

How Enzymes Sack the **DIGESTION BLUES**

**DIGESTIVE DIFFICULTIES CAN
UNDERMINE NUTRIENT ABSORPTION.**

Upset stomach, heartburn and other digestive complaints are so common they command a row of remedies at every drugstore. So, the thinking goes, that makes them minor annoyances instead of major health hazards.

Nothing can be farther from the truth. For one thing, some digestive issues, such as gallstones, ulcers or inflammatory bowel disorders, can result in surgical procedures or have significant complications. But long-term digestive problems can also interfere with your body's ability to absorb nutrients from food, leading to shortfalls that can undermine overall health.

The body uses enzymes to break down carbohydrates, fats and proteins into absorbable units. Providing these enzymes supplementally can support the body's food-processing capacity, especially as part of a formulation that includes other digestive aids such as beneficial probiotic bacteria (and probiotic growth agents like FOS), trace mineral sources and such gastrointestinal circulation promoters as nattokinase.

Ongoing symptoms should be brought to a practitioner's attention. But an enzyme supplement may provide relief of occasional intestinal distress and encourage more complete assimilation of food.





NAME	WHAT IT IS
Amylase	An enzyme produced in the salivary glands and pancreas
Betaine HCl	A substance first found in beets; "HCl" stands for <i>hydrochloric acid</i> , the main component of stomach acid
Bioprine	A patented form of <i>piperine</i> , a substance found in black pepper (<i>Piper nigrum</i>)
Bromelain	An enzyme found in all parts of the pineapple plant (<i>Ananas comosus</i>)
Cellulase	A group of enzymes produced by fungi and other microbes
Lactase	An enzyme produced by the small intestine
Legumase	A patented enzyme designed to help with digestion of peas, beans, lentils and related foods
Lipase	A group of enzymes produced in different parts of the gastrointestinal tract
Pancreatin	A group of enzymes secreted by the pancreas
Papain	An enzyme extracted from unripe papayas (<i>Carica papaya</i>)
Protease	A group of enzymes found in intestinal, pancreatic and stomach juices



Papaya



Beets



Lentils

WHAT IT DOES

Breaks starches down into sugars that are then broken down into glucose, the body's main fuel source; some amylases are used in brewing beer

Helps establish acidic conditions within the stomach and aids in fat and protein digestion; speak to a practitioner before use if you have severe esophageal or stomach problems

Not an enzyme as such, but an extract that enhances nutrient absorption

Breaks down protein and has been found to increase nutrient bioavailability when taken with food; helps fight inflammation when taken on an empty stomach

Helps break down *cellulose*, a form of indigestible plant fiber; also used in coffee processing

Breaks down the sugars found in milk and dairy products; dairy intolerance often occurs in people with irritable bowel syndrome

Breaks down sugars found in legumes that can cause gas and bloating

Breaks down fats, enabling the formation of tiny fat droplets (*micelles*) that can then be absorbed by the body; promotes assimilation of such fat-soluble nutrients as vitamins A, D, E and K

Facilitates the breakdown of carbs, fats and proteins; has been used to treat malabsorption caused by pancreatic dysfunction

Encourages the breakdown and assimilation of protein; also used as an anti-inflammatory

Converts proteins into absorbable amino acids; other uses include removing damaged tissue from wounds and fighting inflammation

NOTE: Always consult with your healthcare practitioner for help in designing a supplementation program, especially if you have a pre-existing condition.