Problems Digesting Dairy Products?

oes your stomach churn after you drink milk? Do you have diarrhea soon afterward? If so, you may be lactose intolerant.

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) estimates that 30 to 50 million Americans are lactose intolerant.

Being lactose intolerant means you can't digest lactose—the natural sugar found in milk and other dairy products. People who cannot digest lactose have a shortage, or deficiency, of an enzyme called lactase, which is produced in the small intestine. Lactase breaks down milk sugar into two simpler forms of sugar, which are then absorbed into the bloodstream.

## **Intolerance is Not Allergy**

Lactose intolerance is not the same as a milk allergy, says Kavita Dada, Pharm.D., a senior health promotion officer in the Food and Drug Administration's (FDA's) Division of Drug Information. "For most people with lactase deficiency, it's a discomfort."

But a food allergy—an abnormal response to a food triggered by the immune system—can be life-threatening. People with food allergies must avoid certain foods altogether. People with food intolerances can often eat small amounts of the offending foods without having symptoms.

## **Symptoms**

When there is not enough lactase to digest the lactose in the foods a person eats or drinks, the person may have

- gas
- stomach cramps

- bloating
- nausea
- diarrhea

These symptoms occur within 30 minutes to two hours after consuming food containing lactose. Some illnesses can cause these same problems, but a health care professional can do tests to see if the problems are caused by lactose intolerance or by another condition.

## Who Becomes Lactose Intolerant?

Lactose intolerance is more common in some ethnic groups than others. NIDDK estimates that up to 75% of all adult African Americans and Native Americans and 90% of Asian Americans are lactose intolerant.

As people age, their bodies produce fewer lactase enzymes, so most people don't have symptoms until they are adults.

Most people inherit the condition from their parents. Lactose intolerance is not very common in children under two years of age, unless the child has a lactase deficiency because of an injury to the small intestine. If you think your infant or child may be lactose intolerant, talk to your child's pediatrician.

# **Managing Lactose Intolerance**

There is no treatment to make the body produce more lactase enzyme, but the symptoms of lactose intolerance can be controlled through diet.

Most older children and adults do not have to avoid lactose completely. People have different levels of tolerance to lactose. Some people might be able to have a tablespoon of milk in a cup of coffee with little or no discomfort. Others have reactions that are so bad they stop drinking milk entirely. Some people who cannot drink milk may be able to eat ice cream and yogurt-which have less lactose than milk—without symptoms. They may also be able to consume a lactose-containing product in smaller amounts at any one time.

Common foods with lactose are

- milks, including evaporated and condensed
- creams, including light, whipping, and sour
- ice creams
- sherbets
- yogurts
- some cheeses (including cottage cheese)
- butters

Lactose may also be added to some canned, frozen, boxed, and other prepared foods such as

breads and other baked goods

- cereals
- mixes for cakes, cookies, pancakes, and biscuits
- instant potatoes, soups, and breakfast drinks
- lunch meats (other than Kosher)
- frozen dinners
- · salad dressings
- margarines
- · candies and other snacks

Dietary supplements with lactase enzyme are available to help people digest foods that contain lactose. However, FDA has not formally evaluated the effectiveness of these products, and you may want to ask your doctor if these supplements are right for you.

#### Look at Labels

"Lactose-free" or "lactose-reduced" milk and other products are widely available in grocery stores. These products may be fortified to provide the same nutrients as their lactose-containing counterparts.

There is no FDA definition for the terms "lactose free" or "lactose-reduced," but manufacturers must provide on their food labels information that is truthful and not misleading. This means a lactose-free product should not contain any lactose, and a lactose-reduced product should be one with a meaningful reduction. Therefore, the terms lactose-free and lactose-reduced have different meanings, and a lactose-reduced product may still contain lactose that could cause symptoms.

Lactose-free or lactose-reduced products do not protect a person who is allergic to dairy products from experiencing an allergic reaction. People with milk allergies are allergic to the milk protein, which remains when the lactose is removed.

Look at the ingredient label. If any of these words are listed, the product probably contains lactose:

- milk
- cream
- butter
- evaporated milk
- condensed milk

# **Raw Milk and Lactose Intolerance**

FDA warns consumers not to drink raw, or unpasteurized, milk. "Raw milk advocates claim that pasteurized milk causes lactose intolerance," says John Sheehan, Director of FDA's Division of Plant and Dairy Food Safety. "This is simply not true. All milk, whether raw or pasteurized, contains lactose, and pasteurization does not change the concentration of lactose nor does it convert lactose from one form into another."

Raw milk advocates also claim that raw milk prevents or cures the symptoms of lactose intolerance. Arguing that raw milk contains *Bifidobacteria*, they claim these microorganisms are beneficial (probiotic) and create their own lactase, which helps people digest the milk.

"This is not true, either," says Sheehan. "Raw milk can contain *Bifidobacteria*, but when it does, the bacteria come from fecal matter (animal manure) and are not considered probiotic, but instead are regarded as contaminants."

Drinking raw milk will still cause uncomfortable symptoms in people who are correctly diagnosed as being lactose intolerant. But worse than this discomfort are the dangers of raw milk, which can harbor a host of disease-causing germs, says Sheehan. "These microorganisms can cause very serious, and sometimes even fatal, disease conditions in humans."

- dried milk
- powdered milk
- milk solids
- margarine
- cheese
- whey
- curds

Beware of foods labeled "non-dairy," such as powdered coffee creamers and whipped toppings. Some of these foods may contain an ingredient called caseinate, which comes from milk and contains lactose. Look for "caseinate" or "milk derivative" on the label if you are trying to avoid milk products.

## **Testing for Lactose Intolerance**

A doctor can usually determine if you are lactose intolerant by taking a medical history. In some cases, the doctor may perform tests to help confirm the diagnosis. A simple way to test at home is to exclude all lactose-containing products from your diet for two weeks to see if the symptoms go away, and then reintroduce them slowly. If the symptoms return, then you most likely are lactose intolerant. But you may still want to see your doctor to make sure that you

are lactose intolerant and do not have a milk allergy or another digestive problem.

## **Tips for Consumers**

- If you are lactose intolerant, try lactose-free milk or dairy products lower in lactose, such as yogurt and cheese. You may be able to consume dairy products in small amounts without symptoms.
- Consume milk or other dairy products with other foods. This helps slow down digestion, making it easier for your body to absorb lactose.
- If you're eating few or no dairy products, ask your doctor or dietitian if you are getting enough calcium in your diet. You may need to take dietary supplements with calcium to keep your bones healthy.

## For More Information

Lactose Intolerance http://digestive.niddk.nih.gov/ddiseases/ pubs/lactoseintolerance/

Food Safety and Raw Milk http://www.cfsan.fda.gov/~dms/rawm-toc.html