



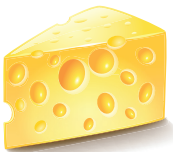
Lactose Intolerance

About Lactose

- Lactose is the sugar found in milk and other dairy products
- The small intestine contains an enzyme called lactase that breaks lactose into smaller pieces in order to be absorbed by the body
- Lactose intolerance occurs when one's intestine does not make enough lactase to digest the lactose consumed
- If lactase is missing, the lactose sugars pass through the small intestine without being digested
- When lactose sugars reach the colon, bacteria break them down and produce gas and acid
- Gas and acid cause symptoms of abdominal pain, bloating, nausea, excess gas and diarrhea

How Common Is Lactose Intolerance?

While lactose intolerance can occur at any age, it is extremely rare at birth and becomes more common after 5 years of age. Lactose intolerance is present in all ethnic backgrounds although African-American, Hispanic and Asian populations are more likely to develop it.



How Is Lactose Intolerance Diagnosed?

- **Dietary Elimination:** Remove ALL dairy from the diet for 2 weeks and observe for improvement of symptoms, then slowly reintroduce dairy and watch for return of symptoms
- **Lactose Breath Test:** Child breathes into a collection bag every 30 minutes over 2–3 hours and samples are analyzed for hydrogen, a gas produced in the large intestine
- **Upper Endoscopy:** Child is sedated, then a fiber optic tube is passed through the mouth and into the stomach and small intestine and samples of tissue (biopsies) are taken and analyzed

How Is Lactose Intolerance Treated?

- **Low-Lactose Diet:** A diet with very few milk products
- **Lactose-Free Diet:** A diet completely free of milk products
- **Lactase Supplements:** Taken right before dairy ingestion
- **Lactose-free products** are available in the grocery store such as milk, cheese, yogurt and ice cream
- **Dairy-Free Options:** Soy milk, almond milk, rice milk
- **Staying Informed:** Pediatric gastroenterologists and dietitians can help kids and families learn how to read food labels

Lactose Content of Common Dairy Foods			Lactose-Containing Food	Substitute
Product	Serving Size	Lactose (Grams)	1 Cup whole milk	1/2 cup soy or rice milk and 1/2 cup water or 1/2 cup liquid nondairy cream and 1/2 cup water
Milk (Whole)	1 Cup	11		
Milk (Skim)	1 Cup	11		
Ice Cream	1/2 Cup	6	1 Cup skim milk	1/2 cup nondairy cream and 3/4 cup water or 1 cup lactase-treated milk
Yogurt (Low Fat)	1 Cup	5		
Sour Cream	1/2 Cup	4		
Cottage Cheese	1/2 Cup	3	1/2 Cup cottage cheese	1/2 cup soft tofu
American Cheese	1 Ounce	1	1 Cup yogurt	1 cup soy yogurt
Swiss Cheese	1 Ounce	1	1 Ounce cheese	1 ounce soy cheese
Cheddar Cheese	1 Ounce	0	1T Cream cheese	1 tablespoon mayonnaise

Contact Us

Division of Pediatric
Gastroenterology & Nutrition
Appointments | **646-962-3869**
weillcornell.org/pedsgi

Prepared by Elaine Barfield, MD