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# THE HEALING POWER OF ENZYMES

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*Chapter 9*

**Attack the  
Bad Guys!**

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## Attack the Bad Guys!

### **DOES YOUR IMMUNE SYSTEM REALLY NEED TO BE BALANCED OR REBUILT?**

#### **ABSOLUTELY! DO YOU KNOW WHY?**

There are dozens of bad guys attacking the very system designed to do its own attacking. The main task of the immune system is to destroy toxins and other foreign invaders that take an enormous toll on the body. If you are old enough to read this book, your immune system is old enough to need continuous attention.

Of course, the first thing we all need to do is minimize our intake of bad guys. This means avoiding food and water containing agricultural chemicals as well as limiting sugar, which stresses our pancreas, kidneys, and liver. In addition, we should cut back on simple carbohydrates that begin depressing the immune system less than an hour after we eat them.

We also need to think twice about eating hormone-fed and injected meat, due to all the poisons that existed in the animal before it was killed. Purchasing grass-fed beef and organic poultry is a must. Three more items that we cannot omit from our list are stress reduction, regular exercise, and positive thinking all the time. (I must admit that after writing this paragraph, I was tempted to become depressed, too.)

Yet, if we desire total health, none of these are exaggerations. If we work hard at the prevention process and eat a nutritional diet, our bodies will produce several million immune cells daily and earn the title "healthy." Unfortunately, the majority of us have many reasons for not practicing prevention. The result is that we put our immune systems on red alert.

## OUR IMMUNE SYSTEM – WHERE IS IT LOCATED?

When we talk about the immune system, can we picture where it is in the body? There are eleven systems that run the body, and we know where most of them reside. When we think of the cardiovascular system, we picture the heart and its arteries. Urinary system makes us visualize the kidneys and bladder. Endocrine system, we may think of the thyroid and adrenal for two major ones.

Our pancreas is part of two systems (endocrine and digestive). Muscular system involves our three types of muscle groups. Nervous system consists of the brain, spinal cord, second brain, and sensory organs that carry messages throughout the body. Reproductive system is made of our sex organs. Respiratory system is one that we immediately think of as our lungs. Skeletal system is another easy



one and we picture our bones. Skin is a system for itself, and the largest organ of the body. The two systems left are the digestive and our lymphatic (immune) systems.

All the systems work together to keep us alive — one cannot work without the others keeping it in balance (homeostasis) — but the one system that helps control each of the other systems is our digestive system. And the digestive system contains over eighty percent of the immune system and the second brain. I hope this helps you understand why certain foods can disrupt our immune system.

### **AS IMPORTANT AS “BALANCE OF ALL THINGS” IS TO NATURE, SO IS THE HEALTH TO THE HUMAN BODY**

The common denominator among my clients with serious conditions related to a depressed immune system is an inability to digest food properly. Some of the most common of these disorders are Epstein-Barr virus, Chronic Fatigue Syndrome, Systemic Candidiasis, and HIV infection. When poor digestion occurs, the food we eat is not broken down into the basic building blocks needed to rebuild cells and generate energy for metabolism. This brings on two big negatives — cell

starvation, and the release of partially digested food particles into the blood stream.

Starved cells cause malnourished tissue that puts the brakes on important chemical processes. This results in less excretion of the toxins out of the cells. If that is the case, then fewer nutrients are introduced into the cells. There is less energy production for all cells, including those of the immune system. This reduces the number of white blood cells that are critical for fighting infection. Overall cell weakness starves the body of fuel and oxygen. A very high percentage of the population suffers from incomplete digestion, but they have yet to develop serious immune system disorders.

When the body releases partially digested food remnants into the system, it creates at least three major pathological problems:

- (1) These remnants become irritants, causing inflammation of the mucosal wall of the intestines that in return releases powerful and damaging chemicals. These chemicals injure the intestinal wall enough to increase its permeability. The foreign proteins in the undigested food can leak directly into the lymphatic channels of the intestinal wall and gain access to the body's entire circulation system. Here they are considered foreign objects, so the defense mechanism mobilizes an attack by the fighter cells of the immune system. Ultimately, the battle-weary soldiers begin to run out of fuel and fail to reproduce sufficient numbers of white cells.
- (2) Food remnants also provide fuel for the overgrowth of fermentative fungal organisms such as *Candida Albicans* and other parasites that further drain the immune system.
- (3) The general inflammation brought by these wandering particles causes metabolic reactions that consume large amounts of oxygen. This produces free radicals that damage cell membranes.

Other, more complex damage occurs as well, but the medical terms and explanations are more intimidating and confusing. It is sufficient to say that the combined effects of poor digestion and errant food remnants clearly work together. They bring about a vicious sequence of events that leads to an obvious and progressive weakening of the immune system.

I have had many clients in my office over the years with *Candida* overgrowth and other yeast infections. Even after reading several books on the subject and trying extreme diets, each one of them remains extremely fatigued. They have a

desperate look about them. By the time they get to me, they have tried so many things and have spent enormous amounts of money. These clients challenge me to help them.

Candidiasis is one of the many fungal forms known to the human body that can become imbalanced. Fatigue and depression are two of the most significant symptoms. I have met with several Candidiasis support groups, and it is amazing to see how much freedom they have gained simply by understanding the real nature of the illness. Candida is natural to the body and only becomes candidiasis (overgrowth) when the immune system is not functioning efficiently.

A big part of my practice involves working with people who have fungal problems. Many ask me questions about diet. Some ask specifically why others can easily eat mushrooms but they cannot. It is not because mushroom is a fungus, rather it is the inability to break down the mushroom, an important factor — the answer can usually be found in one's genes or enzyme potential. I do not put anyone on an extreme diet or regimen. Good diet alone cannot control these symptoms. We must evaluate the individual body's inability to break down foods that compromise their immune system. I suggest they learn about their biochemical type and which foods sustain them. We must always consider individual biochemical type and how the same food can affect a dozen different people with a dozen different reactions. The only food that seems to cause havoc for everyone if eaten in excess is sugar.

Within weeks after treatment began, dramatic changes took place in the lives of these clients. I observed a big improvement. Later in this chapter, I will discuss Candida overgrowth in more detail.

## **RELIEF FOR EAR INFECTIONS**

Ear infections are very common among teenagers and younger children. These are the ages when children tend to eat a great deal of sugar and other junk food. This only worsens their condition. The amount of mucus in their systems increases due to a poor selection of foods. The immune system is depressed. When I complete a Live Cell Analysis on them, they all have fungal forms in common. I suggest they take high dosages of protease between meals to boost the immune system. I encourage all of them to pay close attention to how much sugar and other junk food they are eating. A multi-enzyme product will counteract their poor digestion if taken at mealtimes. These multiple enzymes must be taken with snacks as well.

Children love to snack after school or while watching TV. Parents are responsible for keeping the enzymes handy if they want to prevent sluggish immune systems in their children. Doctors involved in enzyme therapy begin babies on enzymes

as soon as they are home from the hospital. They use only pharmaceutical-grade plant enzymes without fillers.

## **BRUISING — A SIGN OF DEFICIENCY**

Normal bruising is not a concern if it happens from bumping into something or perhaps a fall. These bruises fade within a normal time period. There are many people who bruise quite easily, especially as they age. Those bruises tend to linger a long while before they fade. As we age, our ability to make digestive enzymes is lessened, and this leads to a needy and deficient state of health. In preventive medicine, bruising is always a sign of someone lacking nutrients and at least a slightly depressed immune system. If you fall into this category, I suggest you try the natural digestive enzymes for support in delivering natural nutrients.

We can take vitamins and minerals in whole food or synthetic form. But this does not mean they are always delivered to our cells. I recommend you do some research of your own and look at the studies showing most people to be nutrient deficient. Many eat the best quality foods and take what they regard as good vitamin supplements. Yet they still bruise easily or catch cold frequently. Taking vitamins and minerals does not necessarily mean that the nutrient deficiency will be relieved immediately. If it's not the right balance of nutrients for your biochemical type (genetic needs), you won't have the expected results.

A toxic body is a deficient body. Find out what caused the problem. Quite likely it will be a case of toxicity in the system. For example, you can cause a toxic reaction by taking improper nutrients. We do not realize that synthetic vitamins (those measured in milligrams such as Vitamin C 1000 mg) can be part of our toxicity. A man-made vitamin (in a lab) outside of a food is a reflection of itself. In other words, it is like you are looking into a mirror and see yourself, but out of the two of you, only one is real and the other a reflection. When the body needs a nutrient, it will use an enzyme to have it delivered.

The metabolic enzyme your body makes can only deliver a part of the synthetic version, and the rest results in a toxin to be taken from the system. Hence expensive vitamins in the urine! For instance, we can only absorb a set amount of nutrients into the cell in a period of time. One example is zinc — we can only absorb anywhere from 3 to 5 mg of zinc dependent on our size in 24 hours. A doctor friend called to tell me he found a zinc product that is 85 mg. I had to caution him that his body would have the added toxicity of getting rid of the synthetic 80 mg.

Highly toxic conditions manifest in various ways. It is best to treat toxicity and deficiency at the same time. Before we knew about the miraculous properties of

supplemental plant-based enzymes, it was nearly impossible to do so. Now we can assist digestion by cutting back on the cause of the toxic state. It is possible to assist digestion, and the enzymes break loose the nutrients, which they deliver directly to our cell. We can cleanse and fortify the liver and blood along with feeding and reinforcing the glandular and nervous systems. Within a short period of time, the bruises will fade and will not return. What makes it so rewarding for me is that my clients can see and feel the difference in their health. At the end of this chapter, you will find more information on enzyme dosages.

Overweight people have a continual battle to fight between the excess body fat they carry and their immune systems. The weaker their immune systems, the more they are subject to colds, flu, serious infections, viruses, heart disease, diabetes, and degenerative disorders. What is worse, when the immune system is depressed, the body is much more prone to weight gain. This causes an emotionally painful, self-perpetuating cycle. Only one of the four biochemical types, Type Three, can carry extra pounds and not suffer fatigue or a depressed immune system. However, if high blood pressure, constipation, or insomnia develops, the Type Three will also contract trouble with the immune system. The final result is that they, too, will be as vulnerable as the other three biochemical types.

### **THE COMMON COLD SHOULD NOT BE COMMON**

The common cold is an acute and highly contagious virus infection of the upper respiratory tract. At least twenty identifiable viruses have been found to cause colds, and they attack anyone with weakened resistance. It has been my experience that almost all of my clients who take enzymes consistently no longer have the colds that plagued them many times throughout the year.

How is this possible? I believe it is because they are finally digesting their food completely and eliminating undigested food particles out of their systems! Those food particles create distress and harbor bacteria that depress our immune systems. Types One and Two tend to be mucus makers because of poor digestion. If you are looking for total health, it is so important for you to educate yourself about all causes of poor health. Be certain you know the facts about the sugars, nutrient robbers, and mucus makers. If this is not enough to convince you, go back and reread the sections that deal with sugar intolerance.

### **SAY GOODBYE TO CANDIDIASIS**

Candida, a yeast-like fungus, is one of the many fungal forms that can create problems in the human body (known as Candidiasis.) There are thirteen different fungi that can be detected using Live Blood Analysis. They all share the ability to cause fatigue and many other debilitating conditions. I will not spend much time

here on the problem of Candida. Hundreds of books and diets on the subject are on the market. Remember, these diets only work while you are closely following them. The stress suffered from following the diet is almost as great as the Candida.

To keep it very simple, the fungal forms are proteins. When we take protease between meals to consume the excess radical protein, we have done away with the cause of the Candida. The formulation I recommend is at least 600,000 units of protease activity three to five times a day. In the practice of enzyme nutrition, health professionals sometime give over 3,000,000 units of protease in one day.

I suggest the food plan corresponding to your biochemical type. In addition, you need the proper enzymes for support of the endocrine system along with the miracle-working protease to digest the spores of the fungal forms.

I also believe it is important for you to have more information on the part played by the microorganisms (probiotics) which live in our intestines. They are critical to our good health. We carry more than 400 species of indigenous bacteria that are constant companions to our intestinal tracts. Our health is maintained by keeping them in balance, so that no one organism becomes dominant among this flora. Normally the resident bacteria preserve this balance. However, we are subject to both internal and external stresses that can interrupt the balance. If the balance is tipped and an overgrowth of yeast organisms occurs, they overwhelm the normal bacteria in the colon.



The most common of these overgrowths is *Candida Albicans*. A certain amount of this fungus is normal and healthy in the human body. This is also why we cannot rid it totally from the body system. Candida is only a problem if the overgrowth occurs. What does this overgrowth look like and how does it make us feel? Symptoms will vary. Candidiasis is found in seventy percent of our population. Sometimes thrush develops in the mouth. Women often get vaginal yeast infections.

Three systems are most profoundly affected by Candida — the gastrointestinal, urinary, and respiratory tracts. An imbalance in the gastrointestinal tract will cause

bloating, poor absorption of vitamins / minerals, food allergies, sensitivity, nausea, and diarrhea. Imbalances in the urinary tract produce frequent urination, pain, burning, swelling, and a strong odor. The respiratory tract becomes susceptible to bronchitis, chronic sinusitis, or postnasal drip.

Bloating and inability to tolerate various vitamins or nutrients are the most common of the Candida symptoms. Candida can directly cause a high incidence of food intolerance. Many more women have Candida because of birth control pills. Those who take frequent or massive dosages of antibiotics such as tetracycline are very much prone to Candida because the medication destroys the natural balance of healthy bacteria in the intestines. If you eat too much sugar or simple carbohydrates, you are more susceptible. Women who douche too often will destroy the balance of healthy bacteria in the vagina.

Fungal infections can range in severity from superficial to life threatening. For example, fungal infections affecting only the top layers of the skin are readily treatable and have a relatively limited impact on quality of life. However, if a fungal infection enters systemic circulation, the consequences can be deadly.



Protease is the best of the enzyme types for treatment of Candida. Candida or fungus is called unicellular, meaning it is a single cell. Protease rids our systems of the excessive growth of any of the fungal forms without side effects.

As with most illnesses and other health problems, the best treatment for Candida is to create a healthy internal environment. Many different products are on the market for our use. The needs for bactocilli and bifidus products are common knowledge to anyone who has ever been formally diagnosed with Candida. However, I believe that many of the new bacteria such as *L. Plantarum* and *L. Salvarius* are superior. Different bacteria can be used together to create balance. *L. Plantarum* has over 200 billion organisms with a growth rate that doubles in less than 5 minutes. That is a big improvement over the acidophilus we used in the past. Bacteria are preventative and precautionary measures for balancing the

system. I favor their use because, in the right combination, they balance the pH and the bacteria of the small and large intestines as well. Remember, your small and large intestines are the last places good digestion can occur, so it is critical that proper balance is maintained in them. If not, fungal forms will take over.

*Candida albicans* does not have a long history. Research shows it came on the scene about the same time we started to eat too much sugar. Another event that contributed to its growth was the advent of widespread antibiotics use, beginning in the 1940s and 1950s. Those who have the worst symptoms and the most acute emotional depression are the ones who have *Candida* and hypoglycemia simultaneously.

To sum up, the best approach for prevention is to add enzyme supplements to the daily diet and eliminate sugar. Please be aware of your sugar intake. If you will not cut back on sugar, at least add the enzymes — some of the food will be digested, some of the nutrients will be delivered, and some of the mess will get cleaned up. To get rid of the invaders, the use of protease between meals will start the correction process.

Precautionary measures make a great deal of sense to me. When clients come in for a consultation, I do not ask for radical changes. I make suggestions and give choices. However, the bottom line on sugar is — it's out! And an absolute NO to fructose, sugar, and sugar substitutes which have even more side effects. This does not mean that a piece of raw fruit can't be good for you, but avoid fruit juices because of the excessive sugar content. It is really quite simple. Read the labels on food products when you are grocery shopping. Choose only those items that are not high in sugar or simple carbohydrates. The benefits you will feel are worth the effort.

It is very difficult for Americans to overcome their sweet tooth. I feel it would be far easier to give up the sweets and start to rebuild our systems rather than suffer the aches, pains, and swelling that come with a strong sugar habit. I have found that when we take doses of carbohydrate-splitting and protease enzymes together, the swelling and inflammation in the body begins to dissipate right away. The client feels an almost immediate difference.

This takes place after using these miraculous supplemental plant-based enzymes. We know that carbohydrate-splitting enzymes with meals and proteases in large doses are perfect for those who suffer from *Candida* overgrowth and chronic fatigue syndrome. However, I would never formulate a regimen with just one carb-splitting enzyme called amylase, because I know the importance of the

enzymes working together. Some formulas have high amylase and cellulose, but that is not reaching the spore.

### CASE HISTORY

One of my women clients, a very successful surgical nurse, suffered from candidiasis. After going through the standard medications she was prescribed for it, she was still very lethargic. She felt she had lost her zest for living. She became so exhausted, she had to give up her practice. Her skin broke out, and she gained a lot of weight.

When she came to my office, I explained how I look at the body's natural processes. From that moment, I told her we would not fight against her illness, we would simply create an environment where the invaders could no longer live. This, of course, comes through the use of supplemental enzymes. She began with high dosages of protease between meals, three to five times per day. Along with this, she took the multi-digestive enzymes for more efficient digestion. She learned that she could no longer afford to leave undigested food particles in her system. I also gave her herbs mixed with the enzymes. These can be taken in very small amounts because the enzymes will deliver them to the cells. The two of them make a very successful health care team.

We paid close attention to her endocrine and immune systems. Within a month, she was back to work. In 6 weeks, she was completely up to speed. Today, she is still doing beautifully. We have remained in contact through the years. I can call on her for support for those who are desperate and feel there is no way out of the traps they have laid for themselves. It gives us a great sense of freedom to realize we can take control of our health and restore balance to the entire body.

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### **UNHEALTHY CONDITIONS IN THE INTESTINAL TRACT ARE ANY PARASITE'S DREAM**

Unhealthy and imbalanced intestinal tract is the ideal environment for parasites. There are at least 134 varieties of parasites that can thrive in the human body. Americans are infested with parasites due to our polluted water system, junk foods, too many cooked foods, and a lack of raw fruits and vegetables in our diets. Researchers in the health care field estimate there are 200 million people in this country who are infested with intestinal parasites. Once they enter the intestinal tract, parasites have easy access to all parts of the body. They can cause a number of diseases.

Parasites, viruses, fungal forms, and bacteria are protein in composition. Because these offenders are proteins, the enzyme protease works wonders in their destruction. Without any side effects, we can fend off these attackers of our immune system. Here is a good example of how protease works. We all know that ear infections are a common affliction in both children and adults. The virus causing the infection has a protein coating that protects the spore, the actual culprit. Protease digests the coating and exposes the spore to the white blood cells waiting to pounce upon it! I think that is an absolute miracle of nature, and in particular the design of the human body.

Parasites occur naturally in the body. They are everywhere. We get them from human contact. We can pick them up from walking barefoot or in the food we eat. However, when parasites are out of control and become toxic, we have health problems. This is what happens in the case of the Candida fungus. Its presence in the intestine is normal until overgrowth occurs through auto-intoxication. Then it develops into Candidiasis, which is abnormal. Those familiar with the practice of colon cleansing know there is a specific place in the colon known as the region of parasites. In order to remove the parasites, it is essential to embark upon an effective elimination program. Parasites can be destroyed harmlessly and without the side effects of drugs. Ingesting protease enzymes safely accomplishes this. They are nontoxic and natural. Great diligence is required on the part of the client. You must take the capsules with consistency and a real dedication to your cleansing program. When you do, the rewards are enormous.

A few years ago, scientists did not recognize phytochemicals, yet today they are the new frontier in cancer-prevention research. The word is derived from the Greek, meaning "plant." *Newsweek* magazine dedicated five pages to an article titled "Beyond Vitamins" in its April 25, 1994 issue. It stated that raw vegetables and fruit such as tomatoes, apricots, and broccoli contain thousands of phytochemicals. These substances work by waking up enzymes inside cells and detoxifying cancer-causing chemicals. This article came out just after *The New England Journal of Medicine* delivered a pessimistic message about those vitamins known as antioxidants. The holistic health community's long-awaited verdict in the "great vitamin debate" did not give the vitamin industry the break it wanted. Nonetheless, scientists reported information on a "magic pill," one that would go beyond vitamins.

A compound called sulforaphane derived from broccoli, cauliflower, brussels sprouts, turnips, and kale was discovered that kept laboratory animals free of cancer. Early in the 1990s, research with cells in a lab dish led biochemists to suspect that sulforaphane works its magic by boosting the activity of phase two enzymes. These enzymes detoxify carcinogens by hooking them up to molecules

and moving them out of the cells where they are rendered harmless. Phytochemicals in strawberries, grapes, and raspberries also neutralize carcinogens before they can invade DNA. It is called ellagic acid.

Even if these early preventatives fail, there is yet another pre-cancer instance where phytochemicals can intervene. In 1993, German researchers announced they had isolated a chemical in soybeans that prevents the attack of cancer cells in the blood stream. This chemical is a growth inhibitor of cancer. Supplemental plant-based enzymes have the same capabilities as these compounds like sulforaphane or the phytochemicals. Their action in the stomach assists the digestion and breakdown of the foods. Ingested on an empty stomach, they can clean up the blood, improving circulation and blood rheology.

Enzyme action is very much like cellular musical chairs. These compounds race to sites on the cell where cancer-causing hormones, including improper estrogen, attach themselves. When the music stops, the enzymes keep the hormones from sitting on the cell's surface. The protease enzymes do an even greater job since they can break down the surface or coating of the cancer cell and expose it to the host's immune system.

After the information came out about the research on phytochemicals, several new products appeared on the shelves at health food stores. These products contained freeze-dried vegetables. Claims were made that salads or juices could be ingested in capsule form. In truth, we have known about research and information concerning supplemental plant-based enzymes for over 70 years. When these products are touted as new ones, it really means they are brand new only to the writer of the article.

## **CARDIOVASCULAR DISEASE**

Cardiovascular disease is not limited to the elderly — age has nothing to do with it. Enzyme therapy is used successfully to treat diseases of the arteries and veins. In their book, *Enzymes: The Fountain of Life*, Drs. Lopez, Williams, and Miehke offer evidence for this. Studies continue to a great extent in Europe, and some in the United States, supporting the use of enzymes. To quote Dr. Inderst in a lecture from September 12, 1990: "Enzyme Therapy is a proven treatment and method for disease relating to blood vessels. It diminishes the swelling, activates the system, and stimulates cells such as macrophages (white blood cells) without the long-term side effects of drug therapy."

Besides being the number one killer disease in America, heart or cardiovascular disease is one of the leading causes of disability. How can this happen? To best understand this complex and critically important part of the body, let us discuss

the cardiovascular system. The primary focus of this system is to move blood throughout the body. It is made up of the heart, blood vessels, and lymph vessels. The circulatory system transports oxygen, nutrients, immune system secretions, hormones, and chemicals necessary for normal function and activity of the organs. It also carries away waste products and carbon dioxide. This miraculous system equalizes body temperature and helps to maintain normal water and electrolyte (salt and potassium) balance.

An adult has an average of 6 quarts of blood in his body. The circulatory system carries this entire quantity through one complete circuit of the body every minute. In the course of 24 hours, 7,200 quarts of blood pass through the heart. Very small vessels, known as capillaries, are so tiny the blood cells must enter them single file. The rate of blood flow through the vessels depends on several factors: force of the heartbeat, rate of the heartbeat, control of the quantity of blood that enters the heart chambers, and finally, the capillaries.

The blood then returns to the heart by flowing through the veins, and the process begins again. The circulation of the blood is extremely important. As it passes through the arteries and veins in the heart, neck, head, brain, and digestive organs, it delivers and picks up carbohydrates, proteins, fats, and chemicals. When blood enters and exits the liver, it brings glucose and glycogen and removes toxins. In the kidneys, it cleanses. In the lymphatic glands, it delivers nutrients. And in organs like the spleen, tonsils, and thymus, it supports the immune system.

The organs and systems of the body vary greatly in the quantity of blood they require at different times. For instance, the brain needs a great deal of blood all the time, whereas muscles demand blood sporadically. Many things depend on physical exertion, which increases the blood flow to the muscles. Hot weather increases the flow of blood to cool the body. Whenever we eat a meal, extra blood is required by the stomach to help digest and absorb the food.

The nervous system controls all this activity. Without this vital control, none of the various needs for blood could be maintained. If the nervous system were not doing its job, the quantity of blood in the brain would change if you shift the position of your body even slightly. There are two nerves that control blood supply. One is located in the heart, the other one is in the neck. These two nerves are perfectly synchronized. They register any changes in the blood pressure and cause the nervous system to change the rate of heartbeat and the size of the blood vessels to always maintain correct blood pressure. Perhaps now you understand the importance of the circulatory system and how our very life depends on its precision work. It is yet another of the marvels and miracles of our bodies.

Lipase enzymes are the major enzymes used for the breakdown of fats and cholesterol and also for lipid regulation. Recently, a cardiologist I know admitted that if the public understood the capabilities of lipase, there would no longer be a need for him to continue his medical practice. I thought that was quite a statement! Obviously this is overstated since hereditary heart diseases would always create a need for cardiologists. Lipase is used with other plant-based enzymes to assist with proper digestion. This feeds and cleanses the life-giving blood in the body. Every red blood cell has an outer lipid lining. Enzymatic action runs the life force in our bodies — every thought, every breath. Our entire being is enzyme-dependent.

Do I believe enzymes are important? What do you think, since they assist in the breakdown of food, delivery of nutrients, and fortification of the blood? If used correctly, are they the very life source for our kidneys, liver, brain, and lungs? I answer with an absolute yes to all these questions! My observation of those with heart problems suggests that elimination of sugars and simple carbohydrates from the diet is an excellent starting point. Frequent urination is also a difficulty people with heart conditions face. This is because their doctors have prescribed diuretics to help control hypertension and a disturbed heart rhythm. However, when the client gets rid of excess sugar consumption, the blood sugar level begins to stabilize. Only then can the body start to eliminate toxins naturally, and the medications being taken are reduced to a lower dosage.

Heart disease is an area of great interest to me because my mother and my sister suffered from it. When I was with my mother, I noticed that control of her diet had a direct effect on her heart rhythm and how often she urinated. Blood vessels are just as biologically active as the liver, kidneys, or any other vital organ. The blood vessels depend on enzymes. When the blood vessels are clogged with fats, the effectiveness of the enzymes is reduced. The blood vessels can become constricted.

How can someone who is interested in prevention deal with this? Keep your enzymes working all the time! Everything that happens in the body does so because of these miraculous substances. As we become more stressed or ill, our immune system suffers, and the power of the enzymes is seriously undermined as well. It makes so much sense to take supplemental digestive enzymes in order to feed and fortify the body. This takes pressure off the digestive system, allowing it to function more efficiently. Plant-based supplemental enzymes keep our blood healthy and help keep our systems in balance.

## **ARTHRITIS**

In 2010, it was estimated that fifty million Americans suffer with diagnosed arthritis. Arthritis treatment costs the nation \$150 billion every year. Incidence of arthritis is expected to skyrocket as baby boomers begin to turn fifty. By the year 2020, more than sixty million people will have some form of arthritis, states Dr. Charles Helmick of the Centers for Disease Control and Prevention. Women are especially susceptible. One in five women has arthritis compared to only twelve percent of men. Medical terminology uses the suffix “-itis” to describe disorders involving inflammation. A partial list of these includes arthritis, pancreatitis, dermatitis, and prostatitis.

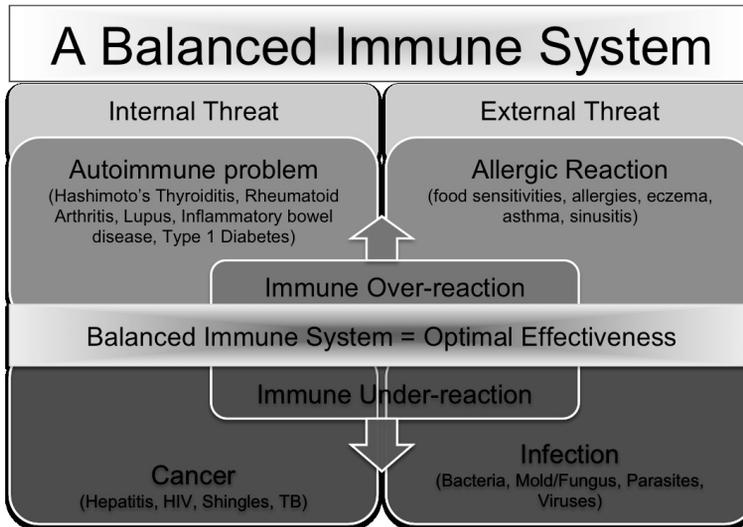
Rheumatoid arthritis is systemic, meaning it is present throughout the body and involves the connective tissue. Degenerative lesions may be found in the collagen (a fibrous protein in connective tissue, bone, and cartilage) of the lungs, heart, blood vessels, and pleura. Those who suffer from the rheumatoid variety often appear to be undernourished and chronically ill because of the inflammation of blood-forming organs. Most common is the arthritis that attacks the joints. Osteoarthritis is located in the musculoskeletal system (muscle and skeleton). Arthritis is one of the most difficult conditions to treat.

The drugs used for treatment stop the body from making prostaglandins. While prostaglandins are responsible for the swelling of the joints, they also protect the stomach from acids and other digestive juices necessary to dissolve food. As a result, about fifteen percent of all arthritic people have ulcers. The goal for medical technology is to develop a drug that reduces swelling without disturbing the stomach. Many of the other treatments have harmful side effects that lead to other diseases. No matter what the treatment or side effects are for arthritis, the one certainty is it interferes with quality of life.

The consistency of the blood changes and more white blood cells are created as a result of inflammation. This is how the body naturally reacts and attempts to protect itself. A positive response to inflammation depends on adequate protease enzymes. If the inflammation is constant or the onset of it is especially severe, an increased abundance of internal support enzymes is required. However, the quantities needed are too great for the body to produce without assistance. The body is unable to radically change its rate of enzyme production, just as it is incapable of drastically slowing it. The significance of a constant, steady supply of enzymes cannot be overemphasized.

When the body’s immune (defense) system breaks down, it is because of an internal enzyme shortage. This begins a process called autoimmunity. The body begins to regard its own tissue or cell structure as a foreign invader. Our immune

system begins to fight against itself. It attacks its own connective tissue, joints, skin, and blood cells. While this battle rages, the original disorder is still taking its toll. The outcome is chronic illness.



In autoimmune disorders, I see some common denominators. Most of those who suffer have problems digesting fats and protein. They tend to be either Biochemical Type Two or Three. They prefer heavily spiced, strong-flavored foods, crave sugar, and were raised on meat. Does this mean they will never eat meat or spicy food again? No, it means that these are the cravings of most arthritic people I have counseled.

Protease and lipase are the enzymes they need the most. The case histories are numerous. They are all very much the same. This is why I approach all the autoimmune disorders with the same enzyme regimen. With the aid of supplemental plant-based enzymes we feed, fortify, and detoxify. First, I address the primary problem of poor digestion with a multiple-enzyme supplement taken with every meal. High dosages of protease are taken between meals for the antioxidant properties. Without exception, all systems are very toxic, and most of these clients are constipated as well. I suggest the use of a bacterium-fortified enzyme with herb formulation to assist with frequent, healthy bowel movements.

### **IMMUNE BOOSTERS, "THE ENZYME CONNECTION"**

It seems as if enzymes play two different roles in rebuilding the immune system. First, they act as an agent that counteracts the causes of the initial damage. Then, they balance the immune system itself. How does this work? Supplemental digestive enzymes attack the offenders themselves by reducing inflammation and neutralizing many of the toxins that injure the mucosal wall. This reduces leakage

of partially digested food remnants, mostly chunks of allergenic protein, through the intestinal walls and into the blood stream. Our powerful protein-digesting enzymes come to the rescue. When taken on an empty stomach, they escort the protein fragments from the small intestine into the colon where they are destroyed through normal digestive procedures. This same enzyme, when no longer needed in the intestine, moves directly into the blood. There, it continues to remove toxins and other unwanted protein matter.

Supplemental plant-based enzyme supplements help strengthen the immune system by increasing the number and intensity of the fighter cells. These warrior cells are macrophages, monocytes (large, mononuclear, non-granular white blood cells with round or kidney-shaped nuclei), and T-cells (lymphocytes involved in rejecting foreign tissue, regulating cellular immunity, and controlling the production of antibodies). When the enzymes reach these immune system cells, they increase the fluidity and permeability of the cell membranes. This makes it much easier for nutrients to enter the cells, and much easier for toxins to leave. This creates improved cellular metabolism throughout the body and an overall boost in energy level. After the vicious cycle of malnutrition, poor digestion, and cellular starvation is finally broken, your immune system is remarkably stronger.

In thousands of my clients' case histories, enzyme supplements produced a stunning turnaround. This amazed not just them but also their families, friends, and even their doctors. I am not alone among health care professionals who have experienced this. Many of them have shared the same information in interviews, books, or by word-of-mouth. Working with medical doctors, I have the honor to be a consultant to some of them. This gives me the opportunity to study the experiences and case histories of many clients and patients. It has been my fortune to see the changes that enzymes make in the human blood, and I feel great humility when I see an enormous transformation occur in someone who has been critically ill. One gentleman, in particular, comes to mind.

### **CASE HISTORY**

A successful oncologist surgeon called my office on a Thursday afternoon. I clearly remember the day of the week because it plays a role in this story. The surgeon asked if he could bring one of his patients in to see me. He wanted to observe the Live Blood Analysis. This is a procedure I teach to preventative practitioners that allows them to evaluate live blood samples and teach nutrition. It is used as a teaching tool rather than a diagnostic one.

This technique is called dark-field microscopy. A drop of blood from the finger is placed on a microscope slide. The observer can detect motion in the cells, noting

balances and imbalances. The patient in question had just completed his final chemo treatment. With a dangerously low white blood count, his doctors were afraid to give him any more.

The injections he received to elevate the white count did not work. His WBC (white blood count) was 580. Normally, the leukocytes should read about 8,000 WBC. His was so far below normal that his physicians were concerned he might have a compromised immune system. I knew, of course, that the enzymes would elevate the WBC. However, the surgeon was desperate. He wanted to see a detectable difference almost immediately.

The doctor intended to do another blood count on Monday morning. It was late Thursday afternoon. When someone is relatively healthy, at least not suffering from terminal illness, we can see an increase in both the WBC and RBC within 10 minutes of ingesting a protease simulation. In this case, we were able to see some new white blood cells and T-cells in a matter of a few minutes. Both the doctor and I were elated.

I explained to his patient that I had no idea until that moment that we could see results so quickly after chemo. As they were leaving, I gave the man nutrition information along with all the standard enzyme formulations. By Tuesday morning, a very happy doctor had phoned me to inform me his patient's white blood count was back up to 7,800 by the previous afternoon. The last time I saw this man he was doing very well, and his cancer is in remission. His hair was growing back in, and he told me he felt wonderful. This took place over 15 years ago, and he is still well and free of cancer.

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## **DO YOU HAVE HEALTHY BLOOD?**

Do you have healthy and vigorous blood? Or is it tired and weak? The answers to these questions could very well mean the difference between a healthy, energetic lifestyle and one of constant weariness and fatigue. We cannot live without that extraordinary and complex protein fluid coursing through our bodies. A miracle of modern science is our ability to use one another's blood as long as it is the same type.

- The blood's liquid component is called plasma. It is the primary ingredient of this life-sustaining, homogenous mixture. The plasma functions as the carrier of food, oxygen, vitamins, and minerals to cells in exchange for waste matter.

- The solid matter in blood consists almost entirely of coin-shaped red cells. Remarkably elastic, they are so flexible they can extend, fold up, and squeeze through a capillary barely half their own diameter. Red cells are naturally manufactured in our bone marrow. Their principal ingredient is hemoglobin, a protein molecule programmed to combine with oxygen.
- Blood contains other miraculous substances as well. One is a thin, plate-shaped cell called a platelet, which is essential for clotting. If the skin is cut, for instance, and a blood leak occurs, the platelet releases a chemical that crystallizes one of the plasma's proteins. Called fibrinogen, it creates a net or a web of red cells, all hooked together into a solid plug.
- The larger white blood cells, considerably less numerous than the red ones, act as the body's defense team. When an invasion of bacteria, fungal forms, or parasites occurs, white blood cells multiply as they engulf and destroy these enemies.

Our blood cannot survive or function without oxygen. The manner in which blood is oxygenated is remarkable. The average adult male has a capillary system that would stretch out, end to end, to about 60,000 miles. The lungs are fraught with these minute vessels. As we take a breath, the oxygen we inhale enters the blood through the very thin walls of these capillaries. The blood carries this oxygen to all the body's tissues. Capillaries are like garden hoses inserted into the river of an artery or vein. Each one is less than 1/1,000 of an inch in diameter. More than three million of them thread through each square inch in the cross section of a muscle. Each capillary carries its dribble of blood swiftly. The heart patiently pumps the body's 6 quarts of blood through all its tissues again and again. The average pace of a complete round trip is about 1 minute.

The lymph system is a companion to the circulatory, or blood, system. Its primary purpose is to isolate and eliminate dangerous infections. The lymphatic system circulates more or less parallel to the blood. The lymph glands, or nodes, are made up of valves and filters, and they travel more slowly because they do not have a pump as the heart does.

Blood circulation is continuous but not constant in an active body. Muscular, electrical, and chemical controls unceasingly regulate and change the pattern of flow. It acts like a sprinkler system in your front yard where different groups of sprinkler heads open and close, flooding first one area and then another. Blood can flow like a big river, causing obstacles too big or heavy to be flushed away, sometimes even reversing the current in certain channels. The entire operation is controlled by special centers in the brain. These receive information from sensory

monitoring devices located at strategic points. They send signals to the heart and to thousands of arterial, venal, and capillary control stations.

Human blood, in a nutshell, performs all these life-giving functions for our bodies:

- Circulates oxygen throughout the body's network of arteries, veins, and capillaries
- Delivers nutrients to the tissues and organs
- Carries minerals, hormones, vitamins, and antibodies
- Removes waste products

Many substances vital to health are recycled through the blood. Blood helps maintain equilibrium (homeostasis) of the internal environment. It bathes the tissue with oxygen. It collects waste products. Its major regulatory duties involve the nutrition of cells, protecting against foreign invaders, and keeping the body temperature constant. The blood also facilitates the body's adaptability to changes in external conditions. These include climatic changes, stressful physical activity, new eating habits, and resistance to injury and infectious organisms.

Blood is analyzed for information leading to nutrient deficiencies and disease. Red blood cells circulate in the blood stream for about 120 days. After that, they are trapped and broken down in the spleen, an organ responsible for storing and filtering blood. The spleen and liver can function as backup sites for red blood cell reserves in an emergency. They act as salvage yards for iron reclaimed from dead red blood cells. The total numbers of red blood cells in the body vary with age, altitude, activity, and temperature. An average, healthy individual has about thirty-five trillion of them. White blood cells or leukocytes are the principal component of the body's immune system. Acting as scavengers, they assist with the repair of the body.

Blood cells are generated in the bone marrow or lymph nodes. These nodes serve as defense outposts against germs that are attacking the body. White blood cells travel from site to site through the arteries, veins, and capillaries. White cells can also leave the blood stream and filter into the lymphatic tissues if necessary to fight infection. Although these cells are produced in large quantities, they die within a few days. Vastly outnumbered by the red blood cells, the average, healthy human has only about seventy-five billion leukocytes in the blood.

Personal physicians order most of the blood tests performed on human beings. The blood taken from the inner bend of your elbow at your doctor's office is almost always sent to medical laboratories for testing. However, there are ways

for the layperson to observe their own live blood specimen. One method is called dark-field microscopy. I remind you that this is not used for diagnostic purposes. Rather, it is a nutritional teaching tool. I use it in our research programs. It is not approved by CLIA in America and has to be used for research in labs. Through the powerful lens of the microscope, we can observe white blood cells to see if they are doing their job efficiently. This can be an excellent indicator of the performance of the autoimmune system. Imbalances detected by the dark field microscope are based on nutritional information about the client, which shows up in blood activity. Someone who has problems digesting fats could have a buildup of platelets adhering to the walls and rough surfaces of a damaged vessel. This condition indicates high cholesterol and headaches. Poorly digested protein will show up in the plasma and will cause the red blood cells to stick to each other. When the liver is toxic from alcohol consumption, prescription drugs, or lack of digestion, it shows up as fibrin material in the plasma.

When digestion is actually in progress, blood fats are easily recognized by the dark-field method. Toxicity appears as bright, shiny crystals. These are often so toxic that they will show up in color on a black and white screen. Some deficiencies look like oval or misshapen red blood cells. In the case of a nutrient deficiency, the red blood cells cannot maintain form and simply fade from view. White blood cells are easily distinguishable and give information about the immune system. One of the most commonly occurring problems is a variation in the white blood cells, or leukocytosis. These cells are present in the blood because the body is in a state of alert against the havoc caused by poorly digested food. The body sees the undigested particles as invaders and responds by calling out the white blood cells.

Dark-field microscopy was for me instrumental in proving the importance of supplemental plant-based enzyme therapy. I tend to try new products on myself as a living laboratory. After ingesting the product, if I observe a change for the good, I am then interested in further use of it. Unfortunately, many formulations do not show a positive change. In my own experience, I have discovered that too often those taking mega-doses of vitamins and minerals can create further imbalances. This can be just as much of an upset to the body's nutrients as it is when poor nutrition occurs. A practitioner can measure these imbalances using blood, urine, and saliva. Our system is overwhelmed when we take more nutritional than we need. Ingesting enzymes are a different matter altogether. They are catalysts that make things happen in the system. In addition, they are not stored nor can they cause an imbalance because they are proteins and can work for minutes, days, or weeks dependent on the need and type. If one takes a larger amount than needed at that moment, our cells to make more metabolic enzymes use them.

## CONCLUSION

The primary function of the immune system is to protect the body from infection, damage, and ultimately disease. Recurrent or chronic infections occur only when the immune system is weakened by a lack of proper nutrition or by excesses of stress, pollution, radiation, toxins, and exposure to a vast array of infectious microorganisms.

In a healthy lymphatic system, the initial exposure to these offending agents' creates an allergic reaction, an inflammatory response, and then healing. However, long-term exposure without proper support to the immune system, may lead to chronic allergies, systemic inflammation, and oxidative stress, which can manifest as autoimmune disorders and various cancers.

Effects of Trapped Proteins:

- Lymph vessels can become clogged with protein deposits.
- Flow can stagnate or even stop for reasons such as fatigue, stress, infection, emotional shock, lack of physical activity, or dehydration.
- This results in tissue swelling (edema) and accumulated protein in the lymph vessel along with osmotically held fluids in the interstitial space (lymphedema).
- As toxins accumulate, cells are unable to function properly, resulting in various metabolic and infectious problems.

**Enzyme Therapy:**

- **Digestive enzymes** assist proper digestion, thereby impacting the health of the lymphatic system.
- **Lipase** assists in proper fat breakdown and transport to the blood.
- **Digestive enzymes and probiotics** contribute to the overall health of the gastrointestinal immune system.
- **Proteolytic enzymes** in particular act to restore lymphatic transport capacity.
- **Protease** helps break down the undesired excess proteins that contribute to swelling and inflammation.
- **Proteases** assist in the body's overall circulation and lymphatic flow.
- **Proteolytic enzymes** assist the immune system by toxic removal from organs.

## TESTIMONIALS

**Re: I'm really happy to have this product on my shelf**

*"I often use your soothing digestive formula with my clients. I find it to be quite effective especially for people who have a large number of food intolerances, maldigestion, or malabsorption. Recently I recommended it for a woman who has fibromyalgia, irritable bowel syndrome, and whose eating options were extremely limited. Along with a probiotic and a few small changes, she is now able to eat a much wider variety of foods without issue. Often I find that the powdered sensitive formula is specifically useful for children and for people who want to begin with just a tiny dose and build up. I'm really happy to have this product on my shelf." - Liz L., PhD, CCN*

**Re: allow the body to heal itself or optimize well being**

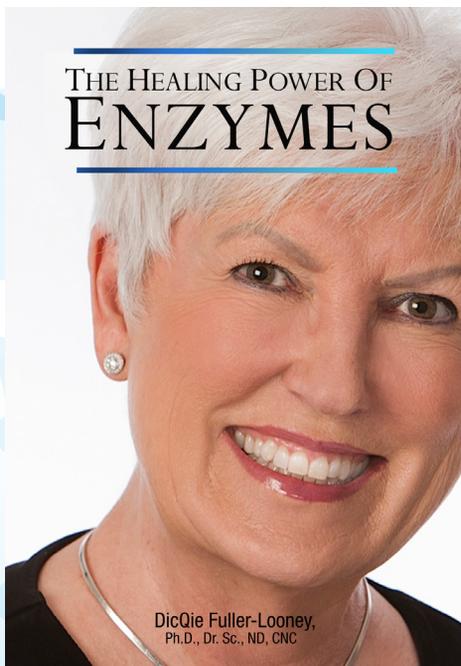
*"We have used your supplemental digestive enzymes for special needs children evolved over time for the past 15 years. . . . We target patients on the Autistic Spectrum, and any patient who has GI issues. Certainly improving GI flora will help with dysbiosis. . . . Allopathic medicine is not always at the causes and contributing factors of diseases and illness, but tries to fix the symptoms rather than help 'normalize' the terrain / milieu and allow the body to heal itself or to optimize well-being at whatever level of function that may be. . . . As the patient's terrain and gut improve, medication doses might be reduced as absorption is enhanced." - Drs. Pia and Rolf H.*

**Re: your staph infection protocol did the trick**

*"The mom of the client that I sent Protease to [four caps three times a day] just stopped in to say thanks again. It turns out that she had done three rounds of antibiotics and the above protocol did the trick. The infection has completely gone. 'All is well,' she says. 'All healed up and feeling good.'" - Zoe G., BioEnergetics Practitioner*

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Dr. DicQie Fuller 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.

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