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Lactose Intolerance

What Is Lactose Intolerance?

Lactose intolerance is the inability to digest a sugar called **lactose** that is found in milk and dairy products.

Normally when a person eats something containing lactose, an enzyme in the small intestine called **lactase** breaks it down into simpler sugar forms called **glucose** and **galactose**. These simple sugars are then easily absorbed into the bloodstream and turned into energy — fuel for our bodies.

People with lactose intolerance do not produce enough of the lactase enzyme to break down lactose. Instead, undigested lactose sits in the gut and gets broken down by bacteria, causing gas, bloating, stomach cramps, and diarrhea.

Lactose intolerance is fairly common and seems to affect guys and girls equally. Little kids are less likely to have it, but many people eventually become lactose intolerant in adulthood — some while they are still teens. Some health care providers view lactose intolerance as a normal human condition and therefore don't really consider it a disease.

Who Gets Lactose Intolerance?

A person may be or may become lactose intolerant for different reasons:

- **Ethnic background.** People of Asian, African, Native American, and Hispanic backgrounds are more likely to develop lactose intolerance at a young age.
- **Other problems with the digestive tract.** People who have inflammation of their upper small intestine, such as celiac disease or Crohn's disease, have a reduced level of the lactase enzyme.
- **Medicines.** Certain antibiotics can trigger temporary lactose intolerance by interfering with the intestine's ability to produce the lactase enzyme.
- **Infection.** After a bout of infectious diarrhea, some kids can develop a temporary lactose intolerance that usually improves after a few days or weeks.
- **Age.** As people get older, their bodies usually stop producing the lactase enzyme, and most people will naturally become lactose intolerant over time.

What Happens When Someone Has It?

People with lactose intolerance may have a variety of symptoms. It all depends on how much dairy or how many milk-containing foods the person eats and how little lactase the body produces.

Usually within 30 minutes to 2 hours after eating, someone with lactose intolerance will experience nausea, stomach cramps, bloating, gas, and diarrhea. This can be unpleasant, not to mention embarrassing if you're at school or out with friends.

Because many people may think they're lactose intolerant when they really aren't, it helps to see a doctor who can diagnose the condition correctly and advise you on ways to manage it.

How Do Doctors Diagnose It?

If your doctor thinks you might be lactose intolerant, he or she will take your **medical history** by asking about any concerns and symptoms you have, your past health, your family's health, any medications you're taking, any allergies you may have, and other issues. Your doctor will also do a **physical exam**.

Doctors can test for lactose intolerance by using the hydrogen breath test. Normally very little hydrogen gas is detectable in the breath. However, undigested lactose in the colon ferments (breaks down) and produces various gases, including hydrogen.

If your doctor decides to give you a hydrogen breath test, you'll be asked to blow into a tube for a beginning sample. You'll then swallow a drink with lactose in it, wait a while, and breathe into the tube again. You'll be asked to blow into the tube every half hour for 2 hours in order to measure hydrogen levels in your breath. The levels should go up over time if you have lactose intolerance.

Doctors also can find out if you're able to digest lactose by testing for the presence of lactase with an **endoscopy**. During this procedure, doctors view the inside of the intestines by inserting a long tube with a light and a tiny camera on the end into the mouth.

A doctor can then take tissue samples and pictures of the inside of your gut and look for clues to why you've been having problems with what you're eating. The amount of lactase enzyme can be measured in one of these tissue samples.

Living With Lactose Intolerance

Lactose usually can be easily managed if you're in tune with your body. Everyone's different, but most people with lactose intolerance can eat a small amount of dairy. The trick is to eat dairy products in combination with other foods that don't contain lactose and not to eat too much dairy at once. It can also help to keep a food diary to learn which foods your body can or can't tolerate.

Dairy foods are the best source of **calcium**, a mineral that's important for bone growth. Because growing teens need about 1,300 milligrams (mg) of calcium each day, experts recommend that even teens who have lactose intolerance continue to include some dairy in their diet.

Foods like cheese or yogurt may be easier to digest than milk, so try a cup of yogurt for dessert or add a piece of cheese to your sandwich. Lactose-free milk is also a great way to get calcium in your diet without the problems that can come with lactose.

Taking a lactase enzyme supplement might help too. Taking this before eating foods that contain dairy will help the body digest the lactose sugar in dairy so you don't develop the symptoms of lactose intolerance, like pain, cramping, bloating, gas, and diarrhea.

Teens with the most severe symptoms of lactose intolerance might have to avoid all dairy products. It's extra important that these teens find other good calcium sources, so talking to a registered dietitian is a good idea. Dietitians are trained in nutrition and they can help people who are lactose intolerant come up with eating alternatives and develop a well-balanced diet that provides lots of calcium for developing strong bones.

Here are some tips for dealing with lactose intolerance:

- Choose lactose-reduced or lactose-free milk.
- Take a lactase enzyme supplement (such as Lactaid) just before you eat dairy products. These can be taken in drops or tablets and even added directly to milk.
- When you do drink milk or eat lactose-containing foods, eat other non-lactose foods at the same meal to slow digestion and avoid problems. (For example, if you are going to have a milkshake, don't drink it by itself. Have something else with it, like a healthy sandwich.)
- Drink juices that are fortified with calcium.
- Eat a variety of dairy-free foods that are rich in calcium, such as broccoli, beans, tofu, or soy milk. Consider hard cheeses such as cheddar, which are lower in lactose.
- Yogurts that contain active cultures are easier to digest and much less likely to cause lactose problems.
- Learn to read food labels. Lactose is added to some boxed, canned, frozen, and prepared foods like bread, cereal, lunchmeats, salad dressings, mixes for cakes and cookies, and coffee creamers. Be aware of certain words that might mean the food has lactose in it: butter, cheese, cream, dried milk, milk solids, powdered milk, and whey, for example.

Reviewed by: J. Fernando del Rosario, MD

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Lactose Intolerance

Post Test – September 2020

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1. Lactose intolerance is the inability to digest a sugar called _____ that is found in milk and dairy products.
2. People with lactose intolerance do not produce enough of the _____ to break down lactose.
3. People of Asian, African, Native American and Hispanic backgrounds are less likely to develop lactose intolerance at a young age.
True or False?
4. As people get _____, their bodies usually stop producing the lactase enzyme, and most people will naturally become lactose intolerant over time.
5. If you think you may be lactose intolerant, it helps to see a doctor who can _____ the condition correctly and advise you on ways to manage it.
6. Dairy foods are the best source of calcium, a mineral that's important for bone growth.
True or False?
7. Lactose-free _____ is also a great way to get calcium in your diet without the problems that can come with lactose.
8. _____ are trained in nutrition and they can help people who are lactose intolerant come up with eating alternatives and develop a well-balanced diet that provides lots of calcium for developing strong bones.
9. When you do drink milk or eat lactose-containing foods, eat other non-lactose foods at the same meal to slow _____ and avoid problems.
10. Yogurts that contain active _____ are easier to digest and much less likely to cause lactose problems.

August 2020 Quiz Answers. 1.E. Coli/Salmonella 2.Vitamin C 3.Bacteria
4.Separate/Produce 5.False 6.32°/40° 7.True
8.Cantaloupes/Watermelon 9.Cutting Boards 10. Contamination



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