



Lactose Intolerance

Ahmad bzour

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Lactose Intolerance Defined

lactose is a carbohydrate in milk and milk products. During digestion, an intestinal enzyme called lactase breaks down lactose into smaller, more easily-digested sugars (glucose and galactose)



- Lactose maldigestion occurs when an individual produces too little lactase to fully digest the amount of lactose consumed
- However, not everyone with a shortage of lactase is lactose intolerant. Some people with lower levels of lactase may not experience digestive discomfort at all when they consume milk or milk products. So the term “lactose maldigestion” simply refers to the incomplete digestion of lactose.



Varying Degrees of Lactose Sensitivity

Lactose Maldigestion

Incomplete digestion of *lactose*, the natural sugar in milk, due to low activity of the *lactase* enzyme; may be asymptomatic

Lactose Intolerance

Gastrointestinal disturbances following the consumption of an amount of lactose greater than the body ability to digest and absorb



Lactose Intolerance vs Milk Allergy

Key differences...

Lactose intolerance	Milk allergy
A sensitivity	An allergy
Occurs in gastrointestinal system	Triggered by immune system
A sensitivity to milk carbohydrate (lactose)	A reaction to milk protein
Rare in young children	Generally impacts young children; may be outgrown*
Can enjoy milk and milk products with simple management strategies	Should avoid milk and milk products (unless allergy is outgrown)



The Impact of Avoiding Milk, Cheese and Yogurt



Lactose Intolerance: A Barrier to Dairy Consumption

- lactose intolerance is a major reason some people avoid milk and milk products
- Lactose intolerance is the number one barrier to health professional recommendations for dairy



The Unintended Consequences

People who avoid milk and milk products due to lactose intolerance miss many benefits

Dairy and its essential nutrients are associated with:

- Improved nutrient intake and diet quality
- Better bone health
- Weight management
- Reduced risk of certain chronic diseases



Strategies for Health Professionals to Help Patients Manage Lactose Intolerance

- Get informed
- Ask
- Advise
- Identify those at risk
- Educate



Get Informed

- Understand how to minimize lactose intolerance
- View dairy foods as an investment in human health and not just as food consumption
- Become educated on current guidelines

Ask

- Include an inquiry about lactose intolerance as a core question when taking a medical history to help reduce dairy nutrient deficiencies

Advise

- Encourage patients to be formally tested for lactose intolerance; OR
- Provide guidance on the gradual introduction of dairy into the diet



Identify Those At Risk

- Review positive linkages between dairy products and key disease status
- Identify pregnant women, the elderly, hypertensives, diabetics and other risk groups whose health may be even marginally improved by protecting against nutrient insufficiency

Educate

- Disseminate dietary guidelines to patients to educate them regarding the critical role of consuming 3 servings of dairy foods per day (for individuals 9 and older, per the guidelines) and emphasize how this helps them meet recommendations for calcium, riboflavin, protein, potassium and other nutrients.



Who Experiences Lactose Intolerance?



An Adult Condition

- Lactose intolerance is rare in younger children
- Lactose intolerance typically emerges in late-adolescence or adulthood²

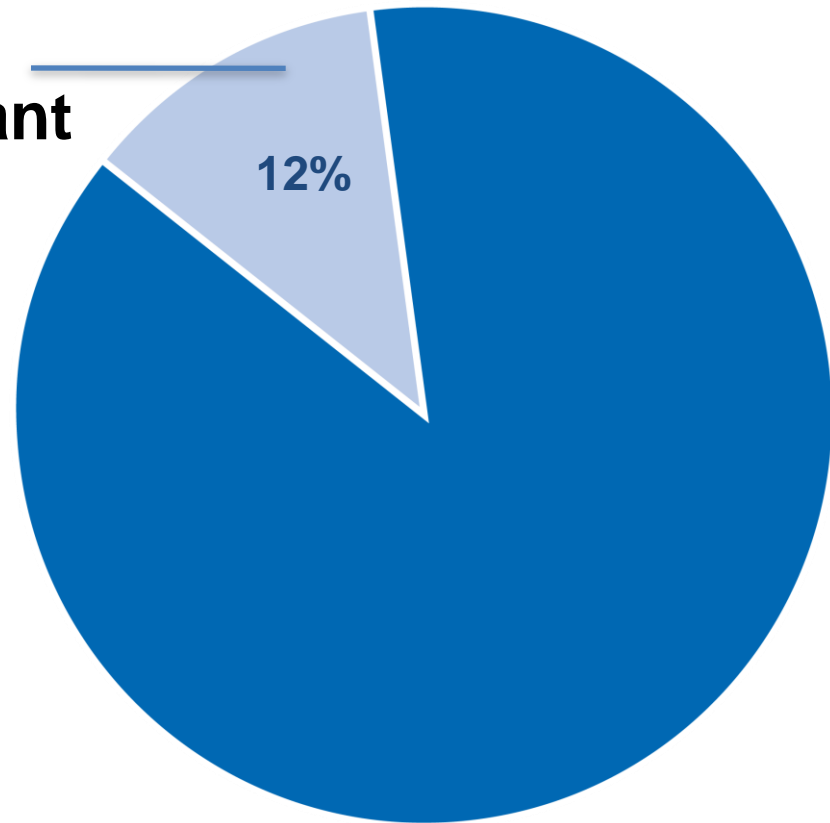


Lactose Intolerance Prevalence Study

12% of Adults Report Being Lactose Intolerant

Percent of Adults, by Ethnic Group, Who Self-Reported Lactose Intolerance

19.5% African Americans	10.05% Hispanic Americans	7.72% European Americans
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What Can Health & Nutrition Professionals Do To Help?



Pinpointing the Problem: Moving Beyond Belly Aches



Two-Step Process

1. Verbal or written confirmation
2. Hydrogen Breath Test, Lactose Tolerance Test



Simple Strategies to Manage Lactose Intolerance

- ✓ **Sip it** – Introduce dairy slowly
- ✓ **Try it** – Opt for lactose-free products
- ✓ **Stir it** – Mix milk with food
- ✓ **Slice it** – Choose natural cheeses
- ✓ **Spoon it** – Try easy-to-digest yogurt

There's More than One Way to Enjoy Dairy



- Lattes, warm milk, hot chocolate
- Natural cheeses such as Cheddar, Parmesan, Swiss
- Cold beverages such as smoothies/licuados
- Cereal and milk (hot or cold)



Easy Ways to Cook with Dairy

- Traditional foods with milk, natural cheeses and yogurt
- Soups made with milk





Amount of Lactose in Common Dairy Foods

Product	Lactose (g)
Whole, 2%, 1%, Skim Milk (1 cup)	12 g
Lactaid® Milk, low-fat, lactose-free (1 cup)	0 g ^A
Cottage Cheese, low-fat, 2% milkfat (1/2 cup)	3g
Cheddar Cheese, sharp (1 oz)	<0.1 g
Swiss Cheese (1 oz)	<0.1 g
Mozzarella (1 oz)	<0.1 g
American Cheese, pasteurized, processed (1 oz)	1 g



Lactose-Free Products Provide Delicious Options

- Real milk without the lactose
- Same essential nutrients

