

This article appeared in The South African Journal of Natural Medicine, 2005; 18:16 – 17.

Enzymes, the missing link

By Heidi du Preez

Apart from consuming processed foods as opposed to whole foods, another missing link in our modern diet is that most people are enzyme-deficient.

We are not only what we eat. We are what we can digest and absorb. The food we eat cannot nourish us unless it is prepared for absorption by enzymes that digest it and break large food particles down into smaller units ready for absorption. Protein is broken down into amino acids, complex carbohydrate into simple sugars, and fat into fatty acids and glycerol. For the body to support these enzymes, it needs nutrients. Vitamins and minerals are called co-enzymes, since they are the co-factors needed to sustain enzymes. If a person becomes nutrient-deficient, enzyme deficiency will soon follow. For example, zinc is needed to make both stomach acid and protein-splitting enzymes called proteases.

Enzymes are one of many specific protein catalysts that initiate or speed chemical reactions in the body without being consumed. They are part of all living cells, including the cells of plant and animal foods. Enzymes are the foundation of energy and the life force in all living things. Without enzymes, seeds would not sprout, fruit would not ripen, and leaves would not change colour and would not exist. Enzymes are responsible for building, detoxifying and healing your body. They are the forces that allow your body to digest and absorb food. Enzymes also regulate tens of thousands of other biochemical functions that take place in your body every day. These functions include breathing, growing, smelling, tasting, stimulating nerves, defending your body against disease, regulating hormones, and building organs, glands and tissues. Even your thinking involves enzymes. One of the primary keys to weight loss may simply be the action of enzymes.

Your immunity, vitality and longevity depend on keeping your body's enzymes at optimum levels. We are born with a limited bodily (metabolic) enzyme energy potential, similar to a bank account that has to last a lifetime. The faster we use up this enzyme potential, the shorter our lives. In order for us to enjoy a long and healthy life, we must avoid enzyme depletion by making regular deposits into our enzyme 'bank accounts'. We can accomplish this by consuming 'live' enzyme-rich foods. These food enzymes from raw food are not denatured by stomach acid, as some researchers have suggested, but rather remain active throughout the digestive tract. The human body has a way of protecting the enzymes that pass through the gut so that more than half reach the colon intact. There they bring about an alteration in the intestinal flora by binding free oxygen, reducing the potential for fermentation and putrefaction in the intestines, a factor linked to cancer in the colon. In so doing, they also help to create conditions in which lactic acid-forming beneficial bacteria can grow.

Most people are enzyme-deficient and are facing nutritional 'bankruptcy'. Because of chemical poisoning, pollution and soil exhaustion, our earth can no longer provide us with clean air to breathe, pure water to drink or nutrient-rich foods to eat. Worldwide,

demineralisation of the soil in which our food is grown has escalated to such a degree that it may affect our ability to survive as a civilization.

People worldwide are facing catastrophic diseases directly related to mineral deficiencies. Stress, strenuous exercise, pregnancy, frequent colds, exposure to extreme temperatures, and fevers deplete our enzyme accounts. Fried foods, caffeine, alcohol, drugs, tobacco and other stimulants also draw out tremendous quantities of enzymes from your 'bank account' and generate cell-damaging substances called free radicals. These free radical molecules are highly reactive, unstable and capable of destroying an enzyme, a protein molecule or a complete cell through oxidation by stealing electrons from other nearby molecules. Sunlight, radiation, chemical solvents and pesticides are more examples of cell-damaging substances that generate free radicals.

The most serious threat to the body's supply of enzymes is the habit of eating cooked and processed foods. Processing or cooking over 48°C totally destroys the enzymes in the food. You will not find enzymes in foods that are in a box, bottle or can. Cooking also contributes to nutrient loss. Pasteurisation, sterilisation, radiation, freezing and microwaving either render food enzymes inactive or alter their structure. We eat 'dead' food. The best way to replenish our enzymes is by eating 'live' raw whole food, such as seeds, nuts, and organic fruits and vegetables. Additionally we can also use supplemental enzymes. People experiencing gastrointestinal disorders (e.g. heartburn, constipation, diarrhoea, bloatedness, and ulcers), food intolerances and metabolic or degenerative diseases such as cancer, will especially benefit from taking supplemental enzymes in addition to an enzyme-rich diet.

Dr Francis Pottenger conducted a now-famous independent study¹ on the long-term effects of eating cooked foods. The study involved 900 cats, and was conducted over the course of 10 years. During the study Dr Pottenger fed two sets of cats raw milk and meat, and another three sets pasteurised milk and cooked meat. Cats that ate the raw food were healthy and disease-free and produced healthy kittens generation after generation. At the end of the first generation, cats that ate cooked foods were lethargic and began to suffer from allergies, infections, and other maladies, including kidney, heart, thyroid and gum diseases. Each succeeding generation of cats that ate cooked foods showed progressively more illness and disease. The third generation of cats that ate cooked food was not even able to reproduce.

Whether we are cats, dogs or human beings, when enzyme-dead food is eaten, the body is overburdened to produce enzymes to aid in the process of digestion. Enzyme-less diets are responsible for many of humanity's ills, including the shortening of lives. Today, doctors are treating children for juvenile arthritis, sugar diabetes, cancer and other degenerative diseases that just a few years ago were found only in people in their 50s and 60s. We should seriously consider our modern diet consisting of mainly processed foods.

Further reading

1. d'Raye T. *Food Enzymes – For Vibrant Health and Increased Longevity*. USA: Awieca Inc., 1998.

Reference

1. Pottenger F. *Pottengers' Cats: A Study in Nutrition*. LA: Price-Pottenger Nutrition Foundation, 1995.

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