Lipase: The Missing Enzyme

Lipase: Fats are the most difficult component of the diet to digest. Fatty foods cause more indigestion than proteins or starches.

Most Americans have crossed-wires when it comes to fats. Because of bulging waistlines, most Americans battle between fat-phobia and fat-craving. The human body is programmed to crave fats. Without essential fats and fatty nutrients animals and humans cease to thrive. Omega-3 and omega-6 fats from flaxseed and cold-water fish were found to be essential for human health by physiologists in the 1930s. Fat-soluble nutrients such as beta carotene, lutein, and vitamins A, D, E and K fulfill important functions in health maintenance. So fat isn't all bad.

The American diet is intentionally laden with saturated fats and hardened hydrogenated fats, leaving about 80% of the population deficient in the essential fats required for the maintenance of the human nervous system, the production of hormones and the control of inflammation.

Foods actually taste better when they contain fats. A famous fast-food quarter-pound hamburger actually has a saturated fat content equivalent to 16 pats of butter! The fast-food engineers really know how to stimulate our taste buds. It is worth noting here that weight loss is a common finding among individuals with chronic heart failure. It is evident that malabsorption of fats is related to heart failure. In one study subjects with heart disease had 10 times more fat in their stool than heart-healthy individuals. This means those with heart disease weren't absorbing their fats (Am J Cardiiology 5: 295, 1960). Yet heart patients are typically placed on low-fat diets! These individuals were leaner, but not healthier.

The pancrease produces about a liter and a half of digestive juices per day in an array of enzymes (pretease, amylase, cellulase, lactase and lipase). Lipase is the enzyme designed to digest fats. With advancing age the body produces less and less digestive juice, about 13% less per decade of life.

For these same reasons, fat blockers such as Olean and Elestra are undesireable. They keep fat from being absorbed, but they also keep fatty nutrients from being available. Undernutrition occurs in about half of the patients with chronic heart failure.

Fats are a major source of fuel for the heart muscle. The use of lipase has been suggested to improve fat absorption (Am J cardiology 8: 43, 1963).

It was not till 1997 that researchers found that lipase also can help to control LDL cholesterol and is helpful in stubborn cases of high triglycerides. (Lipds 32: 1147, 1997).

Low levels of lipase have been found among adults who have benign fatty tumors surrounding their eyelids, an unsightly condition called xanthelasma. Adults with this condition often hide these fatty growths with makeup. While lipase is untried in these cases, a course of daily lipase with meals may prove to be a remedy.

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