

Managing Lactose Intolerance

What is Lactose and Lactose Intolerance?

Lactose is a sugar found in some dairy products. Lactase is an enzyme in the gut that is needed to break down lactose. Many adults have trouble digesting foods with lactose because their level of lactase goes down after childhood, which is normal. People with intestinal disease or injury may also become lactose intolerant, even if they were not before.

Symptoms of lactose intolerance include nausea, bloating, gas, diarrhea, or cramping. These symptoms usually occur 30 minutes to 2 hours after eating a food with lactose. *Lactose intolerance is NOT a food allergy.*

Tips for Decreasing or Eliminating Lactose

The amount of lactose you can eat varies from person to person. Many people with lactose intolerance can eat some foods with lactose by changing the type, amount, and timing of these foods. Other people may need to (or choose to) avoid these foods altogether.

Milk and foods made from milk contain lactose. The amount of lactose in a product will depend on the amount of milk used. The chart on the following page provides information on the lactose content of some common foods.

Sometimes even baked items, instant mixes, salad dressings, and other foods you may not think of also contain lactose. Look on the food label for the ingredients listed below. You might need to avoid foods made with these ingredients.

| Ingredients that may Signal Lactose | | | |
|-------------------------------------|------------------|-------------------------|--|
| Butter | Lactose | Milk sugar | |
| Cheese | Milk | Non-fat dry milk powder | |
| Cream | Milk by-products | Skim milk solids | |
| Dry milk solids | Milk solids | Yogurt | |

Lactose is also sometimes in medications. You can check for lactose on the label, but it does not have to be listed. Ask your pharmacist to help you if your symptoms don't go away even when you are not eating or drinking lactose foods. Ask your doctor to prescribe a lactose-free alternative if one exists.

Lactose Content of Common Dairy Foods*

*Note: These are estimates only; actual lactose content may vary by specific product, brand, or recipe. Please check labels or with manufacturer for full information.

| Product | Serving Size | Approximate Lactose Content (grams) |
|---|--------------|---|
| Butter | 1 tsp | 0 |
| Buttermilk | 1 cup | 9 - 12 |
| Cheese | 1 ounce | |
| Cheddar cheese, Swiss | 1 ounce | <1 |
| Mozzarella | 1 ounce | <1 |
| Bleu Cheese | 1 ounce | <1 |
| American cheese | 1 slice | 1 - 4 |
| Cream cheese | 1 ounce | 1 |
| Condensed milk (sweetened) | ½ cup | 3 |
| Cottage cheese, 2% milkfat | ½ cup | 3 |
| Cream (light) | ½ cup | <0.2 |
| Evaporated Milk | 1 cup | 25 |
| Half-and-Half | ½ cup | 0.2 |
| Ice cream and frozen yogurt | ½ cup | 2 - 6 |
| | | Varies by brand and recipe |
| Margarine | 1 tsp | 0 |
| Milk (nonfat, 1%, 2%, whole) | 1 cup | 12-13 |
| Milk, 100% Lactose-Free | 1 cup | 0 |
| Nonfat Dry Milk Powder (unreconstituted) | 1 cup | 62 |
| Sherbet | ½ cup | 2 |
| Sour Cream | 2 tbsp | 0.7 |
| Sorbet | 1⁄2 cup | 0 |
| Soy milk or other plant/nut based milk | 1 cup | 0 |
| Whipped Cream topping, pressurized | 2 tbsp | <0.5 |
| Yogurt** | 6 oz | |
| Low, fat | | 5 – 12 |
| Greek | | 4 |
| | | **note: although yogurt contains |
| | | lactose, cultured yogurt is often well |
| | | tolerated by persons with lactose intolerance |

Tips for Including Lactose Foods in Your Diet

Many people with lactose intolerance can eat or drink up to 12 grams or more of lactose per day, especially if they follow the tips below. However, always talk with your doctor or Registered Dietitian before making changes to your prescribed diet.

- Add new foods one at a time. If you have symptoms, eat less of that food or skip it in the future.
- > Some dairy products are very low in lactose or are lactose free.
 - Hard cheeses (e.g., Swiss, cheddar, Parmesan)
 - Butter and margarine
 - Lactose-free milk (e.g., Lactaid[®] or store brand equivalent)
 - Plant based milks (see more information below)
- Although yogurt contains lactose, cultured yogurt is generally well tolerated by persons with lactose intolerance (check labels for "contains live cultures")
- If you wish to drink regular milk, try taking a little at a time (like ½ cup). Many people can tolerate up to 2 cups of milk per day when taken in smaller servings spread out over the course of the day.
- > Eat lactose foods with a meal instead of alone.

Milk Alternatives

All milk from all mammals, including goats, contains lactose.

Plant-based milk alternatives such as soy, rice, hemp, oat, coconut, flax, pea, almond, and cashew milk are all lactose free. If you plan to use one of these alternatives, be sure to read the nutrition labels carefully and choose a brand that specifically states it contains calcium and vitamin D. See more information on calcium and vitamin D below.

Note that plant-based milk alternatives do not always work the same in cooking and baking as cow's milk. In general, soy milk and pea milk work best in baking, sauces, and savory dishes. Rice milk works well in desserts because it is naturally a little sweet. Coconut milk has the most fat of any plant-based milk, so it can be used as a substitute for heavy cream and is also tasty in curry dishes (however, it will give a coconut flavor that may not be desired in all recipes).

Specialty Products

If you are not able to tolerate lactose foods using these tips, special products may help. Keep in mind that *not everyone with lactose intolerance needs special products.* You may want to try the tips provided in this handout before trying the more costly specialty products.

Lactose Free Milk - available in the dairy section of most grocery stores.

- > Choose from nonfat, 1%, 2%, and whole milk varieties.
- Contains the same nutrition as regular milk, including calcium and vitamin D.
- > Costs a bit more than regular milk.
- > Tastes a little sweeter than regular milk.
- > Lactose free ice cream and other dairy products may also be available.

Lactase Enzyme Supplements – available in caplet or chewable form in the digestive aid section of the grocery store or pharmacy.

- Contain the enzyme lactase, which is needed for the digestion of lactose.
- > May not be needed with some dairy products (see above).
- The amount suggested on the label may not be needed. Try a smaller dose and increase only if needed.
- > Store brand varieties may be available and may be cheaper.

A Word on Calcium and Vitamin D

If you are on a low lactose diet, talk to your doctor and/or Registered Dietitian about your calcium and vitamin D intake. Studies have shown that people with lactose intolerance often do not take in enough of these nutrients. Low calcium and vitamin D intake increases the risk of osteoporosis, a disease in which your bones become fragile and break easily. A Registered Dietitian can help you determine whether you are getting enough of these nutrients in your diet. The UVA Health handout on Calcium and Vitamin D also provides more information.

| | Daily requirement for adults | Amount in 8 oz cow's milk |
|-----------|---|------------------------------|
| Calcium | 1000 mg (1200 mg for women over 50 and men over 70) | 314 mg |
| Vitamin D | 600 international units (800 IU over age 70) | 98 international units |