# LACTOSE INTOLERANCE

If you suffer from a bellyache or diarrhea after drinking milk products, then you may have lactose intolerance.

### What is lactose intolerance?

Lactose is the two-part sugar consisting of glucose and galactose that is found in all dairy products. Lactase is an enzyme normally found in the upper small intestine. When lactose is present, lactase goes to work breaking the bond between the simple sugars so they may be digested. The small intestine readily absorbs the now divided simple sugars and the story ends.



For some people who do not have enough of the lactase enzyme in their digestive tract to do the job, the story ends differently. In the absence of the lactase enzyme the two-part sugar enters the lower small intestine and trouble starts. The intestine, sensing the abnormal content, draws water into the intestine causing the dreaded cramp. As digestion continues, the large amount of water arrives in the colon, overwhelming its water absorbing capability. As colon bacteria digests lactose, large amounts of gas may be produced, causing the victim to race to the bathroom before the flood is released. Lactose intolerance has strikes again. Fructose, xylose, sorbitol, and lactulose, which are sweeteners found in many foods, gum and candies, can cause the same symptoms. Lactose intolerance symptoms are unpleasant and can be painful, but are not dangerous.

### What foods contain lactose?

In order to avoid foods containing milk products, it is necessary to read food labels. The Food Allergen Labeling and Consumer Protection Act of 2004 listed milk among the eight major foods which must be identified on the label if contained in the food product. Any food or beverage containing milk products must be labeled using the word "milk". Common sources of lactose are



- Milk
- Cream
- Ice cream
- Cheese (especially soft & white cheeses)
- Cottage cheese
- Sour cream
- Butter
- Puddings
- Goat's milk

## Watch for hidden lactose

Some patients find that they can tolerate small amounts of milk products without experiencing significant symptoms, while others find most any food containing milk to be troublesome. A good way to find out how much you can tolerate



is to remove all milk products from your diet for two weeks and slowly reintroduce items one at a time, paying careful attention to how your body responds. If you are particularly sensitive to lactose, look for lactose hiding in:

- Soups
- Salad dressings
- Breads, baked goods, waffles & pancakes
- Instant potatoes and similar prepared foods
- Lunchmeat, canned tuna & hotdogs
- Hot chocolate, breakfast & meal replacement drinks
- Processed breakfast cereals
- Margarine
- Medicines; including some tablets used for gas & stomach acid
- Chocolate, candies & snack foods





# Is lactose intolerance the same as a milk allergy?

Lactose intolerance is not the same as a milk allergy. Allergies involve the immune system, while food intolerances do not. If after consuming milk products you experience swelling, tightening in your throat, hives, shortness of breath or anaphylaxis, you should immediately seek medical attention, as that may represent a food allergy. Food allergies can be life threatening. If, on the other hand, you experience abdominal pain, gas diarrhea, constipation, or bloating, it can very likely point to a food intolerance.

#### How can I be sure I have lactose Intolerance?

The easiest way to determine whether you have lactose intolerance is with an elimination diet. Such a diet requires that you remove all dairy sources from your diet for 14 days. It is important that you read labels and avoid fast-food during that time, as they contain many sources of hidden lactose. After 14 days, note how you are feeling. Then try reintroducing dairy to see how your body responds. Clearly, if you experience a return of symptoms, then lactose is the culprit. If, however, the symptoms remain at the end of the 14-day elimination period, another food may be the source of your problem. A more restrictive elimination diet to identify problem foods is recommended.



### What about calcium?

Mom and experts have been telling us to drink our milk for years to build strong bones and teeth. For those with lactose intolerance, obtaining calcium from milk products can be an uncomfortable solution. Fortunately, there are options that will allow you to easily obtain the needed calcium for your body. The amount of calcium you need depends on your stage of life. Talk with your doctor or dietitian to ensure you are getting all the nutrients required for good health.

### What can I eat and drink?

If you love milk, or want to be sure you are getting the nutrients contained in dairy products, you can:

- Consume milk products as an ingredient of, or accompanied by other foods. The resulting slower digestion makes it easier for you to absorb lactose.
- Eat smaller portions.
- Choose easier to tolerate sources of milk products like:
  - Milk treated with lactase enzyme (Lactaid<sup>®</sup>)
  - Aged cheeses, such as cheddar, Swiss, colby and parmesan
  - Processed cheese such as those individually wrapped
- Try yogurt, as it contains active cultures that break down lactose
- Use enzyme supplements to ease symptoms so you may consume milk products that you love
- Take a calcium supplement
- Choose other sources of calcium. For comparison, a cup of milk contains about 300 mg. of calcium, and an 8 oz. serving of yogurt can yield 415 mg. of calcium.

Food	Amount	Calcium
Calcium-fortified orange juice	1 cup	349 mg
Canned Sardines	3 oz.	325 mg
Calcium-fortified soy milk	1 cup	299 mg
Cooked Collards	1 cup	268 mg
Tofu	4 oz.	250+ mg
Cooked turnip greens	1 cup	249 mg
Cooked spinach	1 cup	245 mg
Dried figs	1 cup	241 mg
Beans and legumes	1 cup	190+ mg
Canned salmon	3 oz.	181 mg
Blackstrap molasses	1 Tbsp.	100 mg
Almonds	1 oz.	80 mg
Broccoli	1 cup	62 mg

The following foods are excellent sources of calcium:

Source: USDA National Nutrient Database

Today many cereals are fortified with added nutrients, including calcium. Check the label to see if your favorite cereal provides extra calcium.

Although consumption of milk products may yield unpleasant and temporary consequences, it isn't dangerous. Experiment with the suggestions described above and talk with your doctor to find out what works best for you.



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The information provided on this handout is not intended to replace a consulation with your doctor.