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# **12 Foods That Contain Natural Digestive Enzymes**

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By Ryan Raman, MS, RD — Updated on March 20, 2023

Some foods, including certain fruits like pineapple and fermented foods like kimchi, contain digestive enzymes that may benefit digestion.

Many organs work together to make up your digestive system (1Trusted Source).

These organs take the food and liquids you eat and break them down into simpler forms, such as proteins, carbs, fats and vitamins. The nutrients are then transported across the small intestine and into the bloodstream, where they provide energy for growth and repair.

Digestive enzymes are necessary for this process, as they break down molecules like fats, proteins and carbs into even smaller molecules that can be easily absorbed.

There are three main types of digestive enzymes:

- Proteases: Break down protein into small peptides and amino acids
- Lipases: Break down fat into three fatty acids plus a glycerol molecule
- Amylases: Break down carbs like starch into simple sugars

Enzymes are also made in the small intestine, including lactase, maltase and sucrase.

If the body is unable to make enough digestive enzymes, food molecules cannot be digested properly. This can lead to digestive disorders like lactose intolerance.

Thus, eating foods that are high in natural digestive enzymes can help improve digestion.

Here are 12 foods that contain natural digestive enzymes.

### 1. Pineapple

Pineapples are a delicious tropical fruit rich in digestive enzymes.

In particular, pineapples contain a group of digestive enzymes called bromelain (2Trusted Source).

These enzymes are proteases, which break down protein into its building blocks, including amino acids. This aids the digestion and absorption of proteins (3Trusted Source).

Bromelain can be purchased in powdered form to help tenderize tough meats. It's also widely available as a health supplement to help people who struggle to digest proteins (4Trusted Source).

A study on people with pancreatic insufficiency, a condition in which the pancreas cannot make enough digestive enzymes, found that taking bromelain combined with a pancreatic enzyme supplement improved digestion more than the enzyme supplement alone (3Trusted Source, 5Trusted Source).

#### Summary

Pineapples contain a group of digestive enzymes called bromelain, which helps break down proteins into amino acids. Bromelain is also available as a supplement.

### How to Cut a Pineapple

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### 2. Papaya

Papaya is another tropical fruit that is rich in digestive enzymes.

Like pineapples, papayas also contain proteases that help digest proteins. However, they contain a different group of proteases known as papain (6Trusted Source).

Papain is also available as a meat tenderizer and digestive supplement.

Studies have shown that taking a papaya-based formula may help ease digestive symptoms of IBS, such as constipation and bloating (7Trusted Source).

If you want to eat papayas, just make sure to eat them ripe and uncooked, as heat exposure can destroy their digestive enzymes.

Also, unripe or semi-ripe papayas can be dangerous for pregnant women, as it may stimulate contractions (8Trusted Source).

#### Summary

Papayas contain the digestive enzyme papain, which breaks down proteins into building blocks, including amino acids. Make sure to eat papayas ripe and uncooked, as high heat can destroy their digestive enzymes.

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### 3. Mango

Mangoes are a juicy tropical fruit that is popular in summer.

They contain the digestive enzymes amylases — a group of enzymes that break down carbs from starch (a complex carb) into sugars like glucose and maltose.

The amylase enzymes in mangoes become more active as the fruit ripens. This is why mangoes become sweeter as they start to ripen (9Trusted Source).

Amylase enzymes are also made by the pancreas and salivary glands. They help break down carbs so that they are easily absorbed by the body.

That's why it's often recommended to chew food thoroughly before swallowing, as amylase enzymes in saliva help break down carbs for easier digestion and absorption (10Trusted Source).

#### Summary

Mangoes contain the digestive enzyme amylase, which breaks down carbs from starch (a

complex carb) into sugars like glucose and maltose. Amylase also helps mangoes ripen.

# 4. Honey

It's estimated that Americans consume over 400 million pounds of honey each year (11).

This delicious liquid is rich in many beneficial compounds, including digestive enzymes (12Trusted Source).

The following are enzymes found in honey, particularly raw honey (13Trusted Source, 14Trusted Source, 15Trusted Source, 16Trusted Source):

- Diastases: Break down starch into maltose
- Amylases: Break down starch into sugars like glucose and maltose
- Invertases: Break down sucrose, a type of sugar, into glucose and fructose
- Proteases: Break down proteins into amino acids

Make sure that you're buying raw honey if you're seeking its digestive health benefits. Processed honey is often heated, and high heat can destroy digestive enzymes.

#### Summary

Honey contains a variety of digestive enzymes, including diastase, amylase, invertase and protease. Just make sure to purchase raw honey, as it is not exposed to high heat. Processed honey may be heated, which destroys digestive enzymes.

### 5. Bananas

Bananas are another fruit that contains natural digestive enzymes.

They contain amylases and glucosidases, two groups of enzymes that break down complex carbs like starch into smaller and more easily absorbed sugars (17Trusted Source).

Like mangoes, these enzymes break down starch into sugars as bananas start to ripen. That's why ripe yellow bananas are much sweeter than unripe green bananas (18Trusted Source, 19Trusted Source).

On top of their enzyme content, bananas are a great source of dietary fiber, which may aid digestive health. A medium banana (118 grams) provides 3.1 grams of fiber (20).

A two-month study in 34 women looked at the connection between eating bananas and the growth of healthy gut bacteria.

Women who ate two bananas daily experienced a modest, non-significant rise in healthy gut bacteria. However, they did experience significantly less bloating (21Trusted Source).

#### Summary

Bananas contain amylases and glucosidases, two enzymes that digest complex starches into easily absorbed sugars. They are more active as bananas start to ripen, which is why yellow bananas are much sweeter than green bananas.

## 6. Avocados

Unlike other fruits, avocados are unique in that they are high in healthy fats and low in sugar.

They contain the digestive enzyme lipase. This enzyme helps digest fat molecules into smaller molecules, such as fatty acids and glycerol, which are easier for the body to absorb (22Trusted Source).

Lipase is also made by your pancreas, so you don't need to get it from your diet. However, taking a lipase supplement can help ease digestion, especially after a high-fat meal (23Trusted Source).

Avocados also contain other enzymes, including polyphenol oxidase. This enzyme is responsible for turning green avocados brown in the presence of oxygen (24Trusted Source, 25).

#### Summary

Avocados contain the digestive enzyme lipase, which breaks down fat molecules into smaller fatty acids and glycerol. Although lipase is made by the body, consuming avocados or taking a lipase supplement may ease digestion after a high-fat meal.

### 7. Kefir

Kefir is a fermented milk beverage that is popular in the natural health community.

It's made by adding kefir "grains" to milk. These "grains" are actually cultures of yeast, lactic acid bacteria and acetic acid bacteria that resemble a cauliflower (26Trusted Source).

During fermentation, bacteria digest the natural sugars in milk and convert them into organic acids and carbon dioxide. This process creates conditions that help the bacteria grow but also adds nutrients, enzymes and other beneficial compounds (27Trusted Source).

Kefir contains many digestive enzymes, including lipase, proteases and lactase (28Trusted Source, 29, 30Trusted Source).

Lactase aids the digestion of lactose, a sugar in milk that is often poorly digested. A study found that kefir improved lactose digestion in people with lactose intolerance (31Trusted Source).

#### Summary

Kefir is a fermented milk beverage that contains many digestive enzymes, including

lipases, proteases and lactases. These enzymes break down fat, protein and lactose molecules, respectively.

## 8. Sauerkraut

Sauerkraut is a type of fermented cabbage that has a distinct sour taste.

The fermentation process also adds digestive enzymes, which makes eating sauerkraut a great way to increase your intake of digestive enzymes (32Trusted Source).

In addition to containing digestive enzymes, sauerkraut is also considered a probiotic food, as it contains healthy gut bacteria that boost your digestive health and immunity (33Trusted Source, 34Trusted Source).

Many studies have shown that consuming probiotics can ease digestive symptoms, such as bloating, gas, constipation, diarrhea and stomach pain, in both healthy adults and those with IBS, Crohn's disease and ulcerative colitis (35Trusted Source, 36Trusted Source, 37Trusted Source, 38Trusted Source).

Just make sure to eat raw or unpasteurized sauerkraut rather than cooked sauerkraut. High temperatures may deactivate its digestive enzymes.

#### Summary

Sauerkraut is a type of fermented cabbage that is rich in many digestive enzymes. The probiotic properties of sauerkraut may help ease digestive symptoms.

# 9. Kimchi

Kimchi is a spicy Korean side dish made from fermented vegetables.

As with sauerkraut and kefir, the fermentation process adds healthy bacteria, which provide nutrients, enzymes and other benefits (39Trusted Source).

Kimchi contains bacteria of the *Bacillus* species, which produce proteases, lipases and amylases. These enzymes digest proteins, fats and carbs, respectively (40Trusted Source, 41Trusted Source).

Aside from aiding digestion, kimchi has been linked to many other health benefits. It may be especially effective at lowering cholesterol and other heart disease risk factors (42).

In a study in 100 young, healthy participants, scientists found that those who ate the most kimchi experienced the greatest reduction in total blood cholesterol. Elevated total blood cholesterol is a risk factor for heart disease (43Trusted Source).

#### Summary

Like sauerkraut, kimchi is another dish made from fermented vegetables. It's fermented with bacteria of the *Bacillus* species, which tend to add enzymes, such as proteases, lipases and amylases.

## 10. Miso

Miso is a popular seasoning in Japanese cuisine.

It's made by fermenting soybeans with salt and koji, a type of fungus (44Trusted Source, 45Trusted Source).

Koji adds a variety of digestive enzymes, including lactases, lipases, proteases and amylases (46, 47, 48Trusted Source).

That's one reason why miso may improve the ability to digest and absorb foods.

In fact, studies have shown that the bacteria in miso can reduce symptoms linked to digestive problems, such as irritable bowel disease (IBD) (49).

Moreover, fermenting soybeans helps improve their nutritional quality by reducing their antinutrient content. Antinutrients are compounds found naturally in foods that may hinder the absorption of nutrients by binding to them (50Trusted Source).

#### Summary

Miso is a popular seasoning in Japanese cuisine that's made by fermenting soybeans. It's fermented with the fungi koji, which adds digestive enzymes, such as lactases, lipases, proteases and amylases.

# 11. Kiwifruit

The kiwifruit is an edible berry that is often recommended to ease digestion (51).

It's a great source of digestive enzymes, particularly a protease called actinidain. This enzyme helps digest proteins and is commercially used to tenderize tough meats (52Trusted Source, 53Trusted Source).

Additionally, kiwifruit contains many other enzymes that help ripen the fruit (54Trusted Source).

Scientists believe actinidain is one reason why kiwifruits seem to aid digestion.

An animal study found that adding kiwifruit to the diet improved the digestion of beef, gluten and soy protein isolates in the stomach. This was thought to be due to its actinidain content (55).

Another animal study analyzed the effects of actinidain on digestion. It fed some animals kiwifruit with active actinidain and other animals kiwifruit without active actinidain.

Results showed that animals fed kiwifruit with active actinidain digested meat more efficiently. The meat also moved faster through the stomach (56Trusted Source).

Many human-based studies have also found that kiwifruit aids digestion, reduces bloating and helps relieve constipation (57Trusted Source, 58Trusted Source, 59Trusted Source, 60Trusted Source).

#### Summary

Kiwifruit contains the digestive enzyme actinidain, which helps digest proteins. Moreover, consuming kiwifruit may ease digestive symptoms like bloating and constipation.

### 12. Ginger

Ginger has been a part of cooking and traditional medicine for thousands of years.

Some of ginger's impressive health benefits may be attributed to its digestive enzymes.

Ginger contains the protease zingibain, which digests proteins into their building blocks. Zingibain is used commercially to make ginger milk curd, a popular Chinese dessert (61).

Unlike other proteases, it's not often used to tenderize meats, as it has a short shelf life (62Trusted Source).

Food sitting in the stomach for too long is often thought to be the cause of indigestion.

Studies in healthy adults and those with indigestion show that ginger helped food move faster through the stomach by promoting contractions (63Trusted Source, 64Trusted Source).

Animal studies have also shown that spices, including ginger, helped increase the body's own production of digestive enzymes like amylases and lipases (65Trusted Source).

What's more, ginger appears to be a promising treatment for nausea and vomiting (66Trusted Source).

#### Summary

Ginger contains the digestive enzyme zingibain, which is a protease. It may aid digestion by helping food move faster through the digestive tract and boosting the body's own production of digestive enzymes.

### The Bottom Line

Digestive enzymes are proteins that break down larger molecules like fats, proteins and carbs into smaller molecules that are easier to absorb across the small intestine.

Without sufficient digestive enzymes, the body is unable to digest food particles properly, which may

lead to food intolerances.

Digestive enzymes can be obtained from supplements or naturally through foods.

Foods that contain natural digestive enzymes include pineapples, papayas, mangoes, honey, bananas, avocados, kefir, sauerkraut, kimchi, miso, kiwifruit and ginger.

Adding any of these foods to your diet may help promote digestion and better gut health.