcg	817	mcg	224	mcg	~	0
Thiamin	0	mg	0.1	mg	0.1	mg	0.1	mg	0.1	mg	0.2	mg	0.8	mg
Riboflavin	0	mg	0.1	mg	0.1	mg	0.2	mg	0.1	mg	0.1	mg	0.1	mg
Niacin		mg		mg		mg		mg		mg		mg		mg
Vitamin B6		mg		mg		mg		mg		mg		mg		mg
Folate		mcg		mcg		mcg		mcg		mcg		mcg		mcg
Food Folate		mcg		mcg		mcg		mcg		mcg		mcg		mcg
Folic Acid		mcg		mcg		mcg		mcg		mcg		0		mcg
Dietary Folate Equivalents		mcg		mcg		mcg		mcg		mcg		0		mcg
Vitamin B12		mcg		mcg		mcg		mcg		mcg		0		mcg
Pantothenic Acid		mg		mg	0.5	mg		mg	0.1	mg	0.3	mg	1.3	mg
Choline	6.7	mg	9.9	mg	~	0	18	mg	~	0	18.3	mg	~	0
Betaine	0.1	mg	0.1	mg	~	0	550	mg	~	0	0.3	mg	~	0
Minerals														-
Calcium	18	mg	33	mg	48	mg	99	mg	135	mg	108	mg	54	mg
Iron		mg		mg		mg		mg		mg		mg		mg
		mg		mg		mg		mg		mg		mg		mg
Magnesium														
Phosphorus		mg		mg		mg		mg		mg		mg		mg
Potassium	141			mg		mg		mg		mg		mg		mg
Sodium		mg		mg		mg		mg		mg		mg		mg
Zinc		mg		mg		mg		mg		mg		mg	4	mg
Copper	0	mg	0	mg	0	mg	0.1	mg	0.3	mg	0	mg	0.6	mg
Manganese		mg		mg		mg		mg	0.8	mg		mg		mg
Selenium		mcg		mcg		mcg		mcg		mcg		mcg	~	0
Fluoride	~	0		0		0		0		0		0	~	0
Raw Totals	2,009		18,561		5,996		32,697		69,607		9,007		18,163	<u> </u>
Fats & Fatty Acids														-
Total Fat	0.1	g	0.3	g	0.4	g	0.4	g	0.7	g	0.5	g	6.9	g
Saturated Fat		g		g	0.1		0.1		0.1	a	0.1	a	1.2	a
Monounsaturated Fat	0	g	0	g		g		g	0.1		0.1	g	2.2	O O
			0.2	9			0.0	9			0 4	9		
Polyunsaturated Fat	0.1				0.2		0.2		0.3		0.1		2.5	
Total trans fatty acids		0		0		0		0		0		0		0
Total trans-monoenoic fatty acids	~			0	~	0		0		0		0		0
Total trans-polyenoic fatty acids		0		0		0		0		0		0		0
Total Omega-3 fatty acids	52	mg	113	mg	129	mg	138	mg	180	mg	113	mg	111	mg
Total Omega-6 fatty acids		mg		mg		mg		mg		mg		mg	2424	
Omega-6 to Omega-3 Ratio		:1.0		:1.0		:1.0		:1.0		:1.0		:1.0	21.8	

Resources

To determine your essential fatty acid balance go to: www.Omega3Test.com. I have known Doug Bibus, a real fatty acid scientist, for many years. I use his lab for analyzing the meats carried in our meat store. When you purchase the test put "SLANKER" in the Offer Code and you will earn a discount.

Don't be taken in by fancy marketing fluff. This link to <u>Many Paleo Recipes Are Nutritional Disasters</u> explains how many marketers focus more on generating sales than on providing guidance in the dietary changes required to optimize one's health. If one doesn't actually change the chemistry of the foods in their diet with an eye to the A, B, Cs they will not succeed in their health goals.

This is a link to <u>four papers</u> by Artemis P. Simopoulos, M.D. "Today industrialized societies are characterized by (1) an increase in energy intake and decrease in energy expenditure; (2) an increase in saturated fat, omega-6 fatty acids and trans fatty acids (partially hydrogenated oils), and a decrease in omega-3 fatty acid intake; (3) a decrease in complex carbohydrates and fiber; (4) an increase in cereal grains and a decrease in fruits and vegetables; and (5) a decrease in protein, antioxidants and calcium intake."

Fungi, mycotoxins, and related subjects can be very complicated, especially since they are infrequently or never discussed by dietitians. This link sources many discussions regarding how <u>fungi and their mycotoxins</u> impact health and food safety. Many health issues are caused by mycotoxins and sometimes it is amazing how little sugar it requires for fungal infestations to be an issue. For some people, eating just a little fruit is all it takes to cause chronic conditions to flare up. This is why "The Real Diet of Man" focuses on very low glycemic foods.

Is GMO a real concern for those who follow "The Real Diet of Man"? Or is the focus on any particular food being simply organic and/or nonGMO taking the consumers' eyes off the ball? This Genetic Engineering link addresses that issue.

The movie *Food Inc*. made a big splash some years ago. Was it an honest portrayal of food production, processing, distribution, and selection in our country? The link to Ted Slanker's *Food Inc*. Review explains why this movie did not advance the consumer's understanding of nutrition, food chemistry, and food selection. Was it was mostly baseless scaremongering?

There are many thousands of studies evaluating the importance of Omega-3 in the diet. Way too many of them do not properly measure changes in the Omega-3 deficiency nor do they even properly evaluate the overall diet of the participants in the studies. Therefore, the conclusions of those studies are flawed. This link explains The Omega-3 Scam. It underscores that only sporadically following the A, B, Cs of "The Real Diet of Man" will not reach result in optimum health. Interestingly, the flawed reports that are critical of Omega-3 actually prove that eating foods recommended in many Paleo recipes that ignore these A, B, Cs will result in less than optimal health.

About the Author

Starting in late 1999, Slanker Grass-Fed Meat became the meat marketing arm of Ted Slanker's ranch, "Slanker's Polled Herefords." But let's back up a little before that.

Ted was always very interested in agriculture. His grandparents lived in the country and as a child he always loved visiting their farm. His favorite activity was collecting eggs and riding the work horses. Because his father was an officer in the Air Force, he lived all over the country and graduated from Benedictine Military School in Savannah, GA. In 1966 he earned a BS degree in Business and Technology from Oregon State University.

In 1969 he bought his first horse and moved to the country. In 1971 he bought two Polled Hereford steers to raise for freezer beef. Soon he added cows and within three years had a herd of registered Polled Herefords which he has been raising ever since.

Over the years, Ted has been a very active and progressive cattleman who has experimented with numerous advanced cattle breeding and management methods. He designed a sophisticated computerized cattle management record-keeping system while computers were still in their infancy. He was an early advocate of rotational grazing, Expected Progeny Differences (EPDs), and modern pasture management techniques. The cattle working facilities he built on his ranch were designed by Temple Grandin. He has been a presenter at many professional cattlemen gatherings. For several years he wrote a biweekly beef cattle management column titled "Just Managing to Get By"

He started a very progressive regional Cattleman's association in NE Texas that was noted for the quality of its guest speakers who hailed from as far away as Hawaii. After several years it faded away when in 1999 Ted started advocating the raising and marketing of grass-fed meat. It was a concept that proved to be too far ahead of its time for many livestock producers. Today though, the concept has taken hold in the area and many local ranchers now raise cattle and other livestock for Slanker Grass-Fed Meat.

Ted continues to do consulting work, writes extensively, and is a guest presenter in topics ranging from ranch management to human nutrition. He is known as the maverick's maverick with his many controversial opinions which are now becoming evermore commonplace in today's meat and nutrition industries.

Always a skeptic, Ted remains an ardent student of his trade. In 1999, when the concept of raising and marketing grass-fed meats was being discussed by members of the Red River Valley Cattleman's Association, Ted talked with leading scientists and scholars in the field of human and livestock nutrition. He poured over reams of tedious and sometimes confusing professional scientific literature while crosschecking what he read with other professionals in the field. As he did his research, he wrote scores of articles about nutrition, boiling down very complex ideas to language an average layman can understand. He is famous for the passion of his writings and presentations.



Ted and Linda Slanker

Ted and his wife, Linda, who are pretending to be retired in Palm City, Florida, continue to raise Polled Hereford breeding stock as well as grass-fed beef on their ranch located in the Red River Valley of northeast Texas. Of course there are many other wild creatures including a variety of feral hogs, wild cats, deer, coyotes, and other varmints too numerous to mention among the cows in the lush green pastures. The ranch is a family business with Sandra Slanker-Isenberg (daughter) and Ted Slanker III (son) actively involved in day-to-day, hands-on management. In addition to family, there are other important stalwarts, especially Norm Smith and Carolyn Ratliff, who have been instrumental in running Slanker Grass-Fed Meat for many years.

The meat store, Slanker Grass-Fed Meat, which is just a small part of part of the small family-owned ranch that's "a fer piece from town," delivers grass-fed meats direct to the front doors of health-conscience customers in all 50 states. Online shoppers know that with Slanker they are not only supporting the small rancher but a rancher who walks the talk.

The website is: Slanker Grass-Fed Beef