## Scientific Summary

National Institutes of Health Consensus
Development Conference on Lactose
Intolerance and Health:

## **Consensus Statement and Implications**

# Scientific Consensus: In Most Cases Lactose Intolerance Shouldn't Limit Dairy Consumption When Managed Appropriately

The National Institutes of Health (NIH) convened an independent expert panel\* for a Consensus Development Conference on Lactose Intolerance and Health on February 22-24, 2010 to examine the latest research on lactose intolerance, strategies to manage the condition and the health outcomes of diets that exclude dairy foods. After a thorough review of the scientific evidence, the expert panel completed a consensus statement¹ that is intended to correct some of the common misperceptions about lactose intolerance, including the belief that dairy foods need to be excluded from the diet.

According to the expert panel, "Many individuals with real or perceived lactose intolerance avoid dairy and ingest inadequate amounts of calcium and vitamin D, which may predispose them to decreased bone accrual, osteoporosis, and other adverse health outcomes. In most cases, individuals do not need to eliminate dairy consumption completely."

#### **Key Findings:**

- **Prevalence is unclear.** "Lactose intolerance is a real and important clinical syndrome, but its true prevalence is not known."
- Lactose malabsorbers aren't necessarily lactose intolerant. "The majority of people with lactose malabsorption do not have clinical lactose intolerance. Many individuals who think they are lactose intolerant are not lactose malabsorbers."
- Avoiding dairy can lead to nutrient shortfalls. "...many adults and children who avoid dairy products—which constitute a readily accessible source of calcium, vitamin D, and other nutrients—are not ingesting adequate amounts of these essential

#### **Key Terms:**

- Lactose malabsorption is the reduced digestion of lactose 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.

nutrients... Deficient intakes of calcium and vitamin D are risk factors for decreased bone mineral density."

- More research-based strategies are needed.
   "Evidence-based dietary approaches with and without dairy foods and supplementation strategies are needed to ensure appropriate consumption of calcium and other nutrients in lactose-intolerant individuals."
- Resources and uniform practice guidelines are needed. "Educational programs and behavioral approaches for individuals and their healthcare providers should be developed and validated to improve the nutrition and symptoms of individuals with lactose intolerance and dairy avoidance."

<sup>\*</sup> The statement by the NIH committee is "an independent report of the panel and is not a policy statement of NIH or the Federal Government." NIH did not receive any funding or support by the National Dairy Council for the development of the statement.



#### **Key Implications for Health Professionals:**

- Encourage formal diagnosis. To help prevent nutrient shortfalls associated with avoidance of dairy foods, the expert panel recommends people seek formal diagnosis and personalized nutritional counseling with health professionals like physicians and registered dietitians.
- Recognize there are individual variations in the amount of lactose that can be
  comfortably consumed. According to the expert panel, "The available evidence
  suggests that adults and adolescents who have been diagnosed with lactose
  malabsorption could ingest at least 12 grams of lactose when administered in a
  single dose (equivalent to the lactose content found in 1 cup of milk) with no or minor
  symptoms. Individuals with lactose malabsorption can tolerate larger amounts of
  lactose if ingested with meals and distributed throughout the day."
- Talk to your patients about the health benefits of dairy foods. The expert panel states that those who avoid dairy foods due to real or perceived lactose intolerance may be missing out on important nutrients necessary for good health, such as calcium and vitamin D, which may increase their risk for osteoporosis and poor skeletal health. As part of their research review, they note calcium ingestion, through increased dairy intake or calcium supplementation, is associated with decreased blood pressure, decreased risk of development of colon polyps, and improved cardiac and vascular smooth muscle contractility.

### Translating NIH's Consensus Findings to Patient-Focused Solutions

To prevent nutrient shortfalls due to dairy avoidance, the expert panel suggests health professionals counsel patients with lactose intolerance on strategies for including dairy foods in the diet and/or finding other dietary sources for the many nutrients found in dairy foods.

The good news is most people with lactose intolerance say they are open to dairy solutions as long as they can avoid the discomfort associated with consuming them.<sup>2</sup> And research shows that people like lactose-free milk more than non-dairy alternatives.<sup>3</sup>

People with lactose intolerance should know that practical solutions can help them enjoy dairy foods:

- Gradually reintroduce milk back into the diet by trying small amounts of it with food or cooking with it.
- Drink lactose-free milk, which is real milk, tastes great, is easy to digest and has all the nutrients in regular milk.
- Eat natural cheeses, which are generally low in lactose; and yogurt with live and active cultures, which can help the body digest lactose.

Visit www.NationalDairyCouncil.org for more information, management strategies and patient education materials.

<sup>3</sup> Palacios OM, et al. Consumer Acceptance of Cow's Milk Versus Soy Beverages: Impact of Ethnicity, Lactose Tolerance And Sensory Preference Segmentation. Journal of Sensory Studies, 2009; 24:5.



<sup>1</sup> National Institutes of Health Consensus Development Conference Statement. NIH Consensus Development Conference: Lactose Intolerance and Health. http://consensus.nih.gov/2010/images/lactose/lactose\_finalstatement.pdf

<sup>2</sup> NPD Group. Fluid Milk Concept Test for Dairy Management Inc. November, 2007.