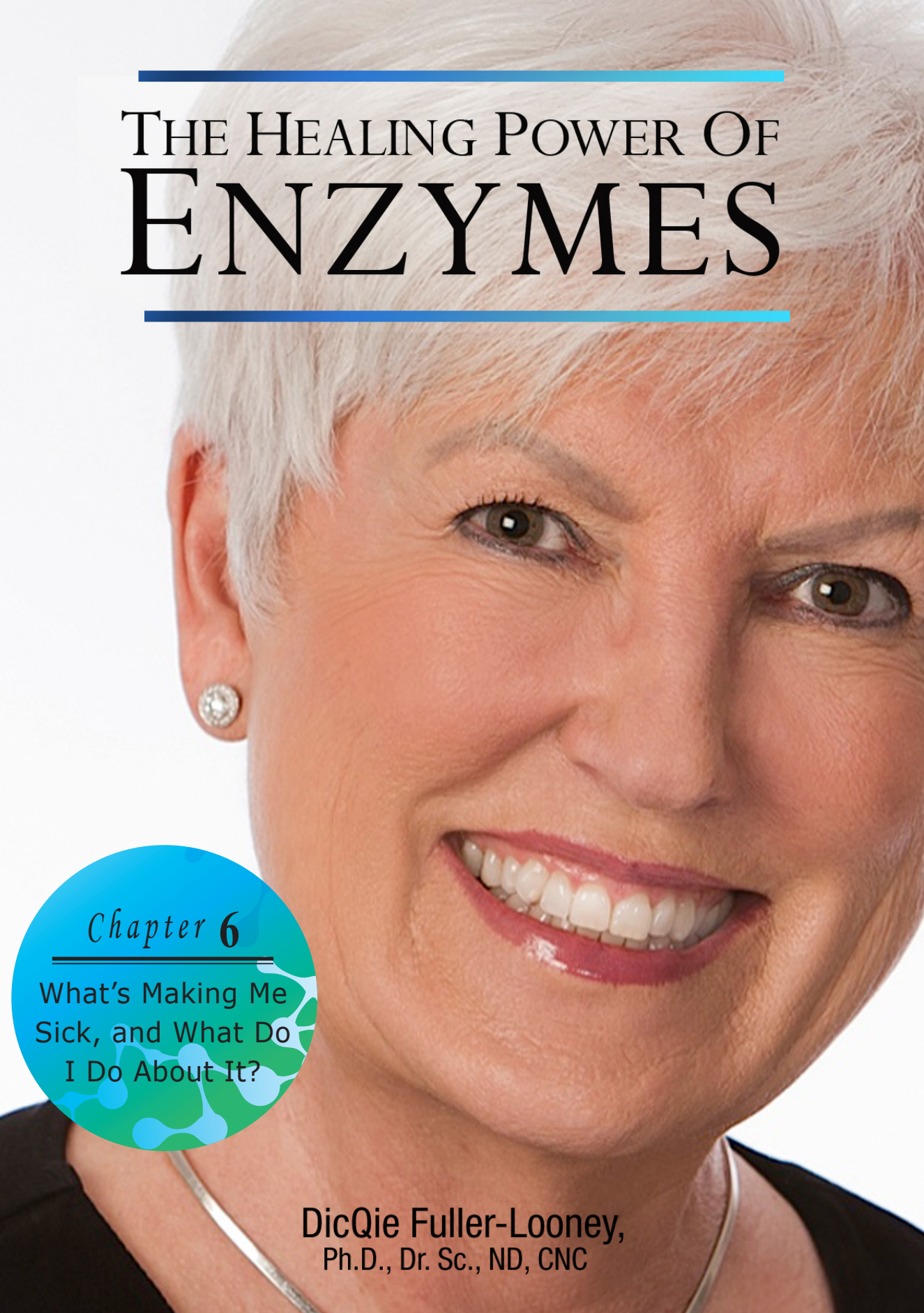
The Healing Power Of Enzymes



Chapter 6

What's Making Me Sick, and What Do I Do About It?

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ACID / ALKALINE BALANCE

Our bodies naturally seek a point of balance in all our systems, and the process of digestion is one of the most important ones. For example, the body works continuously, 24 hours a day, to maintain the proper acid / alkaline balance. If this balance is not well maintained, the metabolic enzymes and all other biochemical activity will not function normally. The resulting difficulties in digestion will affect your breathing, elimination, nervous system, blood pressure, insulin / sugar controls, and hormones, among other functions.

Acidosis is brought on by acid-producing medications, drinks, and some foods, the greatest of which is sugar. The body's two buffering systems, the lungs and kidneys, can control it for the most part. These systems control the fluids composed of sodium, protein, and phosphate. The vagus nerve, running throughout the entire body, also plays a vital role in good health. If it is pinched by a hiatal hernia, then it reduces the acid level.

Hydrochloric acid is the only acid beneficial to the body, and it is necessary to digest proteins. But when food is prevented from entering the stomach because of hiatal hernia, it is not broken down to the extent it should be because hydrochloric acid was not released. (Note: I do not recommend taking hydrochloric acid in synthetic form, as I believe it is important for the body to manufacture its own. Protease enzymes assist in that process.) When food comes from the stomach and reaches the duodenum, bile alkalinity is produced. This acts as an abrasive soap that washes away the mucous coating that the stomach uses to protect itself from extremes of alkalinity or acidity. The result is putrefaction or fermentation of food rather than digestion.

As in all things in the natural world, a perfect order of balance is always maintained. This process is known as homeostasis, and it applies to our digestive system as much as it does to the path of our galaxy through space. If your pH balance is abnormal, you will be forced to breathe very quickly to counteract the acid imbalance. Because the vagus nerve runs near the heart, your pulse and blood pressure increase. Added to this, the stomach becomes irritated and spastic. The liver and gallbladder overproduce bile, further irritating the digestive tract. Then the pancreas will produce too much insulin, leading to low blood sugar. Within the small intestine, a reduction in alkaline occurs, causing the whole system to become excessively acid. The large intestine responds with either diarrhea or constipation!

Conversely, too many antacids and diuretics, leading to potassium depletion, bring on alkalosis. In a situation of excess alkaline, the pineal gland overcompensates by producing too much hydrochloric acid. What starts this domino effect of distress? Most people become upset about something in their lives at least several times a day. Are you aware that your stomach contracts at even the smallest negative feeling? Think back to a time when you may have heard bad news and it felt as if you had been hit in your stomach, or you grab your stomach. Feelings lead to biochemical changes in the body. Emotional difficulties trigger these as much as biological ones do.

When the body cannot get the fuel it needs to run efficiently, it will look to itself for life-sustaining chemicals. For example, when it needs calcium and cannot get it because of poor diet, it will take calcium from its own bone. It can break down the white blood cells for enzymes or take protein from the muscles, whatever it takes to remain alive. Added to this, the endocrine glands, your body's mind, become sluggish. These glands are crucial to good health, as they control the immune and nervous systems. Without the endocrines functioning properly, imbalances occur in our glucose levels, brain food, and hormones. We can experience erratic premenstrual syndrome, bowel problems, fatigue, and a depressed immune system. And enough has been said already about imbalance in digestion.

What can you do to prevent this state from occurring? Or, if it already has occurred, what do you do then? Laboratory tests and Biological Terrain Assessment using blood, urine, and saliva have proven repeatedly that plant enzymes support correct pH balance. I ask my clients to ingest supplemental digestive enzymes with meals, and I have taught and used the testing to support this. From a urine specimen, I have observed a constant pH balance of 6.2 to 6.7, with some variation expected due to biochemical type. The optimum pH in urine in 24 hours is 6.4. Doctors who use enzyme therapy have documented the same results thousands of times with various evaluation tools.

We have used Spectra Cell Laboratory, located in my hometown of Houston, which has a method of determining the nutrient needs in the body by using venous blood draw. We conducted clinical research comparing those who take digestive enzyme supplementation and those who do not. The results revealed that many supplemental digestive enzyme users showed no lack of nutrients, while everyone in the group who had never taken the supplements lacked various nutrients dependent on their biochemical types.

CASE HISTORY

A very beautiful young woman, my former client whom I had not seen for several years, recently came to my office. The last time we were together, she had just been married and was expecting her first child. She was particularly lovely the day that she told me she was pregnant. As the health of her child was very important to her, her OB/GYN doctor sent her to me for advice on diet and enzymes. Throughout her pregnancy and the birth, she carefully followed her enzyme program. However, after the child was born, she became negligent in her daily routine.

I have seen this happen so many times. Because she felt better and had the baby, she did not think she needed the enzymes anymore and stopped taking them. Even though all symptoms are removed if you stick with the daily regimen of enzymes, you still need to continue your program. This young woman enjoyed good health for a while after she stopped using them. Soon though, the old habits and cravings for sweets, coffee, and pizza were back. She once again experienced fatigue, skin breakouts, hiatal hernia symptoms, and gallbladder nausea brought on by digestive problems.

At some point her husband lost his job and she had to return to work, leaving her child in someone else's care. Although I was sympathetic to her plight, I simply suggested that she treat herself with the same love and care she had shown for herself and her baby during her pregnancy. Knowing that she could not change her biochemical type since it is something we bring with us into the world, we worked on an appropriate diet for her type and added enzymes back to her diet.

Three days later, she called to cancel her appointment. She was already back in control and knew that she would continue on the path toward good health. She learned that her good health was something she owed to herself and her family. To this day, I am amazed when I see her. She exudes youthfulness and happiness. People compliment her on the beauty of her skin, and they constantly comment on how she looks younger every time they see her!

Those of us who are in enzyme nutrition hear this story repeatedly. I cannot say it often enough — education and supplementation are of extreme importance.

When we understand why we have pain or feel ill, we can make choices and stay in control of our lives. For so many years, we thought that if we had a particular symptom, all we had to do was treat it, make it go away, and then resume our old lifestyle. That is how conventional medicine is practiced. However, when you find a health maintenance program that works for you, you must commit to follow it for the rest of your life. Instead of treating what you have as a disease, or just treating its symptoms, you must increase the love you have for yourself and others. That love must include the gift of good health to you.

HOW TO OVERCOME DAIRY INTOLERANCE

When your body can no longer make the correct amount of enzymes to digest a particular food properly, but that food is still consumed, intolerance for it is created. From then on, we experience an allergy or adverse reaction to it. It is a toxic substance for us. This occurs for people who develop a problem with dairy products. Lactose is the offender contained in dairy. The enzyme lactase breaks down lactose. I have my clients take lactase along with other enzymes. Protease is also important because dairy has several types of protein in itself such as casein. Lipase must be included too because of the fat (lipid) content in dairy products. It is advisable to take a multi-digestive formula rather than a single lactase product.

My advice to those who suffer dairy intolerance, or any other kind of food allergy (sensitivity), is to take the enzyme supplements for at least 21 days before trying to eat the food you are allergic to. It takes that long for the system to make a positive response to the newly introduced enzyme support. Then, be sure to take digestive enzymes each time you consume those products. I strongly encourage you to follow this program before you reintroduce foods with which you have had problems in the past.

Gluten Sensitivities: I presented several slides on lectins while in Europe and told the audiences that the human body does not make all the necessary enzymes to properly break down lectins / glutens, which are found in carbohydrates and are part of our inflammation and disease processes. We have recognized lectins / glutens for more than 100 years.

Why has it now become such a problem? To better understand, we first need to be educated in what they are. Think of lectin / gluten as a protein containing a key that fits a certain type of lock. This lock is a specific type of carbohydrate. All life

forms — plant and animal; insect and fungus — have cell membranes that contain carbohydrates, which sit within and project from the membrane. When a lectin / gluten with the right key meets one of these "locks" on the gut wall, artery, gland, or organ and "opens the lock," it disrupts the membrane and damages the cell. This in turn initiates a cascade of immune and autoimmune events leading to cell death. During my presentation, I went on to explain supplemental enzymes formulated for this problem could assist in eliminating the cause.

Being gluten intolerant should not keep you from quality of life. Because it is difficult to test conclusively, many people will be diagnosed based on a wide variety of screenings and observations. The most common symptoms are gastrointestinal problems (or gastrointestinal distress) such as diarrhea, flatulence, gas, and bloating. Other symptoms may include joint pain, fatigue, and headaches. Think about the fact that there can be 250 or more symptoms related to gluten intolerances. In fact, it can manifest itself as Candida.

Is gluten intolerance a wheat allergy? Unbelievably, you can have wheat allergies but not have gluten intolerance. This may be confusing, but they are two different responses in your body. Gluten intolerances or sensitivities happen slowly over a period and are more a nutritional deficiency. Symptoms of wheat intolerance will manifest itself as a typical allergy, quickly with a single exposure.

To expose the problem in a broader form, let us find an answer to the question posed earlier in this book. Why is it now such a problem if it has been in our foods for hundreds of years? The answer to the question is simple, but comes with serious consequences. Much of our food has been genetically modified, and in doing so we have transferred lectins from animal, plant, bacteria, human, and virus DNA into our foods to enable them to last longer on the shelf or into the seeds to grow foods quicker in a smaller area. They are called GMO (genetically modified organisms). It has confused our digestive system, and since around eighty percent of our immune system is in our digestive system, the response is an allergy to these foods simply because the body does not recognize them.

What can a person do if he or she is suffering from gluten sensitivities? Now that we have a better understanding of what gluten / lectin and wheat intolerances are and why we are having such a reaction to them, I should remind you that they are not just a protein problem, but also proteins combined with carbohydrates referred to as glycoproteins in food. When asked to formulate a supplemental enzyme product for these intolerances, I therefore know the formula must have specific blended proteases required for gluten / lectins found in food. Proteolytic enzymes are also necessary for the proper breakdown of casein and wheat proteins. The formula then needs several different carbohydrate-splitting (polysaccharolytic)

enzymes which work differently from each other because carbohydrates have many different kinds of linkages. The carbohydrate on gliadin is very complex, consisting of xylose, glucose, galactose, and arabinose, which are all plant sugars. It is typical of plant cell walls, which require hemicellulase, pectin, and lignin for proper degradation. An additional specific probiotic named *bifobacterium lactis* is able to block the toxic effects and balance the increased permeability to the gut. This type of formula can be a great benefit to those suffering from these intolerances and who require gut balance.

I once received a question about these allergies and the comment was that enzymes do not work for this problem. They absolutely **do work** for this problem if it is the correct formulation. Supplemental digestive enzymes are necessary when the human body does not genetically produce the enzymes needed for these confusing modified organisms we now find in our food sources. Because of this growing problem, I was asked to formulate a product specifically for gluten sensitivities.

The historical method of treating gluten intolerance is to remove the foods containing gluten from the diet. You might ask yourself, is this possible? Avoiding the genetically modified organisms by purchasing organic food or growing your own food makes sense. Nevertheless, when you travel or eat out, quality of life begins to take a back seat. Those of us suffering from this intolerance benefit by taking the proper supplemental enzymes formulated with the necessary probiotic in order to address the hidden gluten / lectins in foods.

SUGAR INTOLERANCE

I believe that most of America is glucose intolerant. By that I mean we have become very lackadaisical about how much food containing high levels of sugar we eat. Sugar is used as a preservative in most foods. The average person simply is unaware of this fact. It appears in surprising places. Any food that has been processed, canned, or frozen includes sugar. Any label that claims "no fat" or "low fat" has high levels of sugar listed on it. It is hidden in most food products on the market — a whopping ninety-two percent of all foods sold in America are combined with sugar to a greater or lesser degree. The average American eats 1 cup of sugar every day, or 210 pounds a year! We can give our children an amazing amount of sugar without realizing it. Certain soft drinks intended for young people contain 16-18 teaspoons of sugar in 12 ounces of liquid. Cereals sometimes contain more than 60 teaspoons of sugar!

Our glucose balance is the most precious and high-precision balance in the body. The brain needs 140 grams of glucose or we will get a headache. Added to that,

we need an additional 40 grams to make and feed red blood cells. That means the requirement for normal brain function and healthy blood cells is 180 grams of glucose per day, yet we ingest 1,000 grams of sugar each day. We are a nation of sugar addicts! How do our bodies handle the surplus? We produce more insulin, which carries glucose to our cells. Hypoglycemia is the end result of sugar overconsumption. This happens when the body is forced to make enough glycogen to balance the increased quantities of glucose and insulin in the system.

America is "virtually falling asleep" because of eating so many simple carbohydrates (sugars). Sugar robs the system of nutrients as well as creating an acidic state. So many children are unable to absorb their lessons in our schools because their brains are blocked by too much sugar. Fatigue is rampant among adults as well. I have concluded that sugar is responsible for most of the colon problems we suffer. Most of us still do not realize that overdoses of sugar have far-reaching effects, causing numerous health complications.

Fortunately, enzymes can make a big difference. Amylase and invertase work well in the breakdown of sugar to glucose and help with gaining control of how much we ingest. That is why I only use small amounts with a diabetic. One way to start the "cleanup" process is with protease enzymes, which provide a nontoxic environment. However, when it comes down to it, each of us must take responsibility for our own consumption of sugar. Remembering the fatigue, anxiety, and headaches you have while eating a diet heavy with sugar will assist you in your efforts to control your intake.

TRYING TO KICK THE SUGAR HABITS WITH SYNTHETIC SUGAR

If you are using an artificial sweetener, it is probably because you are trying to avoid the calories while still craving that sweet taste. Sweet cravings are very common and quite understandable when you realize that sugar is as addictive as some hardcore street drugs. Unfortunately, switching to artificial sweeteners will neither reduce these cravings nor increase your satiety. On the contrary, you are likely making matters worse. Your body tends to crave sugary foods when it is lacking proper fuel. Sugar is very quick fuel and can give your body a boost when it is running low. However, using artificial sweeteners will not trick your body into thinking it has had its fill. Rather, it wants more sweets because it did not get the energy boost that normally goes along with the sweet taste. In fact, this is part of why artificial sweeteners are associated with increased weight gain rather than weight loss. You are simply confusing your body.

For example, inflammatory bowel disease — an autoimmune disease that can have serious health consequences — may be caused or exacerbated by the

regular consumption of the popular artificial sweetener Splenda®, as it inactivates digestive enzymes and alters gut barrier function. Previous research also found that sucralose could destroy up to fifty percent of your beneficial gut flora, and it increases pH level in your intestines as well. Many consumers may suffer ill effects from artificial sweeteners such as Splenda® without realizing their problems are related to their consumption of artificially sweetened foods and beverages. If you experience any of the above signs and symptoms, you would be well advised to stop your use of sucralose products.

There really is not a good reason to ingest synthetic sugars. You might be thinking about diabetes and how this is suggested for that population. However, science is now showing it creates worsening symptoms of diabetes and weight gain. Now that we've covered synthetic sugars, let's talk about other synthetic ingredients…

ARE YOU EATING BEAVER ANAL FLUID WITHOUT EVEN KNOWING IT? (SHOCKING TRUTH!)

Yes, it's true. Millions of people across the globe are eating "beaver anal fluid" and don't even know that they're consuming such a substance.

It is called "castoreum," and it is emitted from the castor sacs within the animal's anus. For a beaver, this slimy brown substance is used to mark its territory, but for us humans, it is used as an additive that is often labeled as "natural flavoring" in the foods we eat — vanilla, strawberry, and raspberry being the most common. Castoreum is a product of the trapping industry. When beavers are skinned for their fur, these glands are taken out and sold after being smoked or sun dried to prevent putrefaction.

Why is castoreum used? The most notable characteristic (after being processed) has to be the smell of castoreum. Instead of smelling horrible, like most people would expect from an anal-produced secretion, it has a pleasant scent. This supposedly makes it a perfect candidate for food flavoring and other products.

But the question that many people put forth would have to be: "Who in their right mind actually made this odd discovery?" It reminds me of the common question: "Who was the first person to eat raw oysters?"

Another industry that uses castoreum is the fragrance world. For decades, perfume manufacturers have used it to make various types of fragrances. These anal secretions are said to contain around twenty-four different molecules, many of which act as natural pheromones to stimulate our senses. From perfumes to air fresheners, beaver castor sacs are quite versatile within the fragrance industry.

IS IT NATURAL?

The food industry is a tricky business to figure out, and it will continue to boggle the minds of many on issues exactly like this. Much like with other additives that have raised concern over the years (aspartame, high fructose corn syrup, and food colorings), castoreum is proving to be just as questionable. Sure it is natural, but does "being natural" make it right to use or consume? Many disgusting substances are considered "natural," yet eating them may not be the best idea.

Having the anal secretions from a beaver take the place of a strawberry in something like strawberry ice cream hardly seems like an efficient process. Why go through the process of harvesting "anal secretions" when a strawberry is much easier to pick? It hardly seems like a better option.

HOW DO I DECIPHER WHAT I AM EATING?

The act of labeling something so vulgar and disgusting as "natural flavoring" should be illegal in many people's eyes, but the FDA views it all in a different light. The exact definition from the Code of Federal Regulations is as follows:

> *"The term natural flavor or natural flavoring means the essential oil, oleoresin, essence or extractive, protein hydrolysate, distillate, or any product of roasting, heating, or enzymolysis, which contains the flavoring constituents derived from a spice, fruit or fruit juice, vegetable or vegetable juice, edible yeast, herb, bark, bud, root, leaf or similar plant*

material, meat, seafood, poultry, eggs, dairy products, or fermentation products thereof, whose significant function in food is flavoring rather than nutritional."

Whew, did you get all that? This may be the first time you have ever read that — now you know why! In short, when the phrase "natural flavors" appears on a package, the best move is to call the company and find out what the flavors are actually made from. Of course, I say this assuming that we are all the kind of people who would be horrified to find out that we might have come close to ingesting fluid from the anal sex glands of beavers.

Castoreum certainly is not a product for vegans, vegetarians, or those concerned about animal rights. The European beaver was hunted to near extinction, both for fur and for castoreum, which was also believed to have medicinal properties. The North American beaver population was once more than sixty million, but as of 1988 was six to twelve million, largely due to extensive hunting and trapping. Although sources report that beaver populations have now recovered to a stable level, some experts say that today's American beaver population is only five percent of what it was when Europeans first settled in North America.

Here is a positive if you are one of those people who has stress or need sleep — castoreum in medicine is used for menstrual problems, anxiety, and sleeping disorders. And by the way, if you enjoy smoking, please understand that castoreum is used for the smell and taste of your cigarettes. Maybe that is where they got the term "cigarette butt"!

In food, castoreum is used to flavor candies, drinks, and desserts. Read the ingredients on food packages, call customer support when you see those words **"natural flavors"**, and guess what? You will never consume anal fluid again.

MONSTER® ENERGY DRINKS ARE BETTER BIGGER

Our children and young adults rave about the look of the can and the buzz or rush they receive along with the added excitement of the unknown — maybe a seizure. Forget that their ingredients are a laundry list of huge amounts of:

- Sugars that make up the syrupy goo
- Synthetic sugars that can rattle hormones and add no calories
- Petroleum-based artificial colors
- Caffeine at anywhere from 80 to 350 mg (by comparison, espresso has "only" 4 mg)
- Stimulating herbs and brain-blasting amino acids
- Inositol as an effort to keep your body from going into a panic attack
- Whoops, I almost forgot, some added synthetic minerals and vitamins

Americans are paying big bucks to feel "energized." We spend nearly three and a half billion dollars annually on drinks named Rockstar®, Red Bull®, Power House®, Adrenaline Rush®, Monster®, Spike®, and Venom®. Eight million adolescents guzzle these beverages on a daily basis, and both casual and dedicated athletes use them to get an extra "push."

The side effects of energy drinks alone should be enough to discourage you. Some may think they have to take more to get the same "benefits," or they may add some alcohol to strengthen the effects. However, mixing energy drinks with booze causes further dehydration. This explains why kids are passing out at dance clubs. Energy drink cocktails cause drowsiness, loss of coordination, and slow reflexes. To make matters worse, when you are chugging back energy drinks and alcohol, it is harder to determine just how much booze you have actually taken in. As a result, your blood alcohol concentration will rise together with your energy. You will not even realize how much alcohol you have consumed and might try to do something stupid, like drive a car. There have been many instances with young people dying because of energy drinks and mixing them with alcohol. While

mixing some energy drinks with alcohol may taste good, the effects of this could be a fatal mistake. And because there now have been deaths pointing at these types of drinks, they are banned by several countries.

Moms, this paragraph is for you. For pregnant women, experts recommend a maximum daily caffeine dose of 200 mg (many energy drinks contain more). Higher doses increase the risk of miscarriage. Additionally, fetuses cannot efficiently metabolize caffeine. *The Journal of the American Academy of Pediatrics* has published information regarding the issue of energy drink consumption and youth-aimed marketing. The concern is the interactions, long-term consequences, and dangers associated with risky behavior.

Checking out at the grocery store the other day, I found myself behind a very handsome, body buffed young guy who had only two items in his basket. (Hey, I was just looking at his basket!) You probably guessed it — Red Bull® and alcohol. I have started paying attention to the ages of those I see consuming energy drinks, which led to investigating websites of the most popular energy drinks. There are hundreds of comments from users on each site stating dying devotions, not caring if they die — they'll die happy — and warnings from some that suffered side effects. This world of toxic dependency on liquid drugs offered in a can to our young people should concern each and every one of us. European countries are banning the use of energy drinks. Does this mean they care about their children but America doesn't?

Think about America 5-10 years from now. It has always been said that America's strength is its youth. What will a young person drinking these energy drinks today possibly look like as an older adult? Use your imagination on how they might morph into obese, sleep-deprived people suffering heart and blood pressure problems with exhaustion and confusion. Their skin would be wrinkled and aged before their time because of the high dehydration. Wait, is that not what is happening right now?

DIABETES

The medical records of the 19th century are very sparse and incomplete when it comes to any cases resembling diabetes. Why? This is because type II diabetes, or what was formerly known as adult-onset or noninsulin-dependent diabetes, is the direct result of sugar / starch consumption. Refined sugar was not widely used until after Napoleon built sugar factories in Europe in the 19th century. In 1850, the average Englishman consumed only 7.5 pounds of sugar per year. By 2000, we ate 156 pounds. That is how much added sugar Americans consume each year on a per capita basis, according to the United States Department of Agriculture

(USDA). Imagine it, thirty-one five-pound bags for each of us. They get this number by taking the amount of sugar purchased and dividing it up by the total of all Americans. All I can say is someone is getting more than that because our family does not consume sugar unless hidden, and this is true for all of us. This year, about 25.8 million citizens of the United States have type II diabetes. Some people are born with type I diabetes where from birth the pancreas is unable to produce the necessary insulin. Type II is characterized by an overabundance of it. Insulin is the pancreatic hormone that regulates the transport of glucose (blood sugar) into the cells. In type II, the body develops a resistance to the action of insulin. When the body fails to respond to insulin, the blood glucose level rises and pancreatic cells pour out more of the hormone in a vain attempt to process it. Eventually, these cells wear out, causing insulin shortage.

Type II diabetes and its complications affect 25.8 million Americans, costing as much as $174 billion each year. According to the Centers for Disease Control, the number of Americans with diabetes could triple by 2050. One in ten U.S. adults has the disease, but that could grow to one in three in the next 40 years. Some common occurrences that are suffered by those with diabetes are blindness, kidney failure, and loss of limb. Each year, 4.2 million people become legally blind, 202,290 develop kidney failure, and 65,700 lose a leg through amputation. At all ages, people suffering from diabetes have twice the normal death rate.

When we consume large amounts of sugar, the body counteracts with the release of high levels of insulin. Remember, insulin is a hormone secreted by the pancreas. Insulin transports glucose (a form of sugar useful to the body) through the blood stream and into the cells where it is converted to glycogen. Glycogen is stored carbohydrates. If it is present in excessive amounts, it is further modified into a fat called triglyceride. Copious amounts of insulin contribute to obesity because of this conversion of glucose into triglycerides. When we consume any foods such as fruits, vegetables, or starches that break down into sugar, we are taking in a considerable amount of sugar. Even refined carbohydrates eventually break down into glucose, causing the body to overreact. Instead of producing the exact amount of insulin necessary to handle the quantity of sugar ingested, it makes more. This excess insulin is what forces the blood sugar to an even lower level.

The consequence of consuming large amounts of sugar causes the body to end up with less blood sugar than it started with, and the result is exhaustion. So what do we do? We eat more sugar for that so-called "mid-afternoon pick-me-up." The body again secretes more insulin, and the cycle is perpetuated.

HYPOGLYCEMIA

Let's compare diabetes to hypoglycemia. Diabetes includes hypoglycemia in its definition. The unbalanced relationship between blood sugar and insulin is a description of both ailments. In fact, it is my belief that diabetes begins first with hypoglycemia, a Greek word that means "low blood sugar." This can be misleading, because it starts with excessive amounts of sugar in the blood. Many people have been suffering from hypoglycemia years before their diabetes is diagnosed. It is so common in the United States that most Americans suffer from it without knowing it.

Hypoglycemia is extremely common, and it afflicts the majority of Americans. Its symptoms include headaches, low energy level, mood swings, overalertness, irritability, hunger, tension, and nervousness. Depending on what food has been ingested, the symptoms can change from hour to hour. Often, hypoglycemia completely controls a patient who is suffering these symptoms, even though he or she is unaware of it. Most people, if asked, would say they have some of these symptoms. We blindly accept this state of health as a way of life.

Many conventional doctors believe there is no such thing as hypoglycemia, categorizing it among those "nonexistent" maladies like PMS or Chronic Fatigue Syndrome. Although they refuse to admit to it, they repeatedly see many patients with the symptoms described above. These physicians do not know how to treat them. Remember, low blood sugar is not a diagnosis or a disease — it is a response! The hypoglycemia I refer to and treat with enzymes is not a disease, it is a condition that affects a huge percentage of the population.

What can we do about hypoglycemia? I advise those who come to my office about the importance of health education. We must learn to identify the amount of sugar we use, especially those hidden ones, as most of us do not even know they exist. Hypoglycemia also involves allergy or substance intolerance. It is very difficult to determine all the different reactions we have to foods. When we discover what they are, it's even more difficult to eliminate them for the rest of our lives. Therefore, as a preventative, I suggest the use of enzymes to aid digestion, stop toxic reactions, and replace the body's depleted supply of carb-splitting enzymes. Please do not feel that if you have this condition there is no hope. A change of diet with enzyme supplements can do wonders for you. Along with the enzymes, there are also certain herbs that assist with the insulin response.

Symptoms of hypoglycemia can be tolerated for brief periods. However, if the blood sugar level remains very low for a prolonged period, then fatigue and dysfunction develop. This can include confusion, hallucinations, convulsions, and even lapsing into a coma. With hypoglycemia, the nervous system is deprived of glucose

necessary for metabolic activity. Another normal response to hypoglycemia is a significant increase of epinephrine, a hormone secreted by the adrenal glands. More serious symptoms develop such as increased pulse rate, tachycardia, elevated blood pressure, sweating, and anxiety. Treatment would depend on the primary cause of the hypoglycemia.

For example, one cause of hypoglycemia is cell damage to the liver. If someone is fasting, the liver is the primary source of glucose to the blood stream. This can also result in an ability to convert glycogen into glucose. Glycogen is actually formed by and stored in the liver and, to a lesser extent, in the muscles. Glycogen changes to glucose and is sent to various parts of the body as needed. It's been called the animal starch. Another cause may be an inefficient endocrine system or a tumor. If this medical problem stems from an endocrine or liver disease resulting in the decreased secretion of glucose, then special dietary changes are in order. These changes are aimed at avoiding extremes in the blood glucose level by maintaining a constant one at all times. An effective diet plan is high in protein and fat, but low in carbohydrates. It calls for frequent, small meals during the day, and one before going to bed.

Many people have been told, or assumed, that they have hypoglycemia. Hypoglycemia is recognized and discussed by most people. It is touted as one of the disorders of the modern age. Because of that, many people tend to dismiss it. In truth, it is more serious than we think. The majority of cases are simply glucose intolerance rather than a true hypoglycemia. Or our poor eating habits generate it. Some prescription drugs lower blood sugar levels and interfere with the production of insulin — these drugs create a hypoglycemic effect. In either case, there must be a change in the diet. The diet must include protein and careful control over the amount of sugars we eat.

One of the first things we do for hypoglycemia in the world of enzyme therapy is to fortify the liver. The best choice for this is protease. I always suggest to my clients who have any form of glucose intolerance to make an effort to identify the foods they crave or eat in the greatest amounts. Then, eat several small, low-sugar meals a day. This way, problem foods that should be avoided can be determined. *(Refer to the Body Type section to find your type and the appropriate foods for you.)* Above all, good digestion is essential. Protease, in the correct proportion, together with amylase must be used in some supplements.

I see clients in person at my office. In addition, I receive calls from people all over the country who ask about biochemical typing and enzyme therapy. I have developed a questionnaire for all those who seek my help. I utilize this as a tool to assist me in evaluating individual nutritional needs. One of the disorders listed is

hypoglycemia. Most people mark it as a symptom they have experienced. I chose "hypoglycemia" over "glucose intolerance" because most people still do not know what that means. However, if you ask an average American what hypoglycemia is, he or she will answer that it is the fatigue felt after eating sugar. This is an example of how trendy hypoglycemia has become in the last few decades.

CASE HISTORY

This brings to mind a child who came to my office one day. His mother was very concerned about his lethargy. He had become a couch potato, had no interest in sports or school — all he did was watch TV. However, even that did not keep him focused. His parents thought he had a learning disability. They put him through a long series of tests at one of the local children's hospitals only to find he had no learning difficulties. His inability to concentrate, the dizziness, and shaking he was experiencing were still unexplained by the time they came to see me. After reviewing the boy's diet, it did not take long to realize that his system was completely out of balance due to eating far too many simple carbohydrates. He was suffering from all the symptoms of hypoglycemia, or sugar intolerance.

He was willing to eat all the foods we suggested, at the proper times, and to take enzymes. I made an absolute agreement with him — he promised to work with me, and I agreed to drop out of the situation if none of it worked. I designed a plan for him that started with enzymes first thing in the morning, between meals, and with meals. I explained everything to him so he understood how the enzymes fortified his system. He and his family saw a real difference within 3 days. This child told me that he actually felt better within 24 hours. He had a complete reversal, and now he is very involved in schoolwork and neighborhood activities. Once we got things under control, I could show his parents why all the vitamins and minerals they gave their son, and the methods they used to stop him from eating sugar, were ineffective. He suffered an inability to properly digest his food and utilize it as fuel for his body. No amount of vitamins or changes in his habits would work!

Many parents ask me why they should have to keep sweets from themselves and the rest of the family just because their children cannot control how much sugar they eat. Recently a mother complained to me that her child was sneaking sweets into his room. She could not understand why she and her husband were having behavior problems with him. When she asked the child what they could do to help him, he answered, "Just don't buy those things, Mom." But her comment back to him was, "Why should the rest of the family suffer just because you have a

problem with sweets?" I pointed out to her that a child learns from parents and other adults. In order for a child to know how to control his or her sugar intake, the parents must first show that they can control theirs. It is inconsiderate to have something in the house that constantly reminds the child of forbidden foods. By watching the rest of the family indulging in them, the child becomes confused and cannot help thinking, "If it's okay for them, why can't I have it, too?" or "Why am I being punished?" That child was very intuitive and absolutely correct with his response. It was obvious to both his mother and me that she too had a problem with sugar. She was not willing to give up her own sugar cravings. Otherwise, she would have happily honored her son's request.

We can readily see other people's destructive behaviors without seeing our own. If you feel fatigued, dizzy, lacking in stamina; if you walk into a room only to forget why you went there; if you are speaking to someone and in mid-sentence you forget what you were saying, it is time for you to look at your sugar intake. I could relate many stories to you, but they are all very similar to those I have told. We do not like to give up that sugar. We think we feel better when we have it. We do not like to deny ourselves, yet America is asleep because we are eating so much sugar. It is all too easy to justify our behavior by saying we have hypoglycemia and therefore cannot control our sugar cravings. The truth is, we do not know how to push away those desserts offered to us! In my own experience, by taking plant enzymes for complete carbohydrate digestion, the cravings have lessened because I am allowing my system to heal. Try a program of supplemental digestive enzymes that contain the carbohydrate-splitting enzymes and see what happens.

DETOXIFY AND FORTIFY: PURIFYING YOUR BLOOD, LOWERING YOUR CHOLESTEROL

"Detoxify" means to counteract or destroy toxins, or to remove their effects from the system. In the past, these two processes were employed in a linear fashion. First, by some detoxification process like fasting, we would flush toxins into the blood stream. This caused flu-like symptoms of fever, fatigue, and overall aching. Then we would fortify the body with certain nutrients to restore the balance. Now, with enzymes, we can detoxify and fortify at the same time without the side effects. Chapter Three explained exactly how enzymes can be used to cleanse the body and boost good health simultaneously. Enzyme cleansing eliminates the discomforts associated with detoxification while increasing a sense of wellbeing and higher energy levels. Enzymes are beautiful and non-invasive ways to cleanse and nourish.

By now you know how strong digestion, combined with a tough immune system, contributes to a healthy, vital blood supply. I have covered many of the reasons

why these systems are often below par, allowing the blood to become weak and polluted. It is important to know that germs and viruses only thrive on decaying matter (toxins). They do not attack clean, toxin-free blood, tissues, or organs. Therefore, if we reduce the number of contaminants in our blood, we automatically reduce the number of germs and viruses. There are two ways we can accomplish this. We can depend on the body's ability to cure it, and we can offer a little assistance to get the job done.

Our bodies are true marvels of creation. Hundreds of interconnected organs and systems are programmed to respond to an endless variety of circumstances, both good and bad. For example, four major command centers are constantly working to remove toxins from our blood. You will discover that our bowels, kidneys, lungs, and skin (yes, skin!) are considered protectors of our blood, among other things. They work tirelessly at keeping the blood free of unwanted debris, each in their own unique way. Unfortunately, when our bodies are short on enzymes, these wonder-workers are not always effective because of the stress we impose on our systems. As we get older, our bodies simply cannot effectively detoxify our blood and lymphatic system without help.

The lymphatic system filters out waste products. For example, white blood cells attack bacteria, and as part of the process they die along with the bacteria. The lymphatic system ushers both of these waste products to the lymph glands where the fragments break down and assimilate harmlessly into the body. For decades, millions of concerned consumers have tried a variety of self-administered ways to detoxify. They experimented with everything — macrobiotic and other vegetarian diets, fasting, and herbal regimens. Most of these approaches work to some degree, especially the herbal treatments. However, my studies have convinced me that enzyme supplements are the missing ingredient. When taken consistently, they purify the blood by breaking down its undigested proteins, cellular debris, and other toxins. With the blood healthy once again, the body gradually rebuilds itself and replenishes its storehouse of enzymes. The ultimate result is a balanced body capable of functioning at peak efficiency.

I find it interesting that when dealing with people I know, either friends or family, it is very difficult to advise them about their nutritional wellbeing. It is amusing to learn that you simply cannot tell people whom you know what to do! I am addressing this because I have suggested the use of enzymes and dietary changes to my own family and close friends. In keeping with our human nature, they all wait until they have manifested a condition or illness before they make any changes. When they finally do take action, it is invariably the result of what they have learned from someone else's book or work. My word to the wise is, if you have found the answers to a loved one's health problems in this book, they

may not be ready to listen to your pointing it out to them. Be comfortable with what you have learned — the best example for your friends or family is to see you working diligently at staying healthy. When family and friends do rid their diets of sugar, the results that manifest are so encouraging. Because our nation has such a sweet tooth, we have become so enzyme deficient that we cannot recognize the battle raging within our bodies. The symptoms are so numerous now that there is a great deal of crossover into other maladies besides sugar addiction. Fatigue, aches, pains, depression, and inflammation describe a multitude of disorders.

One of my relatives recently read a book about Crohn's disease. He is having a problem with his colon, and the book detailed the number of malnutrition dilemmas we are facing because our metabolic enzyme output is so badly hindered. The digestive system is so compromised that this colon disorder has now manifested as Crohn's disease. My loved one eliminated almost all the simple carbohydrates, desserts, breads, and some of the pasta from his diet. It worked for him, and now he feels so much better. It does not matter whether he heard it from another source or me, the important thing is he understands what he had been doing to himself and he has taken steps to change his lifestyle. I reiterate, I cannot emphasize too strongly the importance of eliminating sugar or foods that turn into glucose from your diet. Get rid of those sweets, those white breads, and tortillas, and start giving enzymes to your body. I am speaking to myself just as much as to anyone else.

Eating foods that create residue in the small intestine inhibits your metabolic enzymes. This waste matter keeps the villi from absorbing nutrients. The system can no longer depend on the metabolic enzymes, which have been rendered useless. They are unable to respond if called upon because of the toxic conditions we have created by eating the wrong foods day after day, year after year. The protocol for a very toxic colon that can involve explosive diarrhea calls for the return of a good pH balance. It is almost impossible to achieve this if you are nutrient-deficient. If your small and large intestines have bacteria or fungal-form takeover, the best recourse is to use *L. Plantarum*, a natural bacterium. I then call in my protease — the big detoxifier. Protease is a scavenger for improper proteins. Its miraculous properties cannot be praised enough.

Occasionally, you may find someone whose gastrointestinal system is so irritated that taking high doses of protease may cause a slight uncomfortable sensation. If that is the case, simply take the protease with a meal or small amount of food instead of on an empty stomach. Most of the time, I find people not drinking enough water when swallowing the capsules. All protease, whether metabolic your body makes or supplemental you take orally, requires water to work. The other thought is to calm down and repair the system. The bacterium *L. Plantarum* will

not create the discomfort. It will restore the natural pH with the "good" bacteria. When this takes place, it works like a natural antibiotic because the body is able to make its own reserves. The next best enzymes for this are high amounts of lipase along with the carbohydrate-splitting enzymes. A good enzyme formulation is what I would use until everything is back to normal.

To be toxic means we have self-poisoned our bodies either with undigested food or through autointoxication. This means we have poisoned our system through toxins locked in the blood stream from something we have not digested properly. Toxins are trapped in our colon where they leak into the blood, and then we have to deal with the adverse effects. There are thirty-six poisons released into the blood from undigested foods. These poisons, or toxins, are substances that have been ingested, inhaled, absorbed, or have developed within the body. Even in relatively small amounts, they can cause structural damage or functional disturbances.

CHOLESTEROL — IS IT REALLY THE BAD GUY?

We have known for decades that, over time, a high-fat diet will raise the cholesterol level in the blood and increase risk of a heart attack. We have also known that unless you are a smoker or have a genetic defect, you have the ability to reduce your cholesterol level. More recently, we have learned that when you reduce your cholesterol level, you also reduce the amount of high-density lipoprotein in the blood. This is not ideal, because HDL plays a very important role. It drives excess cholesterol from the blood stream into the liver, which removes it from the body. Fortunately, regular exercise offsets the loss of HDL good fats caused by low-fat diets. We often overlook the fact that the body manufactures its own fats. Although we need a certain amount of fat to maintain good health, it is all too easy to accumulate harmful levels. Knowing our individual body type and the foods we should eat is very helpful in preventing our system from overproducing our supply of bad fats.

In spite of our best intentions, however, a majority of us have too many undigested fats floating in our blood. It is very rare for me to find fat-free blood when I view samples under the microscope. The presence of excess fats in the blood is the result of too much fat intake or fat production, too little exercise, or a deficiency of the digestive enzyme lipase, which breaks down fats. Nearly everyone whose blood samples I have evaluated is lipase deficient. Taking lipase enzyme supplements with every meal easily remedies this.

As a clinical nutritionist, I have no doubt in my mind that good nutrition is the best method of prevention. The general public, because it is uneducated when it comes to good nutrition, views this way of life as too simplistic. For example,

the press constantly feeds us information from doctors and government health reports. Because we all pay such close attention to the media, most of us believe that cholesterol causes heart disease, and that we will prevent heart disease by avoiding cholesterol. I believe that no true scientist genuinely believes it. Even though what we hear is just opinion, we have been left with the idea that cholesterol is bad for us.

IS CHOLESTEROL BAD, OR IS IT NECESSARY?

Our bodies manufacture 1,500 milligrams of cholesterol per day. If we do not eat foods containing it, our livers make it for us. This tells me that cholesterol is important. To preserve that all-important state of homeostasis, I believe cholesterol must be in balance with blood sugar, blood pressure, sodium, potassium, and electrolytes. Levels of cholesterol can vary depending on what is driving it. If your good cholesterol (HDL) is driving it due to exercise and everything else is in range, then that is a good cholesterol reading. If triglycerides (LDL) are driving the number, that is not a good reading. Recently warnings have been going out that the low cholesterols have just as many problems as high and can be an indicator of disease. The only problem with this is so many are on cholesterol-lowering drugs that falsify or skew the results.

What do triglycerides look like? They are waxy, fat-like substances. When we look at live blood just after someone has eaten or while they are digesting, we expect to see a certain amount of cholesterol floating around in the plasma. If it is not there, we know a big imbalance exists, one that needs correcting as soon as possible. Cholesterol is essential to good health because it is a major building block. It is a component for all the body's hormones, particularly the sex hormones. It plays a major role in the endocrine system and helps form the protective myelin sheath around nerve endings. It also helps in the provision of bile salts for digestion.

I have read cholesterol research and wasn't surprised to find a study done in America with people having blood cholesterol levels anywhere from 200 to 225 milligrams living longer than those with levels of 150 to 200 milligrams. That makes a statement that differs greatly from what the media tells us. I have consulted some of my medical doctor colleagues who are more comfortable when their patients' readings are higher than 150 to 200. We know that a certain amount of cholesterol is very important for the maintenance of good health. However, that amount will vary depending on biochemical type. It is intriguing to me that no-fat and low-fat foods are all high in sugars, and many times synthetic sugars, which is a devastating combination. After all, the balance of the cholesterol readings is what is important. Your total cholesterol might be high because your good fats

HDL are higher than the range given. This also determines your risk. The higher the HDL levels to the LDL, the lesser the risk.

This is a primary example of trading one problem for another. Many physicians tell me they like how our clinic uses cholesterol readings as indicators of possible nutrition problems. They are not surprised if cholesterol levels are high in patients with heart disease. Rather, they are concerned that this indicates the causes for both high cholesterol and heart disease are the same. It is sugar consumption moreso than fatty foods, which drive up cholesterol levels, because sugar causes the liver to make large amounts of triglycerides. A particularly lethal combination is a donut (fried starch!)

In my office, as in those of countless health professionals using enzyme therapy, high or low cholesterol is not a problem. I say that with complete confidence. Whether clients suffer from high cholesterol because of an inherited condition or create high cholesterol through improper diet, they are given a formulation high in lipase, along with other supportive enzymes, and Brindall Berry combined with other herbs. Their high cholesterol level can drop within a 21-day period. Laboratory tests, university findings, and our research support this fact. Immune-deficient clients with low cholesterol are also brought into the normal, healthy range with enzyme supplements. For some it happens even more quickly when they make positive dietary changes.

It is important to discuss the research on high-cholesterol foods. The information available to most of us tells us that we should not eat eggs or animal fats because of their high cholesterol content. Even though it has been proven that eggs do not present a cholesterol problem, we are still told not to eat them. It is worthwhile to investigate who the sponsors are of the tests that are run and how the information is delivered to an unsuspecting public. I feel it is not in our best interests to stop eating eggs, because they are very high in necessary amino acids. We hear that cholesterol will escape into the blood, lining the blood vessels with the harmful plaque that creates heart disease. The real truth is that the cholesterol (yoke) when eaten with the white (amino acids) causes greater balance and use of the protein. Nature does not make mistakes — just man.

EAT THE WHOLE EGG

I personally advise Body Type One to start the morning with eggs. It amuses me how many people question the cholesterol content in eggs. I show my clients the documented research so they can be comfortable with knowing that the egg is safe to eat. I consider the egg white to be one of the ideal protein sources. Cholesterol is only present in the egg yolk. However, it is the synergy between the

egg white and the yolk that makes an egg such a superior protein source. They are the healthy lipoprotein that balances the good cholesterol. Clinically, eggs are highly nutritious, because they contain important amino acids. Science uses the egg as a standard measure for all protein when eating the whole egg. If a health professional advises that eggs are bad for you, as an allergy to eggs, then of course they could be harmful for you. This could be a warning that perhaps your body is not making the correct amount of protease and lipase. When I recommend certain foods to a client, I always make sure the foods are eaten with the right amount of enzyme supplements to assure proper digestion. For me, any concern with cholesterol would begin with looking at lipase activity. Next, I would consider the body's ability to handle lipids and what should be done to balance the body type with foods and enzymes.

WHAT PART DOES CHOLESTEROL PLAY IN THE CREATION OF PLAQUE?

Does it arrive early or late in the procedure? Was it formed because of eating a high-cholesterol food, or was it brought on because junk food seems to encourage the production of free radicals? Dr. Elmer Cranton, President of the American Holistic Medicine Association and author of *Bypassing Bypass*, was the first to propose a theory that has influenced the thinking of many health professionals. He suggests that perhaps the role of cholesterol is to help protect the body from free radical oxidation. Many doctors will now tell you that cholesterol does not create plaque as much as it is the presence of "free radicals." Cholesterol is one of the body's natural antioxidants. This means the body manufactures it to guard against the oxidizing damage by free radicals. While sheltering the afflicted area, cholesterol is converted to its oxidized form, which is harmful to the blood cells. The HDLs counteract this effect. LDLs are associated more closely with heart disease than with total cholesterol.

In the nutrition field, many have concluded that cholesterol is not the enemy. High-serum cholesterol (LDL) results from the imbalance in the body. Enzyme

antioxidants, along with vitamins found naturally in herbs, are the answer to the body's need for nutrients with which to rebuild itself. The media bombards us with information about popular antioxidants on today's market. Pine bark or grape seed, which I prefer, are two of them. Rose hips are better than synthetic vitamin C. Alfalfa is another product that works well in the restorative process. Siberian ginseng is a nutrient as well as an antioxidant. I use ginkgo biloba leaf and ginkgo biloba extract regularly. And remember, the strongest scavenger is protease. Another good enzyme is lipase, which delivers other antioxidants into the blood stream. With a correct formulation of all these enzymes, herbs, and nutrients, the invaders do not stand a chance!

OBESITY IS A BIG PROBLEM IN AMERICA (PUN INTENDED)

In 2012 over 34.2 percent of Americans were overweight and another 33.7 percent were obese. Do you realize this comes to 67.9 percent of Americans being FAT! We spend over $147,000 per year on exercise and diet pills, all because we are trying to get rid of the fat cells in our bodies. After we spend all that money, most of our efforts fail, and lost pounds are usually found once again. Visit any newsstand or magazine section of a supermarket and you will notice that almost every book or magazine features an article on weight loss, a new way to build the body, or a breakthrough diet. All of these books and articles say much of the same thing. There is disagreement regarding low fat, high protein, no protein, or all vegetables. It seems no one takes the time to explain to the public that the greatest imbalance is enzyme imbalance. One form of help for weight loss commonly touted is diet pills, either prescription or over-the-counter. Usually these pills contain an appetite suppressant that helps you cut back on your food until you can get control of it. Others are made up of medications that block insulin production and deter us from addressing another function of our metabolism.

However, when we stop taking the pills, the weight always comes back. Most of these medications also have side effects, so they can be taken for only short periods of time. Consider the terrible side effects of Fen-Phen, thermal medicine, or ephedrine supplements. For some people, a lifelong weight problem means a continuous cycle of gain and loss that puts an incredible amount of stress on our bodies as well as our emotions. Whatever the situation, shedding excess pounds is indeed a difficult task. What is more, the road to a slender body is paved with nutritional dangers. Most diets fall short when it comes to providing adequate nutrition. The HCL diet is now under the gun for the amount of calories being under what is considered healthy. Some diets suggest certain foods or food groups, while others say to eliminate this food and try that one. The most critical point to remember is that each cell in your body requires forty-five different nutrients to remain healthy! An article published in the New England Journal of Medicine

stated that research has proved both men and women who diet frequently suffer from heart disease more often than others.

To make matters worse, habitual dieting is a setup for weight gain. When you eat less to lose unwanted fat, your body thinks it is starving. It has a natural survival mechanism that allows it to cling to calories or fat, making weight loss even more difficult. If a diet recommends less than 1,200 calories a day, it will not provide adequate nutrients. I know you have heard all this before. What you may not know is that people are overweight because they cannot properly digest food efficiently or receive delivery of the nutrients to their cells. Therefore, the body cries out for more and more food. To answer that call, we eat more without assimilating anything of value and gain even more weight. One can be overweight or obese and be nutrient deficient.

Enzyme supplements added to a meal will help the foods through the digestive process, finally delivering the nutrients. Enzymes taken between meals will assist with cleanup of undigested food particles. Enzymes are critical for the treatment of obesity. Overweight people unable to control food cravings continue to assault their bodies and immune systems with high-calorie foods that are devoid of nutritional value. Plant-based enzymes solve these problems and keep us from doing any further harm to our health.

On June 20, 2013, the American Medical Association (AMA) declared obesity a disease, effectively making it a medical condition requiring treatment! Here is a good question that we should be asking — who is going to treat these now nearly eighty million obese American adults and fifteen million obese American children now in need of medical treatment? According to the AMA, it should be physicians. This is an odd choice since obesity is intimately linked with — if not directly related to — eating and exercise behavior. And yet throughout their training, most medical students receive less than 2 weeks' curriculum in nutrition prescription and no direct coursework in exercise prescription.

Of course, obesity isn't just about eating properly and exercising. In many cases, obese individuals have lifestyle-related metabolic or hormonal disturbances that also need to be addressed. These can cause them to not properly digest their food, utilize the nutrients, and metabolically turn it into energy, creating more storage of fat in the cells. According to Dr. Spencer Nadolsky, a practicing physician in Virginia who works with many overweight and obese clients, "The average physician is taught next to nothing about obesity treatment in medical school and residency." Beyond the obvious lack of training being a factor preventing most physicians from being able to effectively treat obesity, there's another issue at stake: **physicians just aren't afforded enough time with their patients.**

Recent research suggests that the average amount of time American physicians spend with their patients is 8 minutes, barely enough time for a presentation of symptoms and a subsequent referral or prescription. "When a patient is overweight or obese," says Dr. Nadolsky, "every doctor's knee jerk response is to mention 'diet and exercise.'" Sure, we've all heard it before. But let's be honest, **"eat right and exercise" is nothing more than a cliché.** Like a mother wagging her finger and telling children to eat their vegetables, it has no teeth.

Which brings us back to the original question. If physicians have essentially no training in nutrition and exercise prescription for obesity, minimal training in the relationship between metabolic health and obesity, and very little time to actually discuss lifestyle intervention in obesity, then who is going to treat obesity? The answer may be in the obese person's own hands. We have to learn what causes this disease and stop doing it. It is stopping the overeating of improper foods for our own individual health. I know it is easier said than done, but it is up to the individual to do just like any other disease on this planet.

Every person needs to pay attention to the food he or she puts in his or her body, properly digest this food, rid the body of toxins, and maintain balance in our 100 trillion cells for energy, metabolism, and health. But we may lack the specific enzymes to properly break down our foods, challenging our immune system which is located in our digestive tract and compromising our liver, lungs, kidneys, and skin by the inability to rid ourselves of the buildup of toxins.

PERFECT STORM OF INFLAMMATION PROMOTES WEIGHT GAIN AND DIABETES

A wide array of health problems, including but not limited to obesity, insulin resistance, type II diabetes, periodontal disease, stroke, and heart disease, all have inflammation as a part of the disease.

The majority of inflammatory diseases start in your gut. Chronic inflammation in your gut can disrupt the normal functioning of many bodily systems. There also appears to be a connection between certain types of bacteria and body fat that produces a heightened inflammatory response and drives the inflammatory process.

Your Digestive System may be making you fat! It's hard to believe, but very true. Poorly digested food along with improper bacteria in your digestive tract upsets your gut's immune system and just might be behind those extra pounds.

I have observed this phenomenon in hundreds of patients. Remarkable new research has confirmed this perfect storm of inflammation. I have mentioned

effective treatments for the gut, the immune system, toxicity, hormones, and more and explained how the systems are connected. For example, I have seen patients who lose significant amounts of weight just by cutting food allergens from their diet. And I have also seen people lose 20-30 pounds simply by balancing the bacterial ecosystem in their intestinal system.

One patient, a 39-year-old woman, had chronic inflammation, fluid retention, acne, fatigue, and joint pain as well as irritable bowel syndrome with bloating and gas. She had tried every known diet but was unable to lose weight. She could not lose weight because she was inflamed. The imbalances in her gut and the food sensitivities resulted in this "perfect storm of inflammation." But when we had her eliminate the foods to which she was allergic or sensitive and gave her supplemental digestive enzymes to properly break down her food, along with healthy probiotics to heal her gut, she lost 35 pounds in a few months and all her other symptoms went away!

A big debate in nutrition is which comes first — inflammation or obesity. I have always believed that we become inflamed first and gain weight second (which makes us even more inflamed, perpetuating the cycle). Incredible new research now bears this out. Previous research has shown that obese people have different intestinal bacteria than slim people. Lean people tend to have higher amounts of various healthy or beneficial bacteria compared to those who carry a lot of excess weight and who tend to have greater colonization of pathogenic bacteria. For instance, the human adenovirus-36 (a cause of respiratory infections and pinkeye) might play a role in promoting obesity by transforming adult stem cells into fat cells that are capable of storing additional fat.

Researchers have also discovered that certain gut bacteria, including *Staphylococcus aureus* (staph) and *E. coli*, trigger fat cells to produce inflammatory cytokines. Researchers have proposed that this interaction can provoke the development of diabetes, which is a well-known "side effect" of obesity. Staph bacteria in particular appear to play an important role in diabetes, and according to the featured article, obese people have a tendency to become heavily colonized with staph bacteria. Staph bacteria are also the most common bacteria found in diabetic foot ulcers.

Previous studies had come to similar conclusions. For example, one study found that babies with high numbers of Bifidobacterium (beneficial bacteria) and low numbers of *Staphylococcus aureus* appeared to be protected from excess weight gain. This may also be one reason why breast-fed babies have a lower risk of obesity, as Bifidobacterium flourish in the guts of breast-fed babies.

FOR OPTIMAL HEALTH, ADDRESS AND AVOID CHRONIC INFLAMMATION

Remember, the microorganisms living in your digestive tract form a very important "inner ecosystem" that influences countless aspects of health. More specifically, the type and quantity of organisms in your gut interact with your body in ways that can either prevent or encourage the development of chronic inflammation, which is at the heart of many diseases, including heart disease and diabetes. The composition of your microflora may even dictate the ease with which you are able to shed unwanted pounds.

When you eat a bad diet, bad bacteria flourish. Your whole gut ecosystem is upset and the outside world "leaks" in across a damaged gut lining. Since virtually all of us are exposed to factors that destroy beneficial bacteria in the gut, such as antibiotics (whether you take them for an illness or get them from contaminated animal products), chlorinated water, antibacterial soap, agricultural chemicals, and pollution, ensuring your gut bacteria remain balanced should be considered an ongoing process.

TESTIMONIALS

"Rome's Biggest Loser"

Dr. DicQie Fuller-Looney provides the most effective supplements for digestive health in the world. We have had tremendous success helping people restore normal digestive function with the constant usage of her Probiotic, Digest, and Protease. In conjunction with a healthy diet and supplemental enzymes, amazing things can happen. We have also had amazing success reducing joint and muscle inflammation with her combination of systemic Protease for inflammation and another product for repair of muscle, tissues, and bone.

I currently use these products with the world-class-sprinters that I coach. There is absolutely no substitution for these products!

We had our first meeting with the Rome's Biggest Loser contestants. I took a poll regarding digestive health. Out of twenty contestants:

- *Eleven had their gallbladders removed*
- *Six complained of constipation (one had a complete blockage and had to drop out for medical reasons)*
- *Sixteen said they suffered from frequent gas, bloating, and indigestion*

After 2 weeks almost every person was asymptomatic. There were very few complaints of indigestion, frequent bloating, and gas. The combination of Protease, Digest, and Probiotic ensured that each contestant would be able to digest, assimilate, and use the nutrients they were consuming. Without these enzyme products, it would have been impossible for the contestants to lose such a large amount of weight in just 6 weeks.

One participant made the following comment: "I was lucky enough to be chosen as one of the participants in the program. Whether or not I am the ultimate winner of the competition, I have already won by losing over 15 pounds in 6 weeks. I have used many supplements over the years, but not often for weight loss. Your efforts to ensure digestion health are very much appreciated! I was eating a lot of food, and I am sure that your products helped me digest it efficiently. I will be sure to recommend your products to anyone seeking good digestive health."

***"Dr. Fuller, I personally want to thank you** for your work and how attentive you were to me while suffering with my gallbladder. As you know, I spent years looking for an answer to my nausea and diarrhea. Just at the time I was ready to give up and have my gallbladder removed (even had a surgery date) I heard of you. It was so refreshing to be educated on why my problem existed and suggestions on what to do. I wanted to believe your supplements would make a difference, but I had tried so many things, even other enzyme products. I followed your protocol and in 24 hours felt a difference that I was afraid to even talk about. Here I am all these years later having cancelled my surgery and doing absolutely fine. The only thing I ask of you is to make sure I can always get your products." - W Brink - Denver, CO*

***"Our son is 9 years old** and was diagnosed with Autism several years ago. We first began working on his diet and saw improvements. Then we started giving him digestive enzymes and probiotics, and he got even better. Now we have added the Carbo-G and it is the perfect combination. And we will not stop them. Our son's concentration and awareness is better. He takes direction without a struggle and follows through on tasks. He is less 'moody' and is happier. There is a definite difference for the better!" - L Esquivel, MD - San Antonio, TX*

***"I was at a business luncheon** that included a buffet. They had regular bread and gluten-free bread available, so I chose the gluten-free*

bread since I am very gluten sensitive. I hadn't eaten a sandwich in over a year, so I was really excited about my lunch. I was almost completely finished eating when I realized the bread had been mixed up and I had actually eaten the regular bread. I had already taken my usual dosage of enzymes with my meal but quickly took three more Carbo-G. Later that night and the next day, I experienced very little if any of my usual gluten issues. I slept well and had no brain fog, headaches, or stomach issues the next day. It was amazing!" - D Aubrey, CCN, CNC

***"My granddaughter** loved the Carbo-G. She isn't very compliant and I am trying to work with her on taking it more often. I have also been giving it to people who travel and might not know for sure they are eating gluten free. I am very excited about the product and looking forward to getting more patients on it." - C Brinkley, RN - Henderson, NC*

***"I have started with** six patients on Carbo-G now as part of their protocol. I was planning on them taking it for 6 weeks before I retest their serum values. The subjective feedback so far is positive. All of them are experiencing less bloating than before. Three of the six are endurance athletes and are experiencing less GI stress from their glycogen replacements supplements on their long runs when they use Carbo-G before their training sessions. After six weeks on Carbo-G, there is a seven percent average drop in both AGA and IGG antibody tests and a 16.3 average drop in CRP. I have about 3 more weeks before I start pulling more labs and I will know more then." - C Banks, DC - Texas*

NOTES

- Before putting a product on the market we ask doctors to perform tests on their patients who volunteer. The preceding testimony reflects the testing period using the volunteer's blood.
- **AGA** stands for anti-gliadin antibodies, antibodies produced by the body in response to contact with gliadin, a part of the gluten molecule.
- **IgG** stands for immunoglobulin G, which are generalized antibody molecules.
- **C-reactive protein (CRP)** is a protein found in the blood, the levels of which rise in response to inflammation.

RENEWAL PROGRAM (BEGINNER)

It takes a committed effort to renew the body itself.

What it requires:

- Knowledge of foods that will promote energy and renewal of our system
- Knowledge of foods that will promote healthy tissue, bone, and muscle
- A plan for what to eat and how often
- Exercise to refurbish the body and improve how we feel
- Adequate pure water intake to bathe our cells and eliminate waste
- Proper length of the program to allow for rebuilding (anywhere from 3-6 weeks before moving into the Advanced Program)

Those who need the renewal program:

Anyone who is or has been out of balance for an ongoing period of time which has created imbalance within his or her body system itself such as:

- *Cancer patients*
- *People diagnosed with conditions (system or organ dysfunction)*
- *Obesity / overeating*
- *Depression / anxiety*
- *Fatigue / confusion*

"Transformational Renewal" how to do it:

- Renew and feel good while doing it
- Know what takes place when you begin the renewal of all systems
- Proper eating and exercise will promote energy throughout all systems of the body during each step of the Renewal Program
- A simple one-page system for every day

MOODS, EMOTION, AND EXERCISE

A brisk 10-minute walk will increase energy and improve mood for up to 2 hours with decreased tension as a secondary effect. Exercise scientists from two universities studied ninety-three well-educated women for 11 weeks and noted that when they exercised (leisurely walk, brisk walk, or yoga) for 20 minutes they would self-rate themselves as revitalized (expressed as feelings of energized,

refreshed, and revitalized). Secondly, they felt happy feelings and joyfulness plus increased positive mood changes. Thirdly, they had a feeling of tranquility, calmness, peacefulness, and relaxation.

However, when exercise scientist Nicholaas Pronk at Texas A&M University monitored twenty-three same-type women, working them harder at a moderate or demanding rate of exercise for 22 minutes, they noted that mood changes grew worse (as in tension, anxiety, and exhaustion) although after an hour the anxiety began to decrease.

Therefore, for recovery, any moderate to difficult exercise is not to be attempted, as this will create catabolism (breakdown) rather than renewal. When you burn glucose too fast through strenuous exercise, you begin catabolism, whereas long, slow exercise burns the fat and does not break down the muscle. When you want to build (anaerobic) you cannot do so from a catabolic state (tearing down). This program encourages body renewal, and it is important not to lose the muscle mass needed to renew the body. Breaking down is not a building state for your body.

Negative moods will also influence your ability to heal and rebuild (renew) your body. Negative emotions influence eating wrong foods for recovery and show up as an absence of energy at the cell.

> *"You might want to include the science of the integral protein membranes which are found in our cells. They open when you have a positive attitude, and close down when you have a negative attitude. They open the widest when you have a good belly laugh. Maybe, laughter is the best medicine. Also, they close down when you are angry or fearful. They can also open when you pray." - Dr. Dick Couey*

PROPER FOOD FOR RENEWAL

Carbohydrates break down to glucose, which fuels our muscles and brain. Glucose assisted by insulin is escorted into cells by enzymes. Once inside the cell, glucose is quickly metabolized to energy. Or, if you eat more than is needed, glucose can be converted to either liver or muscle glycogen, which we use during exercise for energy. However, if our metabolism has been negatively compromised, it will be stored as fat.

Carbohydrates are in the following categories:

- Simple Carbohydrates / Starches are those that are quickly converted to glucose, and they include sugars, breads, cereals, desserts, jam / jelly,

and fruit juice (processed foods). Excess consumption of these foods causes an over-stimulated release of insulin, which activates fat cell enzymes to bring the glucose in for storage or make additional fat cells as needed. Remember, if it is packaged, it has additives and is usually a simple carbohydrate / starch.

- Complex Carbohydrates are those that are slowly converted to glucose. They include high fiber foods, sprouted grain breads such as Ezekiel 4:9 bread, yams, Quinoa, rice (brown, wild, abd long grain), beans, and most fresh vegetables and greens. Consumption of these foods creates less of an insulin spike and, when combined with protein, there is a desired slow, steady release of energy.

When carbohydrate and protein foods are in short supply, the body will begin to break down its own muscle for energy, which can become dangerous to our overall health.

WRONG FOODS INFLUENCE POOR MOODS; PROPER FOODS INFLUENCE RECOVERY

Proper foods for renewal are complex carbohydrates (slow-burning glucose). Fats should be eaten in their natural form. No "low in fat" or "low in sugar" products: these are man-made and incomplete. Low in fat or low in sugar simply means high in "synthetic" sugar. Avoid synthetic sugar completely as it will sabotage your success!

Proteins break down to amino acids and cannot be stored in the body like sugars or fat. Our bodies do not store proteins for use later on. But it is very difficult to obtain enough of all the amino acids required by the cell from plant protein sources such as soy, legumes, or nuts. Plant foods are lower in the amino acids (the building blocks of protein) that are required for re-building of tissue and for growth and repair. They need to be combined with another food to give you the complete amino acids that are demanded by the cell. An example is rice and beans eaten at the same time.

EATING FOR RENEWAL — PROTEINS IN OUR DIETS

Protein food is the highest metabolic food. For renewal you need at least 3 ounces for a female and 4 ounces for a male per meal. Protein in our diets comes from both animal and vegetable sources. Most animal sources (meat, milk, eggs, fowl, and fish) provide what is called "complete protein," meaning they contain all of the essential amino acids. Vegetable sources usually are low in or are missing certain essential amino acids. For example, rice is low in isoleucine and lysine.

Though different vegetable sources are deficient in different amino acids, you should understand that by combining different foods you can get most of the essential amino acids throughout the course of the meal. Some vegetable sources such as nuts, beans, and soybeans are all fairly high in protein. By combining them, you can get pretty good coverage of essential amino acids.

It is now difficult to find good soy foods that do not contain genetically modified organisms (GMOs). I therefore no longer suggest soy because they are almost all genetically modified, and their estrogen abilities are not suitable for men ("men's boobies") or women with cancer. Plant sources such as tofu are made from soy and should not be eaten by anyone with breast cancer, including men, because of their estrogen-containing phytoestrogens.

The most complete proteins (bearing eight to nine amino acids) are lean meat, poultry, fish, and eggs. These are complete amino acid sources. One egg equals 1 ounce of protein. One scoop of whey protein isolate and/or natural whey should represent 3-4 ounces of protein. Organic products are preferred and should include grass-fed beef, organic poultry, and fresh-caught or wild fish.

Therefore, the proteins of choice are grass-fed lean animal meat such as poultry (chicken or turkey), fish (wild salmon or tuna), lean beef, and eggs. Choose organic, hormone free, and mercury free when available. You may have whey protein powder for snacks. Pork is not recommended.

Carbohydrates of choice are organic complexes (slow-burning glucose) that include yams, beans, rice (brown, wild, and long grain), most vegetables (including squash), greens (raw), and raw fruit (no fruit juice). Eat organic every opportunity possible.

Starch is not the best carbohydrate source and should be avoided. If you are gluten sensitive, I suggest a specific gluten-digesting formula for this in place of the other digestive products.

Proper fats are important food for our hormones and cells. However, do not eat fried foods for renewal.

Foods can be boiled grilled, baked, sautéed, or steamed. Vegetables are wonderful in a raw state as in salads or snacks.

Do not remove the yolk from the egg. It does not make improper fat, and it is the combination of the two substances that add up to the perfect protein food.

The best choices are unsaturated fats that contain omega 3's and a few 6's. These essential fatty acids are found within nuts, seeds, fish oil, avocados, and virgin olive or coconut oil.

Eat protein and complex carbohydrates at each meal and snack. This is very important to your success.

Remember, when and how often you eat is just as important as what you eat. Eat every three to 3½ hours during the day.

RENEWAL PROGRAM INCLUDES PROPER EXERCISE AND FOOD FOR REJUVENATION

Renewal is about changing your metabolism, improving digestion, and utilizing your food properly. How does exercising for energy work?

- Exercise at a slow rate for 10-20 minutes if you are just beginning, and know that your metabolism increases as glucose is broken down and energy is released as ATP.
- In turn, the mitochondria in our muscles and systems are activated — this takes place at the cellular level in all the systems of our bodies.
- During exercise, heart rate, blood pressure, and respiration increase, resulting in more oxygen circulation throughout the entire body.
- Stress hormones such as cortisol and adrenal both influence arousal responses (energy) and are released in the blood stream.
- Neurotransmitters and neuromodulators (norepinephrine and serotonin) are also increased.

- Energy is generated throughout from a pattern of arousal, and feelings of wellbeing increase that can last for hours.
- Take protease capsules for repair following your exercise.

Metabolism is the sum of all the chemical changes and reactions that happen in your body. Some reactions build up (anabolic) and some tear down (catabolic), and they go on simultaneously every second of your life. The speed that your body does the above tasks is referred to as metabolic rate. Since you have a condition or imbalance, it is likely that yours is very slow or inefficient. The raw material your body uses for metabolism comes from the food you eat and the nutrients the food contains. For the renewal of cells, remember:

- Eat protein and complex carbohydrates at each meal or snack.
- Eat every 3 to 3½ hours (or six small meals a day).
- You must eat at least five times a day for the program to work.
- This keeps food in the stomach most of the day (increases metabolism).
- It keeps you from fatigue.
- It gives you the building blocks to repair.
- Ingest supplemental digestive enzymes with each meal along with 8-10 ounces of pure water to activate enzymes.
- Sensitive types do best if they ingest a soothing formula of enzymes and a probiotic with meals.

SUGGESTED RENEWAL PLAN

Start the day with breakfast — you must "break" the fast.

Breakfast: three to four-egg omelet with vegetables or two-egg omelet and include 2 ounces of white organic cheese and one fruit of choice. No fruit juice. Drink eight to ten ounces of water along with one to two capsules of your supplemental plant-based digestive formula plus an extra protease capsule.

3 hours later: 4 ounces protein of choice with organic fruit or vegetable, for example a smoothie made with 25 grams of protein powder, ice, and fruit. Drink 8-10 ounces of water with your digestive formula plus one protease capsule.

3 to 3½ hours later (lunch): 4 ounces protein of choice such as chicken salad and greens. Drink 8-10 ounces of water with one or two capsules of your digestive formula plus one protease capsule.

3 to 3½ hours later (snack): 4 ounces of water-packed wild tuna or salmon with an apple. Drink 8-10 ounces of water with one or two capsules of your digestive formula plus one protease capsule.

3 to 3½ hours later (snack): 4 ounces protein of choice such as lean meat with a yam (sweet potato) and salad. Drink 8-10 ounces of water with one or two capsules of your digestive formula plus one protease capsule.

Evening snack (optional): 3-4 ounces of protein food with grapefruit (make sure your medication does not prohibit grapefruit) or cup of berries, plus one capsule of your digestive formula.

Before bed: two to three capsules of systemic plant-based protease plus one or two capsules of probiotic with 8-10 ounces of water.

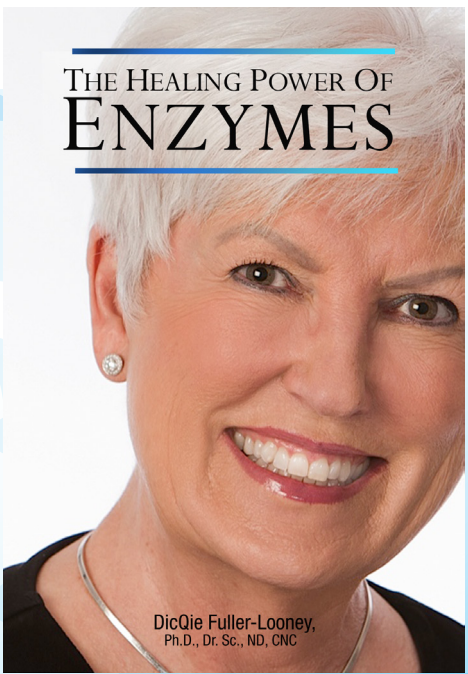
Supplemental enzymes along with metabolic enzymes made by your own body are both hydrolytic and require water to work. You must drink at least 8 ounces of water with enzyme supplements and/or when eating.

RENEWAL PROGRAM (ADVANCED)

In the Beginners' Renewal Program, you learned about food and how to feed the body for renewal. In this program you will learn how the cell renews itself when given the opportunity by not feeding the body system. You might think this an oxymoron, but there are scientific studies to back this up. You may enjoy this program and want to make it an ongoing part of your life.

There is a lot of initial evidence to suggest that temporary periodic fasting can induce long-lasting changes that can be beneficial against aging and diseases. One of the ways fasting works is by making your body reduce the amount of IGF-1 it produces. I am speaking of alternate fasts, not a prolonged fast, because there are risks with prolonged fasting.

Newly Revised with 6 Additional Chapters!



Dr. DicQie Fuller-Looney has enjoyed and been blessed by her 30-plus years as a clinician, educator, researcher, and author. She has earned two Ph.Ds, one in Health Science and the other in Dietetic Nutrition, and also holds a degree as Naturopathic doctor – Heilpraktiker from Germany Kneipp Heilpraktiker Akademie. Her passion in the last 35 years has been in the realm of Enzyme Therapy along with Biochemical Individualism and their use in bringing balance to the body whether involving our health, thoughts, or harmful beliefs.

"How exciting! A Must Read For Everyone!!! What a great educational tool for those practitioners stuck on the simplicity of our wonderful enzymes" - Rose Jacobson, CT

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