Inflammation of the Pancreas

What Causes Pancreatitis

Inflammation of the pancreas is caused when the digestive enzymes produced by the pancreas activate while they are INSIDE the pancreas rather than when they are released into the small intestines. This can be caused when the pancreatic duct is inflamed or blocked. The pancreatic duct is the vessel through which the pancreatic enzymes travel out into the intestines. The pancreatic duct can become inflamed due to gallstones, thick sluggish bile, microbial infection, hyper-immune inflammation due to food allergies, blood sugar dysregulation, or an autoimmune condition such as cystic fibrosis. If left untreated sub-acute and acute pancreatitis can cause cellular damage to the pancreas that can lead to the formation of cysts, tumors or pancreatic cancer.

What Can You Do?

There are many natural strategies to reduce pancreatic inflammation, alleviate symptoms and prevent their recurrence.
Anatomy & Physiology Basics

The Pancreas

The pancreas is a long flat gland located deep in the belly nestled between the spine and stomach, spleen and small intestines in the left upper quadrant of the abdomen.

Most of the cells in the pancreas produce enzymes that digest food. A smaller portion of pancreatic cells produce hormones such as insulin and glucagon that help control blood sugar levels.

The pancreatic duct is the vessel that carries the fluid containing digestive enzymes produced by the pancreas. In most people the main pancreatic duct is approximately one-sixteenth of an inch in diameter (that's pretty small). This duct merges with the bile duct in the head of the pancreas.

The gallbladder is a small, pear-shaped sac, nestled in the lobes of the liver just under the ribs on the right side of the upper abdomen. It stores bile. Bile is a dark green to yellowish brown fluid produced by the liver. Its purpose is to emulsify fats and prepare them for digestion by pancreatic enzymes.

The gallbladder is connected to the liver and small intestines via ducts. The common hepatic duct transfers bile made in the liver into the gallbladder for storage. When we eat fats in foods the body releases a hormone called cholecystokinin that stimulates the gallbladder to discharge bile. Bile travels out of the cystic duct, into the common bile duct, then through the pancreatic duct to the small intestines where it then emulsifies fat for digestion by pancreatic enzymes.

There can be great variation in the arrangement of ducts from person to person. See the image above.
Acute pancreatitis is an extremely painful condition that may require hospitalization and I.V. feeding. It involves intense upper abdominal pain that radiates into the back and is aggravated by eating. The upper abdomen becomes swollen and tender and there is a fever, increased heart rate and often nausea and vomiting. This can lead to emaciation and infection if not treated.

Sub-acute pancreatitis may manifest as a dull, persistent ache in the upper left quadrant of the abdomen, just under the rib cage that recurs intermittently especially after eating high fat or high sugar foods.

Both types of pancreatitis can be identified using blood lab work.

Supplemental support is very effective with sub-acute pancreatitis and recovery from acute pancreatitis, however, diet changes MUST BE MADE to insure recovery and prevent recurrence.

It is absolutely essential that the individual does not consume alcohol, refined carbohydrates, gluten containing grains or cross-reactive grains, fruit juice, hydrogenated fats or oils and no complex carbohydrates that quickly turn into sugars when digested.

The individual must intake at least 8 full glasses of water daily. And total carbohydrate intake is best curtailed at no more than 60 grams per day.

You must take measures to increase the solubility of the bile in order to avoid gallbladder attacks, cholecystitis and pancreatitis in the future.

During a gallbladder attack/cholecystitis/pancreatitis: eat very little, drink quite a lot. You will probably feel so very nauseous and in such a great deal of pain you will not want to eat anything anyhow. Take the hint and allow the inflammation to recede.

Once the attack has subsided introduce an easily digestible protein shake like Apex ClearVite; or try homemade bone broth.

Next be certain to slowly start a supplementation regimen to increase the solubility of bile and dissolve gallstones.

**Maintenance Diet:**

Increase healthy fats and oils: use extra virgin olive oil and coconut oil for cooking; take essential fatty acid supplements

Increase fiber and vegetable protein (freshly ground flax meal, coconut flour for baking). Avoid legumes (including soy).

Increase organic vegetables: leafy greens (kale, collards, mustard greens, spinach, Swiss chard, etc.), summer squash, leeks, fennel, cabbage, etc.

Drink adequate amounts of filtered water (no water containing fluoride or chlorine, no distilled water). To find out how much water is right for you: take your body weight and divide it by 2. The result is the number of ounces of water you
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need to drink each day to be adequately hydrated. Keep in mind that if you drink a diuretic (like tea), you need to replace the diuretic with an equal amount of water PLUS 4-6 more ounces of water to compensate for the water that the diuretic removes from your body.

Eat at least one serving (1-2 cups) daily of raw grated beets covered with the juice of one-half of a lemon, sprinkled with salt (you can add 1-2 tablespoons of warm coconut oil or raw, unprocessed flax seed oil)

Be careful of sugars and fast burning carbohydrates. Eat only low sugar organic fresh fruits (apples, berries, or pears, avoid dried fruits which are high in sugars). Avoid corn, white potatoes and sweet potatoes. Yams are preferable as they contain less sugar than sweet potatoes.

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DO NOT EAT THE FOLLOWING:

Dairy: absolutely no dairy, whether it comes from a cow, goat or sheep – if it comes from a teat, don’t eat. No raw or pasteurized, homogenized: milk, sour cream, yogurt or cheeses. Clarified Butter (Ghee) is acceptable, as the casein has been removed.

No glutinous grains. No wheat, barley, or rye. Acceptable grains/grain substitutes in moderation: potato, rice, tapioca, amaranth, arrowroot, millet, montina, lupin, quinoa, sorghum, taro, teff, chia, and nut flours. Avoid bean flours.

Only use GlutenFreeHarvest Oats if they clear a pulse test.

No Fried Foods

No Hydrogenated fats or partially hydrogenated fats

No Cold drinks (cold drinks inhibit liver function, drink liquids at room temperature or hot)

No Refined Carbohydrates (white flour, pasta, sugar, etc)

No Alcohol

No Caffeine (fizzy drinks, coffee, tea or chocolate)

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AVOID FOOD IRRITANTS:

Identify food allergies and avoid the moderate and high reaction foods

Use the COCA Pulse Test to identify food allergens.

Procedure:

1. Sit down, take a deep breath and relax.

2. Establish your baseline pulse by counting your heart beat for a full minute and record your pulse.

3. Put a sample of food in your mouth on your tongue. You may chew, but refrain from swallowing. You do need to TASTE the food for approximately one-half minute.

4. Retake your pulse and record it.

5. Discard the tested ingredient (do not swallow) and repeat the procedure to test other foods. Repeat as frequently as you like, as long as you always return to your normal pulse before testing the next food.

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Quick Reference Supplemental Support for Sub-acute Pancreatitis

**Biotics Intenzyme Forte:** (broad spectrum pancreatic enzymes)
10 tablets at the onset of symptoms and then 5 tablets, 3 times a day before meals.

**Biotics Gastrazyme:** (vitamin U complex supports GI tract)
4 tablets with each meal

**Biotics Cytozyme-PAN:** (neonatal pancreas concentrate)
3 tablets with each meal

**Biotics Beta TCP:** (support healthy bile flow)
3 tablets with each meal

**Apex HCL-Prozyme:** (digestive enzymes)
2 tablets in the middle of each meal

**Apex ClearVite:** (detoxification & blood sugar regulation support)
one to two shakes daily mixed with water and Natural Value coconut milk.
The Basics of Blood Sugar Handling

In regards to blood sugar, Type II diabetes is a progressive condition that begins with recurring episodes of low blood sugar:

Blood sugar dysregulation does not suddenly emerge overnight; it is a process that occurs over time. It follows an insidious pattern of development involving the three organs of sugar regulation: the pancreas, liver and adrenal glands. These three organs work in harmony to regulate and normalize sugar levels in the blood, day and night.

As you consume a carbohydrate meal the pancreas releases insulin and opens the cells to accept glucose, thus lowering total blood glucose levels. In between meals and at night the adrenal glands release small amounts of glucocorticoid hormones that stimulate the liver to release glycogen, the stored form of glucose. This is how the body evolved to deal with carbohydrates.

Problems emerge when stress levels are high and constant, and when you consume large amounts of carbohydrates at every meal. In this situation insulin is released, blood glucose begins to drop but the amount of insulin released causes the blood sugar to drop below normal fasting level. As the blood sugar drops, the adrenals release glucocorticoids and the liver re-leases glycogen. Pretty soon the blood glucose levels are too high again and the pancreas releases more insulin. This fluctuation in extremes wears out your organs. And, as the body’s cells become exposed to more and more insulin they become resistant to its action. This causes the blood glucose to rise and then the body cannot lower it! This leads to adrenal fatigue, biliary congestion, insulin resistance and eventually Type II diabetes.

As you can see, this is a progression of disease starting with low blood sugar (hypoglycemia), evolving into reactive hypoglycemia (blood sugar dropping within 4 hours of eating a meal) that develops into early insulin resistance, progresses into insulin resistance and culminates as Type II diabetes. Type II diabetes and obesity are the consequence of untreated sugar dysregulation.

Low blood sugar can cause: fatigue, depression, dizziness, obesity, headaches and sugar cravings. Low blood sugar is the cause of some health problems and it is also the result of other problems. Low blood sugar can be the result of improper bowel flora, digestive insufficiency, stress, adrenal dysregulation, nutrient deficiency, allergies and poor eating habits.

By controlling your blood sugar and modulating your adrenals you can reverse the progression toward insulin resistance and you can reverse Type II diabetes all the way back to the point of reactive hypoglycemia … however, once reactive hypoglycemia has occurred you cannot reverse it, you must continually manage it. Reactive hypoglycemia is managed through diet, supplementation and exercise.
Apex Essential Fats

Why Do Apex Omega Co3 and Super EFA work so well? The fats are pre-emulsified into micelles. Essentially, this is what bile does ... bile acts as a surfactant to emulsify fats in food. When fats are emulsified they form micelles. Micelles are aggregate molecules with water-loving sides facing outward, and this prevents fat droplets from re-forming into larger fat particles. When food fat is dispersed into micelles, it provides more surface area for pancreatic enzymes to digest the fat. Apex Essential Fatty Acids presents essentially fatty acids in a form that allows the body to go directly to the process of fat digestion and assimilation.

Apex Energetics and Biotics Research supplements are not for sale to the general public. Apex Energetics and Biotics Research require that you be under professional care when using their products. Contact Vanessa Hendley at Remède Physique to schedule a consultation.