

Milk, Calcium Intake, and Obesity

**Alejandro R. Castillo, PhD. Dairy Farm Adviser
University of California, Cooperative Extension**

Based on a large body of scientific evidence, a recent report of the National Dairy Council, demonstrates that adequate intake of calcium and calcium-rich foods such as milk, cheese, or yogurt are considerable important for health promotion, or in other words, for reducing the risk for various medical disorders.

For parents who make decisions on children's food, it is very important to know and understand how calcium intake affects human health. Recognizing the consequences of adequate calcium intake and good nutrition during childhood and adolescence is essential to reduce the risk of health problems in later adult years. For example, bone mass in adults is primary influenced by peak bone mass, about 90% of which is reached by 20 years of age, and 100% about 27 years of age. A good bone mass is the main way to reduce the risk of bone fractures in children and adults, and osteoporosis in later adult years. But, calcium intake it is not only related to bone health and osteoporosis. Substantial scientific evidence indicates that increasing consumption of dairy products or calcium lowers the risk of hypertension or reduces blood pressure, coronary heart disease and stroke. Calcium, especially from cheese may play a protective role in dental health. Intake of dairy foods may lower the risk of certain cancers. Moreover, dietary patterns characterized by increased dairy consumption may protect overweight individuals from developing obesity and insulin resistance syndrome. Emerging scientific evidence indicates that dairy products and calcium have a beneficial role in controlling body weight in children and adults. Studies shown that dairy products have greater effects on body weight than predicted from their calcium content alone. A controlled clinical trial in obese adults demonstrated that consumption of dairy products, in particular milk calcium and vitamin D, significantly accelerate body weight and fat loss.

Both calcium and vitamin D, plays a critical role on body weight gain. Vitamin D has long been known for its important role in regulating body levels of calcium, increasing calcium absorption by as much as 30 to 80 percent. Apparently, when the calcium intake is low the body increases the synthesis of the active form of vitamin D (calcitriol). A higher concentration of vitamin D is to compensate dietary calcium deficiency by improving its absorption. But, vitamin D it is also related to fat accumulation, increasing fat synthesis and decreasing lypolysis or fat loss. For that reason, it is recommended keeping your calcium intake high while dieting may assist weight loss.

Milk and other dairy foods are considered to be among the best sources of calcium because of the high content of this mineral, overall nutritional value (high digestibility), and relatively low cost. In any case, it is important to consult your pediatrician or your doctor. Especially how the case of children obesity, treatments must be control by professionals. (*Note Merced Sun-Star, Section C Agriculture, Monday, October 25, 2004*)