How long will you live? (1)
That entire groups of ethnic people live healthfully and disease free to 120 years or longer is alarming, given the fact that life expectancy in the U.S.A. is only 76 years. (2) Imagine living to 120 WITHOUT sickness or disease, to walk upright in full health to the day of your passing. Awesome thought, isn’t it?

Americans typically die from estrogenic and disease-related health issues, not from old age. (3) The obvious question of why is answered in looking at how we live. Beyond the stress of life, environmental issues and lack of exercise, the one thing that separates longevity from early death is the quality of food we eat.

Enzymes:
The Standard American Diet (S.A.D.) consists mostly of processed foods, foods which have life-giving enzymes cooked out of them. Heating, pasteurization, radiation and micro waving destroy enzymes in food and liquids. (4) This causes vital parts of the body (heart, bones, organs, brain, blood, etc.) to lose enzyme benefits and consequently become inefficient, diseased, prematurely old, and finally, to become functional.

Cultures long on longevity eat whole, unprocessed foods, foods rich in enzymes. The difference adds up to 44 or more years of life, a life free of chronic illness and disease.

When Enzymes are plentiful, the body remains healthy. When Enzyme levels are low, sickness and death are common place. Low enzyme levels are America’s number one cause of sickness and death. (5) We can point to our S.A.D. way of life as the cause.

In short, if you eat heated, processed food, if you want longevity, you need enzyme supplements.

Dr. Edward Howell, a pioneer in enzyme research, is formally recognized as the discoverer of the vital role of enzymes in human nutrition. He pioneered more than 50 years of research and scientific experimentation with overwhelming evidence indicating that the primary cause of degenerative disease in humans is enzyme deficiencies, exacerbated by enzyme deficient mothers passing on genetic deficiencies to their offspring.

Dr. Howell, who has written two books on enzymes, theorizes that humans are given a limited supply of enzyme energy at birth, and that it is up to us to replenish our supply of enzymes to ensure that their vital jobs get done. If we do not replenish our supply, we run the risk of ill health. Replenishing enzymes comes from eating whole, unprocessed foods.

Howell postulates, “The length of life is inversely proportional to the rate of exhaustion of the enzyme potential of an organism. The increased use of food enzymes promotes a
decreased rate of exhaustion of the enzyme potential." In other words, the more enzymes you get, the longer and healthier you live.

When we eat enzyme-deprived food, our bodies take metabolic enzymes from other parts of the body and use them to digest food. Yet these enzymes are needed for the proper functioning of the body's organs and systems. The more we rely on enzymes from these organs to digest food, the more we jeopardize our health.

Tests have shown that a 70-year-old person has only about half the enzyme level of a 20-year-old. A newborn baby has 100 times the enzymes levels of an elderly person! As we become enzyme-deficient, we age faster.

Enzymes are the stuff of life. In fact, the entire cycle of life is dependent on enzyme activity, without enzymes, we will die. They are so important in our health and well-being, not even vitamins, minerals or hormones have any value without them.

A little-known fact is that the regular use of digestive enzymes with meals often sheds excess pounds with dieting. Do you remember when you were young and lean? That's when your body had a much higher enzyme level! People who are either overweight or underweight frequently suffer from a lack of enzymes. Once the body receives whole, living foods, it produces changes that work miraculously in overcoming weight problems. (6)

When the body is given an abundance of enzymes, the body can stop exhausting its own supply of enzymes for the sole purpose of digestion of food. The body's enzymes can now break down the excess fat, protein and clogged arteries and therefore have remarkable results for overweight people." (7)

Enzymes are the work horse of maintaining a healthful body. They build strong bones and nerve tissue; they enable sperm to gain entrance into the ovum; they attack cancerous cells and carry them out of the body; they clean up the blood and tissue, dissolving foreign substances; and slow the aging process by maintaining the body's health at the cellular level. (8)

When enzyme levels are low, food cannot be properly broken down and digested. The intestinal track becomes congested with partially digested food a particle that makes the intestinal tract resemble a clogged sewer pipe. Undigested food particles cling to intestines forming walls of encrustation that block vitamins and minerals from being absorbed by the body. Subsequently, food contents lodged in the intestinal tract putrefy and turn toxic. Bacteria and parasites begin to flourish and live in the bowel. Eventually, this condition creates holes in the lining of the intestine allowing partially digested food particles, toxins, bacteria and parasites to seep through the bowel wall and into the blood stream. (9) Because enzyme action is missing in the digestive tract to eliminate this condition, the body has no way of destroying or to rid itself of this toxic brew.

This means much of the food we eat ends up accumulating like garbage in vital areas of the body, undigested and unabsorbed. Our bodies do not receive the nutrients they contain and
we literally "starve" ourselves for wholesome nutrition, even while we feast and gain weight. Again, like garbage, undigested, unsplit food molecules often putrefy in our intestines producing dangerous toxic substances that literally poison our bodies.

If it is a fat molecule we know it as cholesterol plaque; if calcium, arthritis; if sugar, diabetes. (10) Enzymes are living catalysts found in every part of the body and involved in every chemical reaction. Enzymes digest food, making it small enough to pass through the intestinal walls to the blood and then throughout the body. Enzymes eliminate toxins from the body. Enzymes nourish the body with minerals and vitamins. Without enzymes, minerals and vitamins lay useless in the body or pass through without being used.

Enzymes make up every aspect of the immune system. Every function of the body is dependent upon enzymes, including breathing, seeing, hearing, and thinking.

**Watch How Enzymes Work:**
To see how enzymes work in the body go to: http://www.tvdsb.on.ca/westmin/science/sbi3a1/digest/enzymes.htm and click the play button.

**Try This Experiment:**
Have you read the directions on a box of Jell-OT about not putting fresh pineapple into it? Go to the following Website and try this simple experiment to learn why: http://gslc.genetics.utah.edu/basic/protein/

**Low Enzyme Level Indicators.**
Largely because of our modern diets, which are deficient in enzymes, most of us deplete our body's natural enzyme level as we age. Lack of enzymes also puts stress on vital organs like the pancreas, liver and spleen, causing a metabolic deficit.

If you suffer from any of the following health problems, enzyme deficiency could be a leading contributor.

* Lack of energy * Aches & pains * Viral infections * Premature aging * Chronic fatigue * Serious arthritis * High blood pressure * Lowered immunity * Swelling of the joints * Overweight * Respiratory problems * Poor digestion * Loss of memory * Rheumatism * Hormonal disturbances * Headaches * Arthritis * Sciatica * Low back pain * Allergies * Eye, ear, nose and throat disorders * Cardiac irregularities * Pathological changes in the breasts

The miraculous results of enzyme nutrition have been documented by the American Medical Association, American Heart Association, Zoological Society of Philadelphia, Tokyo Imperial University, Cornell University, John Hopkins University, UCLA's School of Medicine, Canadian Medical Association, and the Russian Institute of Biochemistry, to name a few. These institutions collectively offer substantial evidence that enzymes are the major cause and cure of all diseases. In other words, health is simply the production of enzymes and sickness is simply the destruction of enzymes. (11)
Evidence That Enzyme Supplementation Works:
For years, most so-called "experts" believed that if enzymes were taken orally, they simply passed right through the body without being absorbed. Many also believed that all enzymes from ingested food were destroyed in the stomach. Yet independent research shows that neither is the case.

In one experiment, authors of Enzymes Therapy, Max Wolf, M.D. and Earl Hansberger, Ph.D, tagged certain enzymes with radioactive dye and determined that they could later be found in the liver, spleen, kidneys, heart and other vital organs of the subjects who ingested them. A Northwestern University study showed that the enzyme amylase, from germinated barley, digested starch in the stomach and then passed into the small intestine where it continued digestion.

Dr. Howell’s Recommendation:
According to Dr. Howell it’s not possible to overcome the enzyme drain of cooked foods just by eating other raw foods. He states: "The only solution is to take capsules of concentrated plant enzymes. In the absence of contraindications, you should take from 1 to 3 capsules per meal. Of course, if you are eating all raw foods, then no enzymes will be necessary at that meal.

The capsules should be opened and sprinkled on the food or chewed with the meal. This way, the enzymes can go to work immediately. Incidentally, taking extra enzymes is the third way to neutralize the enzyme inhibitors in unsprouted seeds and nuts.

Concentrates of plant enzymes or fungus enzymes are better for predigestion of food than tablets of pancreatic enzymes. This is because plant enzymes can work in the acidity of the stomach, whereas pancreatic enzymes only work best in the alkalinity of the small intestine.

If the enzyme tablet has an enteric coating, then it’s not suitable, since it will only release after it has passed the stomach. By this time, it’s too late for food predigestion. The body itself has already used its own enzymes to digest the food." (12)

Not All Enzyme Supplements are Created Equal:
Many enzymes are not only deficient but also inactive. At the Young Living Life Research Clinic in Springville, UT, Gary Young tested over 21 different enzyme products and did not find a single one that was effective in a clinical environment. The patients were closely monitored, their food intake was measured, their blood and digestive systems regularly measured and analyzed. The clinic staff found that the patients were simply not obtaining value from their foods because their enzymes were inactive. (13)

A Sampling of Hundreds of Clinical Studies:
ALLERGIES result from low levels of enzymes, especially amylase, protease, and lipase, allowing food substances to accumulate in the blood. Dr. William Lintz eliminated allergy symptoms in 472 patients by eliminating the toxins in their bodies. In hundreds of other cases, enzyme supplements taken orally restored the body’s enzyme level, dissolved
undigested food particles, and eliminated a variety of allergic conditions including asthma, hay fever, eczema, headaches, vomiting, angioneurotic edema, colitis, and hives. (14)

ARTHITIS - Dr. Anthony Bassler treated and observed 344 patients with arthritis and, along with British surgeon Sir Arbuthnot Lane, discovered that symptoms disappeared or lessened substantially with the cleaning up of the intestinal track, consequently increasing enzyme efficiency. In England, Dr. Arnold Renshaw’s enzyme therapy resulted in either marked improvement or cures for more than 1500 arthritic patients. (15)

ARTERIOSCLEROSIS - is the condition of clogged blood vessels. The principal substance that clogs arteries is cholesterol. This accumulation can only occur when enzymes, especially lipase, in the bloodstream are below normal. (16)

BLOOD disorders are effectively treated with oral enzymes, worldwide. Phlebitis, hypertension, blood clots, cholesterol buildup, arteriosclerosis, varicose veins, and leukemia are a few of the successfully treated conditions. This success is a result of the scavenger like quality of enzymes that patrol the bloodstream to seek out and dissolve foreign substances. To prove the connection between enzymes and heart disease, Dr. J.E. Kirk conducted an exhaustive study covering 27,200 essays on 98 different enzymes. (17)

CANCER, like all disease, is preceded and preserved by low enzyme levels. So it seems logical to assume that cancer can be prevented or treated by increasing enzyme intake. Modern medical science is slowly coming around to this realization as evidenced by doctors at Johns Hopkins School of Medicine. In 1994, they discovered that prostate cancer is induced by a missing enzyme that can be found in any cruciferous vegetable. Normally, humans carry 100 to 10,000 cancer cells floating around at all times. In a healthy immune system, enzymes destroy these cancer cells quickly before they are able to attach to an organ and grow. When the immune system lacks enzymes, these cells can attach, grow, and become malignant. (18)

FIBROCYSTIC OR CYSTIC BREAST DISEASE IN WOMEN: Fibrocystic disease occurs in almost 50% of premenopausal women. Although benign, it can cause pain and discomfort. Enzyme therapy has been successfully used as treatment. Drs. Wolfgang, Scheef and Konig studied 247 women over a period of five years. After six weeks, more than 65% of the women taking the enzyme therapy were free of complaints.

INJURIES - Many Olympic athletes are daily given enzyme supplements to accelerate recovery from surgery, injuries, or intense exercise. (19)

Oral Proteolytic Enzymes in the Treatment of Athletic Injuries: A Double Blind Study, The Pennsylvania Medical Journal, October, 1965. Richard E. Deitrick, M.D., concluded, "Oral enzymes accelerate healing". As a result of his research he added oral enzymes as a routine to his treatment of athletic injuries. The beneficial effect was not limited to one type of injury, but was seen in a variety of injuries normally encountered in contact sports.
Three independent double blind trials in obstetrics have shown that proteolytic enzymes are effective following episiotomies. In all three trials there was a lower incidence of pain, swelling and tenderness in the enzyme treated group as compared to the control group. (20)

**Conclusion:**

Enzymes are essential for health and longevity. But our American culture, with its demand for fast, convenient foods, is destroying our health and longevity. The prime indicator is the destruction of vital, life-giving enzymes found in whole foods through heating, radiation, pasteurization, radiation and micro waving.

To replenish the loss of enzymes we need to eat more whole, raw, unprocessed foods, and add enzyme supplements to our diet. Numerous clinical studies have demonstrated the effectiveness of enzyme therapy in healing.

Not all enzyme supplements work. Be prepared to pay more for high quality enzyme products that work. Otherwise, you may be wasting money on inferior products. Reads labels and ask questions about the formulator to make an informed decision.

Good health and longevity is our birthright. That we are dying so young is testimonial to our lack of knowledge, our way of life and our S.A.D. food intake. This author urges you to read this article aloud to your family. Hold a family summit meeting to make a commitment about eating more raw foods, and making room in the family budget to include quality enzyme supplements on the dinner table. We have in our household and now have the knowledge of knowing we have turned the tables on health and longevity.

**References:**

1. If you are curious to know what your life expectancy is, including the year, month and day of your death, go to: http://life-expectancy.longtolive.com/ to learn the answer.

2. The Vilcabamba in Ecuador, the Tarahumaras in Mexico, the Georgian people in the Caucasus region, the Inner- Mongolian people in the province of Ningxia and the Hunzakut people in northern Pakistan all share two common traits: They practice fasting on a regular basis and they live to be over 120 years of age. Fasting allows the body to slow the secretion of digestive enzymes thereby permitting an increase in metabolic enzymes that help the body to repair and rejuvenate tissue that has been damaged or destroyed (Essential Oils Desk Reference, Essential Science Publishing, 2nd Edition, page 237) For 12 years, Russian researchers studied a strange phenomenon in the communities of Drageston and Bulgaria where people often lived past 100 years of age. Their diets consisted mainly of large amounts of dairy products, yet milk and cheese are major causes of heart and blood vessel diseases. How can dairy products produce disease in people the world over, yet have no unhealthy effect in one particular region? The answer is found within the dairy products. The Dageston and Bulgaria communities use raw, unpasteurized milk and cheese. Chemists have found 35 separate types of enzymes in raw milk that are killed when pasteurized (E. Howell, Enzyme Nutrition, 1985).
3. The word "iatrogenic" is from two Greek words iatros-genics. "Iatros" means physician and "genic" means caused. In other words, iatrogenic is a disease, sickness, impairment, disfigurement or death caused by the practice of "acceptable" medical care (excluding malpractice or other medical mistakes).

After the most extensive study on nutrition ever undertaken by the government, the U.S. Senate Select Committee on Nutrition and Human Needs concluded in its 1978 report entitled "Diet and Killer Diseases," that the average American diet is responsible for the development of chronic degenerative diseases such as heart disease, atherosclerosis, cancer, diabetes, stroke, etc.

Top Ten Killers in the USA. Ranked first to last:


(USA Today, April 24, 1998)

4. In a study by Dr. Radwan Farag of Cairo University, it was discovered that just two seconds of microwave energy destroys all the enzymes in a food (Essential Oil Desk Reference,.Essential Science Publishing, Salem UT, 2nd Edition, p.210)

Three minutes in boiling water destroys the enzymes; pasteurization destroys 80% to 95%; and baking, frying, broiling, stewing and canning destroys 100%. Nature designed food with sufficient enzymes within it to digest that food when it is ingested. When enzymes are destroyed by cooking or other processing, ingesting that food triggers the body’s immune system, and it responds with leukocytosis.

(The Influence of Food on the Blood Formula of Man," P. Kouchakoff, M.D., First International Congress of Microbiology, Paris, 1930)

The key is to remember that food enzymes are destroyed at temperatures above 118 °F. This means that cooked and processed foods contain few, if any, enzymes, and that the typical diet found in industrialized countries is enzyme-deficient.

When we eat cooked and processed foods, we could well be eating for a shorter and less-than-healthy life. (Howell, Edward, Food Enzymes for Health and Longevity. Silver Lake, WI: Lotus Light Publications, 1981)

There is convincing evidence derived from the works of Drs. Francis Pottinger, Jr., Weston Price (A) and Edward Howell (B) that the destruction of enzymes in the cooking and processing of food is, perhaps, the most significant factor in chronic and degenerative diseases in both humans and animals. It begins with a phenomenon known as digestive leukocytosis.
5. Approximately 685 medical reports published internationally in 165 science journals, along with some 5,000 related studies, provide substantial evidence that enzymes stand alone as the major factor in the cause and cure of all diseases.

(Why Doctor Don’t Guarantee Their Work, Ersky Freeman, Global health, Inc., Email: globalhealth@healthyenzymes.org).

6. Lipase is an essential enzyme for anyone who is interested in losing weight because it naturally dissolves fat. Tufts University is one of many institutions that conducted tests showing obese people and fat tumors lacked lipase. An increase of this enzyme can induce weight loss.

D. Galton, Tufts University, Herald News, 3-22-95
E. Howell, Food Enzymes for Health & Longevity, 1994
Finch & Hayflick, Handbook of the Bio. of Aging, 1977

7. Brenda Cobb, Nutritional Director at the Living Foods Institute 1530 Dekalb Ave., Atlanta, Georgia.

8. Why Doctor Don’t Guarantee Their Work, Ersky Freeman, Global health, Inc. 10640 Campus Way South #107, Upper Marlboro, Maryland 20774

9. "Leaky Gut Syndrome (LGS) is a major cause of disease and dysfunction in modern society, and in my practice accounts for at least 50% of chronic complaints, as confirmed by laboratory tests. It is often the primary cause of the following common conditions: asthma, food allergies, chronic sinusitis, eczema, urticaria, migraine, irritable bowel, fungal disorders, fibromyalgia, and inflammatory joint disorders including rheumatoid arthritis. It also contributes to PMS, uterine fibroid, and breast fibroid."

(Jake Paul Fratkin, OMD, www.gSDL.com/news/1999/19990227/)

10. Ibid. #8

11. Ibid. #8

12. Dr. Howell interview with Living and Raw Foods. This complete interview can be read at:
http://www.living-foods.com/articles/enzymes.html


15. A. Bassler, Aging, Arteriosclerosis, & Cardiac Conditions, Medical Record, 1-1-1941/WA Lane, Consequences & Treatment from a Surgical Point of View, British Medical Journal, 3-15-1913/A. Renshaw, Annals of Rheumatic Disease, 1947


