

What is lactose intolerance?

Lactose intolerance is the inability to digest significant amounts of lactose, the sugar in milk. This intolerance is caused by a shortage of the enzyme lactase, which the body normally makes. Lactase breaks down milk sugar for digestion and absorption. When there is not enough lactase to digest the amount of lactose consumed, the results may be very distressing. Not all persons deficient in lactase have symptoms, but those who do are considered to be lactose intolerant.

Common symptoms include nausea, cramps, bloating, gas, and diarrhea, which begin about 30 minutes to 2 hours after eating or drinking foods containing lactose. How bad the symptoms are depends on the amount of lactose each person can tolerate.

Lactose intolerance can be caused by certain digestive diseases and injuries to the small intestine can reduce the amount of enzymes produced. In rare cases, children are born without the ability to produce lactase. For most people lactase deficiency is a condition that develops naturally over time. After about the age of 2 years, the body begins to produce less lactase. However, many people may not experience symptoms until they are much older.

Between 30 and 50 million Americans are lactose intolerant. Certain ethnic and racial populations are more widely affected than others. As many as 75 percent of all African Americans and American Indians and 90 percent of Asian Americans are lactose intolerant. The condition is least common among persons of northern European descent.

How is lactose intolerance treated?

- Diet is used to control or eliminate symptoms.
- Young children with lactase deficiency should not eat any foods containing lactose.
- Older children and adults do not need to avoid lactose completely, it depends on personal tolerance.
- Lactase enzymes are available to help people digest foods that contain lactose. Tablets are taken with the first bite of dairy food or liquid can be added to milk or cream.
- Lactose-reduced milk and other products are available at most supermarkets.

How is nutrition balanced?

Milk and other dairy products are a major source of nutrients in the American diet. The most important of these nutrients is calcium. Calcium is essential for the growth and repair of bones throughout life. In the middle and later years, a shortage of calcium may lead to thin, fragile bones that break easily, a condition called osteoporosis. A concern, then, for both children and adults with lactose intolerance, is getting enough calcium in a diet that includes little or no milk.

In planning meals, making sure that each day's diet includes enough calcium is important, even if the diet does not contain dairy products. Many nondairy foods are high in calcium. Green vegetables, such as broccoli and kale, and fish with soft, edible bones, such as salmon and sardines, are excellent sources of calcium. To help in planning a high-calcium and low-lactose diet, the table that follows lists some common foods that are good sources of dietary calcium and shows how much lactose they contain.

Recent research shows that yogurt with active cultures may be a good source of calcium for many people with lactose intolerance, even though it is fairly high in lactose. Evidence shows that the bacterial cultures used to make yogurt produce some of the lactase enzyme required for proper digestion.

Calcium is absorbed and used only when there is enough vitamin D in the body. A balanced diet should provide an adequate supply of vitamin D. Sunlight helps the body naturally absorb or synthesize vitamin D, and with enough exposure to the sun, food sources may not be necessary.

Some people with lactose intolerance may think they are not getting enough calcium and vitamin D in their diet. Consultation with a doctor or dietitian may be helpful in deciding whether any dietary supplements are needed. Taking vitamins or minerals of the wrong kind or in the wrong amounts can be harmful. A dietitian can help in planning meals that will provide the most nutrients with the least chance of causing discomfort.

Where is hidden lactose?

Lactose is often added to prepared foods. The following food products may contain small amounts of lactose:

- bread and other baked goods
- processed breakfast cereals
- instant potatoes, soups, and breakfast drinks
- margarine
- lunch meats (other than kosher)
- salad dressings
- candies and other snacks
- mixes for pancakes, biscuits, and cookies
- powdered meal-replacement supplements

Some products labeled nondairy, such as powdered coffee creamer and whipped toppings, may also include ingredients that are derived from milk and therefore contain lactose. Read the ingredient labels to be sure. Look for such words as whey, curds, milk by-products, dry milk solids, and nonfat dry milk powder. If any of these are listed on a label, the product contains lactose.

Summary

Even though lactose intolerance is widespread, it need not pose a serious threat to good health. People who have trouble digesting lactose can learn which dairy products and other foods they can eat without discomfort and which ones they should avoid. Many will be able to enjoy milk, ice cream, and other such products if they take them in small amounts or eat other food at the same time. Others can use lactase liquid or tablets to help digest the lactose. Even older women at risk for osteoporosis and growing children who must avoid milk and foods made with milk can meet most of their special dietary needs by eating greens, fish, and other calcium-rich foods that are free of lactose. A carefully chosen diet, with calcium supplements if the doctor or dietitian recommends them, is the key to reducing symptoms and protecting future health.

For More Information

American Dietetic Association (ADA)

www.eatright.org

**International Foundation for Functional
Gastrointestinal Disorders (IFFGD) Inc.**

www.iffgd.org

MDA MIDWEST DAIRY ASSOCIATION™

<http://www.midwestdairy.com/>



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