

THE PANCREAS  
Modified from Ron Kennedy, MD by PBMD

Please consult an encyclopedia or Gray's Anatomy for a diagram of the pancreas and the surrounding organs. Locate the structures on the diagram mentioned in this discussion.

The pancreas is a small bumpy gland with a head and a tail: the tail pointed to your left, situated behind the stomach in the upper abdomen at the level of the umbilicus. It consists of two glands mingled into one mass, loosely embedded in spider web-like tissue. The pancreas would fit easily in the palm of your hand, it weighing only about 85 grams

The larger gland is the so-called "exocrine" gland, (exo = outside). which manufactures and supplies digestive enzymes to the small intestine. These enzymes are injected through the pancreatic duct near the beginning of the open space of the duodenum (the first part of the small intestine) about four centimeters from the pylorus, the valve that separates the stomach from the duodenum. These enzymes include lipase, proteinase and amylase for the digestion of fat, protein and complex carbohydrates respectively. The secretion of these enzymes is stimulated by the presence of food in the duodenum.

The smaller gland in the pancreas is made of many anatomically separated endocrine glands called the "Islets of Langerhans," after the person who first described them. The Islets of Langerhans secrete their products directly into the blood stream, thus earning the name endocrine ("endo" = inside) gland. They are seen, by microscopic section of the pancreas, to be clumps of cells isolated from each other and embedded in the exocrine tissue of the pancreas. The products, hormones, secreted are called "insulin" and "glucagon," and they have the function of regulating the metabolism of sugar in the body.

The consumption of alcohol is very hard on the pancreas. It is even less able to withstand alcohol than the other organs of the body. There is a variety of toxic substances in coffee, some of which are thought to be damaging to the pancreas (and the adrenal glands), particularly caffeine and tannic acid.

Equally or even more toxic substances to the pancreas are the simple sugars. Ingestion of large amounts of sugar results in degeneration of the tissues in the body and sugar is hidden in almost all processed foods which are commonly eaten in the West.

When the pancreas degenerates, the result is a decreased ability to respond with the secretion of enzymes to the presence of food in the small intestine and an imbalanced ability to respond with insulin and glucagon to the presence of sugar in the blood. The final result is a lessened ability to carry on the vital functions of the body, because less nutrition is being delivered to the cells. When the body is receiving less nutrition, appetite is stimulated, and greater quantities of food are ingested — but to little avail, since the pancreas cannot respond adequately.

The overall result is a colon overworked by sheer quantity of food. Under this circumstance the colon slows down, allowing food to collect and putrefy there. This releases toxins, which the body must deal with. This process accounts for premature aging so commonly seen and — combined with hyperinsulinism/insulin resistance disease — for the rather round figure commonly associated with middle age.

By age twenty, at least in people eating a typical Western diet, the pancreas is already seriously compromised. This shows up as increased appetite, slowed digestion with excess gas and loss of normal vitality.

The good news is that it is possible to provide the conditions for the pancreas to regenerate its normal capacity to handle food and sugar. The first step is to stop the ingestion of alcohol, coffee and all other forms of caffeine and excessive carbohydrates and then balance your diet in relationship to protein and carbohydrate in a ratio of 7:10. This allows the pancreas an opportunity to heal in the absence of further insult. This is the first and most important condition for regeneration of function. It is possible to do even more by using oral pancreatic enzymes. These are available off the shelf of your organic grocer, health

food or vitamin store. Simply buy a supply, and take them within the dose range recommended on the label at every meal.

It is possible to have assays done to determine if you need enzyme replacement or not. However, it is reasonable that the best test available is to use a good enzyme replacement for a period of ten days and see if you notice a difference. The evidence that this therapy for the pancreas is making a difference is better digestion and greater vitality.

You may or may not need this therapy for the rest of your life. As your pancreas regenerates its abilities, you may be able to come off enzyme replacement without a noticeable difference. One to two years are necessary to see full regeneration of the pancreas to a youthful condition. Most patients take them for life.

#### The True Importance of Pancreatic Enzymes

In the 1970's Dr. Wm. Donald Kelley designed an effective cancer treatment around pancreatic enzymes on the presumption that excess pancreatic digestive enzymes in the blood stream would digest the glycoprotein calyx in the outer coating of tumors, which cloak themselves to avoid recognition by the immune tumor scavenging cells. Only in the 1990's were digestive enzymes, indeed, found in the circulating blood, in normal people.

The association of pancreatic enzymes to malignancy was made in the 1890's by a Scot embryologist, John Beard, as he observed that the placental cells differentiated at about 3 months gestation, when the pancreas had developed. Before that the cells appear just like malignant cells, and are, indeed, invading the uterine wall. Differentiation meant they stopped invading and appeared unlike malignant cells. Applied to malignant theory, the pancreatic enzymes are thought to effect the transformation to benign-appearing cells. That was applied to cancer therapy in the early 1900's, worldwide, as surgeons injected raw pancreatic enzymes, obtained from fresh pig pancreas, directly into the tumor mass, and effected cures. This was first done by Beard, and surgeon cohorts. Then radiation (x-ray) was discovered and that soon eclipsed enzyme injection therapy as a cancer treatment, only to be rediscovered by Kelley some 60 years later in oral form.

The Beard monologue, published worldwide, was found in the Library of Congress in the early 2000's and a copy was sent to Kelley by a doctor he had advised and cured. Until that time he had never heard of Beard's work. Dr. Kelley was a true genius, if for no other reason, than that he deduced and applied any clue he had and self-taught himself all that was available to him in the course of curing his own pancreatic cancer, and then helping others to cure themselves of many other types as well.