



Website: www.Doctorharold.com

**Please view through my website
to read over 300 articles on
Health issues, Newsletters and
you tu.bes**

<https://youtu.be/4Bkymf4U>

click

Pancreas gland- what does it do for you?

Transcript: The food that you eat as macronutrients, such as dietary carbs, fats, and proteins, all need to be broken down into digestible particles for absorption through the small gut and get converted into fuel for the body's cell function.

The pancreas gland plays an essential role through its secretion of enzymes to help this process. These enzymes breakdown sugars fats and starches.

The pancreas also helps our digestive system by making hormones. These are chemical messengers that travel through the blood stream.

The gland is situated inside your abdomen, hidden behind the stomach, and it is the size of your hand. It is connected to the duodenum part of the small gut through the pancreatic duct. Both pancreatic duct and the bile duct joins together to form an ampulla which opens into the duodenum.

Pancreas secretes insulin that helps your blood sugar to be maintained within the normal range.

Insulin is released from the beta cells in response to rising glucose in your bloodstream. After eating a meal, the carbs are broken down to glucose and passed into the bloodstream

Hormones secreted by the pancreas, also control your appetite, stimulates stomach acid, and tell your stomach when to empty.

Ghrelin is a hormone produced in the stomach and released by the stomach with small amounts also released by the small gut, pancreas, and brain.

Ghrelin has numerous functions. It is called the 'hunger hormone' because it stimulates appetite and increase food intake and promotes fat storage.

Pancreas detects any rise of blood sugar and secretes insulin to keep it within the normal ranges.

If you do not eat when you are hungry, your natural rhythms become off-balance, especially when you ignore hunger for too long.

When you skip meals, your body metabolism slows down, which can cause weight loss.

Unfortunately, among diabetics due to lack or resistant insulin secretion in the pancreas, the blood sugar level remains raised.

Pancreas also neutralize stomach acid. When acid enters the small gut, it stimulates secretin to be released, and the effect of this hormone is to stimulate secretion of lots of bicarbonate by the pancreas.

In the duodenum, gastric acid is neutralized by bicarbonate. Bicarbonates are secreted in the pancreas, thus neutralizing gastric acid, stimulated by secretin. Secretin is secreted in the duodenum.

Enzymes present in the pancreatic juice completes the chemical digestion of large molecules that began in the mouth and stomach.

Pancreas also makes enzymes to breakdown food, as mentioned earlier. These enzymes in juice form travels through the pancreatic duct and empty into the duodenal segment of the small gut, each day about 8 ounces of this enzymatic fluid is secreted.

To breakdown dietary fats it secretes an enzyme called lipase. This enzyme works through with bile secreted by the liver and stored in the gallbladder, to breakdown fat in your diet.

If you don't have enough lipase, fats may not be broken down into fatty acids. Also fat-soluble vitamins like A, D,E,K may not be absorbed through the small gut.

Symptoms of poor fat absorption leads to fatty stools, loose motions.

Protease

This enzyme that breaks down dietary proteins into amino acids. It also helps to protect you from germs that may live in your intestines', like bacteria and yeast. Undigested proteins can cause allergic reactions in some people.

Protease enzyme deficiency is associated with dryness. Dry extremities, dry skin rashes, constipation, calcium deficiency, gingivitis, fungus, high blood pressure, hearing loss, tooth decay and mood swings

Two of the best food sources of proteolytic enzymes are papaya and pineapple.

Shortage of protease secretion by the pancreas, can lead to allergies or toxicity in the intestines.

The third hormone pancreas secretes is Amylase. This breakdown dietary starches into sugar for the body to use as energy.

If you don't have enough amylase, you may get diarrhea from undigested carbs.

So, the pancreas has two main functions: an exocrine function that helps in digestion and an endocrine function that regulates blood sugar.

About four to six hours after you eat, the glucose levels in the blood decrease, triggering your pancreas to produce glucagon.

The function of the glucagon in the body is to maintain a normal level of blood sugar without allowing the level to drop. This process is called glycogenolysis.

It is produced by the alpha cells found in the islets of Langerhans in the pancreas. The pancreas also has cells called beta cells in the islets of Langerhans that produce insulin.

This glucagon secreting alpha cells surround the insulin secreting beta cells, which reflects the close relationship between the two hormones.

The function of the glucagon is to stimulate the conversion of stored glycogen in the liver, which can be released into the blood stream for the cells to use as energy. This process is called glycogenolysis as mentioned earlier.

Glycogen is mainly stored in the liver and the muscles and provide the body with a readily available source of energy if blood sugar level falls.

Put it simply, liver is the stores that keep a stock of sugar converted to glycogen, and glucagon keeps an eye on the blood sugar level and instructs the stores to release glycogen converted into glucose to the blood stream.

Certain foods are bad for the pancreas, such as red meat, organ meat. French fries, potato chips, Mayonnaise, Margarine, butter, Full-fat dairy, Pastries and sugar drinks.

Indulging in the foods mentioned excessively can cause inflammation of the pancreas, referred to as Acute pancreatitis.

This is a most painful condition and is food related.

So, what you eat can have a huge effect on the pancreas.

The best foods for the pancreas are friendly diets high in protein from lean meats and low in animal fats and simple sugars.

You should eat plenty of Veggies, fruits, whole grains, beans, lentils and low fat or nonfat dairy.

Antioxidant-rich foods such as dark, leafy vegetables, red berries, blueberries, sweet potatoes, grapes, carrots, walnuts, and pomegranates are also beneficial.

How do you know that the pancreas is working well for you?

Constant pain in your upper belly that radiates to your back is the first symptom you will know that the pancreas is not working well.

This pain may be disabling. Diarrhea and weight loss will be noticed due to insufficient release of enzymes to break down food. You can get an upset stomach with vomiting.

So, now you realize the importance of the pancreas in the digestion of food and secretion of hormones like glucagon and insulin, and secretion of bicarb to neutralize gastric acid.

Hope this video talk was useful.

Stay safe and Goodbye for now.