

Milk Myth Busters

These are a few common myths about milk and dairy foods. For more information about milk and dairy, check out the [Dairy Facts](#) section found at www.dairycouncilofca.org/Milk-Dairy/Facts.aspx



Milk Myth #1: Drinking milk causes early puberty.

Myth Buster: There is no scientific evidence that drinking milk causes early puberty.

In the United States, girls are entering puberty at younger ages than they were 30 years ago. It is unclear why this is happening, although there are many hypotheses. For example, many believe that childhood obesity—which has also risen dramatically over that time frame—may lead to earlier onset of puberty for girls, as puberty tends to occur earlier in heavier girls.

There is no research demonstrating that milk or dairy products play a role in early puberty. Milk has always contained natural bovine growth hormones (BST) in very small amounts. Some dairy producers administer the synthetic version of this hormone (rBST) to increase milk production. However, FDA has concluded that milk produced by treated and untreated cows is exactly the same. Ninety percent of these hormones are destroyed with pasteurization. The remaining trace amounts are broken down into inactive fragments in the gut. Both hormones are “cow specific” and have no effect on the human body.¹

Today’s girls drink less milk than their mothers did. Thus, it seems very unlikely that milk is responsible for any change in the age at which girls enter puberty. Children who consume more milk tend to have lower, rather than higher BMIs.

Milk is a significant source of calcium and should not be eliminated during the adolescent years. Pre-teen girls (age 9 and up) need 1,300 mg of calcium a day since this is the “window of time” during late childhood and adolescence when calcium is deposited in bone. The 2005 U.S. Dietary Guidelines recommend that adolescent girls consume three cups of milk or milk products per day.²

Milk Myth #2: Drinking milk causes mucus.

Myth Buster: Milk consumption does not lead to mucus production or occurrence of asthma.

The belief has been held for years that milk causes mucus formation, although the few studies on this topic have failed to demonstrate any effect of milk on mucus production. Many people confuse the temporary, slight thickening of saliva after drinking milk with mucus. There is no scientific research showing that milk produces mucus in the airways or the throat. It will not worsen cold or asthma symptoms. In fact, drinking lots of fluids when you have a cold is important in speeding up recovery and may do your immune system some good.³

Milk Myth #3: Drinking milk causes kidney stones.

Myth Buster: Kidney stones are not caused by drinking milk.

Contrary to popular belief, milk consumption does not lead to the development of kidney stones. Research done at Washington State University showed that people could replace milk for apple juice without increasing their risk of stone formation. Some research suggests that drinking milk is associated with lower rates of kidney stone formation. A four-year study in men aged 40 to 75 found that those who consumed a calcium-rich diet (1,326 mg calcium/day) had a 34 percent lower risk of kidney stones than men who consumed only 516 mg calcium per day. Talk to your health professional regarding kidney stones prior to making any dietary changes.^{4,5}

Milk Myth #4: Fat-free milk is just watered-down whole milk.

Myth Buster: Fat-free milk is made by skimming off the fat—no water is added.

A cup of fat-free milk contains less than one-half gram of fat and is fortified with vitamin A and usually with vitamin D. In the United States, skim or fat-free milk is also known as nonfat milk. Nonfat milk contains comparable amounts of protein, calcium, potassium, phosphorus and other key nutrients found in higher-fat milks. For more information on the nutrient content of milk and dairy products, check the Nutrients in Milk page.

Milk Myth #5: Organic milk is safer than regular milk.

Myth Buster: Organic milk is identical in composition to regular milk.

All milk must comply with very stringent safety standards and is among the most highly regulated and safest foods on the shelf. While organic dairy farmers use only organic fertilizers and organic pesticides and their cows are not given supplemental hormones, the milk itself is identical to the milk produced conventionally. Stringent government standards that include testing all types of milk for antibiotic and pesticide residues ensure that both organic milk and conventional milk are pure, safe and nutritious.⁶

Milk Myth #6: Soy milk is just as nutritious as regular milk.

Myth Buster: Soy-based beverages are not nutritionally equivalent to milk.

Fortified soy milk may contain the same amount of calcium as cow's milk on the label, but you have to drink more of it to get the same benefits because the amount of calcium the body absorbs is less. Creighton University researchers calculated that the body absorbs about 25 percent less calcium from soy milk than from cow's milk. Since soy beverages are naturally low in calcium (about 10 milligrams per serving), manufacturers fortify them with calcium salts to boost the calcium content. However, the amount of calcium salts added is not regulated and may vary from 80 to 500 milligrams per serving. A serving of milk (8 ounces) contains about 300 milligrams of calcium. It would take 500 milligrams of calcium in an 8-ounce serving of fortified soy milk to equal the calcium in a glass of cow's milk.

¹ Vicini J et al. J Am Diet Assoc 2008; 108:1198

² Dietary Guidelines for Americans 2005, 6th ed, 2005: www.healthier.us.gov/dietaryguidelines. Vicini J et al. J Am Diet Assoc 2008; 108:1198

³ Wüthrich B et al. J Amer Coll Nutr 2005; 24:6:547S

^{4,5} Massey LK, Kynast-Gales, SA. J Am Diet Assoc 1998; 98:3:303; Curhan GC, Willett WC, Rimm EB, and Stampfer MJ. N Engl J Med 1993;328:833-838

⁶ United States Department of Agriculture. Organic Production and Handling Standards 2006. Retrieved 14 July 2008. <http://www.ams.usda.gov>.