

# **NMCPHC NUTRI-FACTS**

## **Calcium and Obesity Prevention**

## Why are Calcium-Rich Foods so Important?

Milk and other dairy foods are moderate in energy and have a high nutrient-to-calories ratio. Milk, yogurt, and cheese provide a high concentration of many nutrients relative to their energy value. Dairy foods contribute only 9% of total calories available in the nation's food supply. Yet, these foods naturally provide 72% of the calcium, 32% of the phosphorus, 26% of the riboflavin, 23% of vitamin A, 20% of vitamin B12, 19% of protein, and 18% of potassium, along with appreciable amounts of other nutrients. As a result of vitamin D fortification, fluid milk is the major dietary source of vitamin D. In addition to its unique combination of essential nutrients, dairy foods contain several bioactive components (e.g., conjugated linoleic acid or CLA, sphingolipids, probiotics) with potential health-promoting benefits. Due to their unique combination of nutrients, dairy foods cannot be duplicated by a fortified food or dietary supplement.

## **What is Causing Obesity?**

Intake of energy-dense, nutrient-poor foods at the expense of more nutrient-rich foods is contributing to the dietary imbalance and rising obesity rates in the United States. Adults are consuming about one-third of their calories from high-energy foods of minimal nutritional value. Compared to 20 years ago, adults have increased their energy intake by 300 calories a day. Most of this increase comes from refined grains, added sugars, and added fats, as opposed to dairy products, vegetables, or fruit. On average, Americans consume only 1.5 servings of dairy foods a day instead of the recommended two to three servings of milk, yogurt, or cheese/day.

#### How is Dairy Consumption Related to Obesity?

A growing body of research suggests that milk, cheese and yogurt may play a role in weight management efforts when coupled with a balanced reduced-calorie diet.

 According to recent studies, obese adults who ate three servings of yogurt daily as part of a weight loss plan lost 22% more weight, 61% more body fat and 81% more trunkal (stomach) fat during a 12-week study compared to those who simply reduced calories.



- Low daily calcium intake was associated with greater body fat and body weight, particularly in women. In a study involving 35 non-obese, healthy adults, a higher dietary calcium intake over a 24-hour period was associated with burning significantly more body fat, even during sleep.
- Since obesity is one of the risk factors of insulin resistance syndrome, increased dairy consumption may protect overweight individuals from the development of obesity and insulin resistance syndrome and may reduce the risk of type-2 diabetes and cardiovascular disease.
- In a study of obese African-American adults who were otherwise healthy, those who consumed at least three servings of dairy foods a day had lower total body fat, more lean body mass and lower insulin and systolic blood pressure than those who consumed less than one serving of dairy foods a day.
- Children who consumed more ready-to-eat cereal with milk had lower body mass and were at lower risk for being overweight than children who ate less ready-to eat cereal. Children who ate more ready-to-eat cereal with milk also had better nutrient intake profiles including lower fat and cholesterol intake but greater intake of vitamins A, B-6, thiamin, riboflavin, niacin, folate, calcium, iron, and zinc.
- In children ages 2-5, a diet rich in calcium and dairy foods was associated with lower body fat than diets with lower calcium and dairy food intakes.

#### Where can I get more information?

- National Dairy Council www.nationaldairycouncil.org
- Obesity Research www.obesityresearch.org