

Lactose Intolerance Rates May Be Significantly Lower Than Previously Believed

Results of the study, Prevalence of Self-reported Lactose Intolerance in a Multiethnic Sample of Adults¹, published in the September/October 2009 issue of Nutrition Today, indicate that the prevalence of lactose intolerance may be far lower than previously estimated from studies of lactose maldigestion. The study is part of a larger project to examine how lactose intolerance relates to calcium intake and specific health problems that have been attributed to reduced intake of calcium and/or dairy foods.

Key Findings of Prevalence Study

A telephone survey of a national sample of adults in three ethnic groups found that the overall prevalence rate of age-adjusted, self-reported lactose intolerance is 12 percent – with 7.72 percent of European Americans, 10.05 percent of Hispanic Americans and 19.50 percent of African Americans considering themselves to be lactose intolerant.

These new findings indicate that the prevalence of lactose intolerance in practical life settings may be lower than originally suggested.

Why Lactose Intolerance Rates May Have Been Overestimated

Previous studies have found lactose maldigestion to occur in approximately 15 percent of European Americans, 50 percent of Mexican Americans and 80 percent of African Americans.

These high population-wide incidence rates for lactose maldigestion were based on studies using a hydrogen breath test with a challenge dose of 50 grams of lactose in water. “Although this test may be effective in diagnosing lactose maldigestion,” the authors say, “it may overestimate the likelihood that an individual will experience symptoms of lactose intolerance after consuming a typical serving of dairy food with a meal.” One cup of milk contains just 12 grams of lactose.

Key Terms Defined:

Lactose maldigestion is the reduced digestion of lactose, the natural sugar in milk, due to low activity of the lactase enzyme.

Lactose intolerance describes gastrointestinal disturbances following the consumption of an amount of lactose greater than the body’s ability to digest and absorb.

These terms are not synonymous. Not everyone with lactose maldigestion will experience symptoms of lactose intolerance.



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Key Implications for Practice

- ▶ Limiting intake of dairy foods because of perceived lactose intolerance may have adverse effects, including low calcium intake and lower bone mineral content, note the authors. Conversely, the authors cite several studies enumerating the benefits of adequate dairy food consumption – including improved bone health, lower blood pressure, lower body weight, lower incidence of colon cancer and higher diet quality – of which dairy avoiders may miss out.
- ▶ In addition, individuals who avoid dairy products may have difficulty consuming adequate amounts of calcium, magnesium, and potassium from other food sources.
- ▶ The authors remind the reader that the 2005 Dietary Guidelines, the National Medical Association, and the American Academy of Pediatrics recommend choosing dairy foods first for those who experience lactose intolerance. They conclude, “Health professionals need to be aware of the misrepresentation of currently estimated lactose intolerance rates and should continue to encourage individuals with lactose intolerance to consume dairy foods first to help meet key nutrient recommendations with proper guidance and education.”

Visit www.NationalDairyCouncil.org for more information, patient education materials and strategies – such as opting for lactose-free milk or trying small amounts of milk with meals – that may help people with lactose intolerance enjoy the recommended three servings of low-fat and fat-free dairy foods every day – without discomfort.

1. Nicklas, et al. Prevalence of Self-reported Lactose Intolerance in a Multiethnic Sample of Adults. *Nutrition Today*. 2009; 44(5), 222-7.

