

What's Wrong with Dairy Products?

PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE

5100 WISCONSIN AVE., N.W., SUITE 400 • WASHINGTON, DC 20016
PHONE (202) 686-2210 • FAX (202) 686-2216 • PCRM@PCRM.ORG • WWW.PCRM.ORG

Many Americans, including some vegetarians, still consume large amounts of dairy products. Here are eight great reasons to eliminate dairy products from your diet.

1. Osteoporosis

Milk is touted for preventing osteoporosis, yet clinical research shows otherwise. The Harvard Nurses' Health Study,¹ which followed more than 75,000 women for 12 years, showed no protective effect of increased milk consumption on fracture risk. In fact, increased intake of calcium from dairy products was associated with a higher fracture risk. An Australian study² showed the same results. Additionally, other studies^{3,4} have also found no protective effect of dairy calcium on bone. You can decrease your risk of osteoporosis by reducing sodium and animal protein intake in the diet,⁵⁻⁷ increasing intake of fruits and vegetables,⁸ exercising,⁹ and ensuring adequate calcium intake from plant foods such as leafy green vegetables and beans, as well as calcium-fortified products such as breakfast cereals and juices.

2. Cardiovascular Disease

Dairy products—including cheese, ice cream, milk, butter, and yogurt—contribute significant amounts of cholesterol and fat to the diet.¹⁰ Diets high in fat and saturated fat can increase the risk of several chronic diseases including cardiovascular disease. A low-fat vegetarian diet that eliminates dairy products, in combination with exercise, smoking cessation, and stress management, can not only prevent heart disease, but may also reverse it.¹¹ Non-fat dairy products are available, however, they pose other health risks as noted below.

3. Cancer

Several cancers, such as ovarian cancer, have been linked to the consumption of dairy products. The milk sugar lactose is broken down in the body into another sugar, galactose. In turn, galactose is broken down further by enzymes. According to a

study by Daniel Cramer, M.D., and his colleagues at Harvard,¹² when dairy product consumption exceeds the enzymes' capacity to break down galactose, it can build up in the blood and may affect a woman's ovaries. Some women have particularly low levels of these enzymes, and when they consume dairy products on a regular basis, their risk of ovarian cancer can be triple that of other women.

Breast and prostate cancers have also been linked to consumption of dairy products, presumably related, at least in part, to increases in a compound called insulin-like growth factor (IGF-I).¹³⁻¹⁵ IGF-I is found in cow's milk and has been shown to occur in increased levels in the blood by individuals consuming dairy products on a regular basis.¹⁶ Other nutrients that increase IGF-I are also found in cow's milk. A recent study showed that men who had the highest levels of IGF-I had more than four times the risk of prostate cancer compared with those who had the lowest levels.¹⁴

4. Diabetes

Insulin-dependent diabetes (Type I or childhood-onset) is linked to consumption of dairy products. Epidemiological studies of various countries show a strong correlation between the use of dairy products and the incidence of insulin-dependent diabetes.^{17,18} Researchers in 1992¹⁸ found that a specific dairy protein sparks an auto-immune reaction, which is believed to be what destroys the insulin-producing cells of the pancreas.

5. Lactose Intolerance

Lactose intolerance is common among many populations, affecting approximately 95 percent of Asian Americans, 74 percent of Native Americans, 70 percent of African Americans, 53 percent of Mexican Americans, and 15 percent of Caucasians.¹⁹ Symptoms, which include gastrointestinal distress, diarrhea, and flatulence, occur because these individuals do not have the enzymes that digest the milk sugar lactose. Additionally, along with unwanted symptoms, milk-drinkers are also putting themselves at risk for development of other chronic diseases and ailments.

6. Vitamin D Toxicity

Consumption of milk may not provide a consistent and reliable source of vitamin D in the diet. Samplings of milk have found significant variation in vitamin D content, with some samplings having had as much as 500 times the indicated level, while others had little or none at all.^{20,21} Too much vitamin D can be toxic and may result in excess calcium levels in the blood and urine, increased aluminum absorption in the body, and calcium deposits in soft tissue.

7. Contaminants

Synthetic hormones such as recombinant bovine growth hormone (rBGH) are commonly used in dairy cows to increase the production of milk.¹³ Because the cows are producing quantities of milk nature never intended, the end result is mastitis, or inflammation of the mammary glands. The treatment requires the use of antibiotics, and traces of these and hormones have been found in samples of milk and other dairy products. Pesticides and other drugs are also frequent contaminants of dairy products.

8. Health Concerns of Infants and Children

Milk proteins, milk sugar, fat, and saturated fat in dairy products may pose health risks for children and lead to the development of chronic diseases such as obesity, diabetes, and formation of atherosclerotic plaques that can lead to heart disease.

The American Academy of Pediatrics recommends that infants below one year of age not be given whole cow's milk, as iron deficiency is more likely on a dairy-rich diet. Cow's milk products are very low in iron. If they become a major part of one's diet, iron deficiency is more likely.¹⁰ Colic is an additional concern with milk consumption. One out of every five babies suffers from colic. Pediatricians learned long ago that cows' milk was often the reason. We now know that breastfeeding mothers can have colicky babies if the mothers are consuming cow's milk. The cows' antibodies can pass through the mother's bloodstream into her breast milk and to the baby.²² Additionally, food allergies appear to be common results of milk consumption, particularly in children. A recent study²³ also linked cow's milk consumption to chronic constipation in children. Researchers suggest that milk consumption resulted in perianal sores and severe pain on defecation, leading to constipation.

Milk and dairy products are not necessary in the diet and can, in fact, be harmful to your health. Consume a healthful diet of grains, fruits, vegetables, legumes, and fortified foods including cereals and juices. These nutrient-dense foods can help you meet your calcium, potassium, riboflavin, and vitamin D requirements with ease—and without the health risks.

References

1. Feskanich D, Willet WC, Stampfer MJ, Colditz GA. Milk, dietary calcium, and bone fractures in women: a 12-year prospective study. *Am J Public Health* 1997;87:992-7.
2. Cumming RG, Klineberg RJ. Case-control study of risk factors for hip fractures in the elderly. *Am J Epidemiol* 1994;139:493-505.
3. Huang Z, Himes JH, McGovern PG. Nutrition and subsequent hip fracture risk among a national cohort of white women. *Am J Epidemiol* 1996;144:124-34.
4. Cummings SR, Nevitt MC, Browner WS, et al. Risk factors for hip fracture in white women. *N Engl J Med* 1995;332:767-73.
5. Finn SC. The skeleton crew: is calcium enough? *J Women's Health* 1998;7(1):31-6.
6. Nordin CBE. Calcium and osteoporosis. *Nutrition* 1997;3(7/8):664-86.
7. Reid DM, New SA. Nutritional influences on bone mass. *Proceed Nutr Soc* 1997;56:977-87.
8. Tucker KL, Hannan MR, Chen H, Cupples LA, Wilson PWF, Kiel DP. Potassium, magnesium, and fruit and vegetable intakes are associated with greater bone mineral density in elderly men and women. *Am J Clin Nutr* 1999;69:727-36.
9. Prince R, Devine A, Dick I, et al. The effects of calcium supplementation (milk powder or tablets) and exercise on bone mineral density in postmenopausal women. *J Bone Miner Res* 1995;10:1068-75.
10. Pennington JAT. *Bowes and Churches Food Values of Portions Commonly Used*, 17th ed. New York: Lippincott, 1998.
11. Ornish D, Brown SE, Scherwitz LW, Billings JH, Armstrong WT, Ports TA. Can lifestyle changes reverse coronary heart disease? *Lancet* 1990;336:129-33.
12. Cramer DW, Harlow BL, Willet WC. Galactose consumption and metabolism in relation to the risk of ovarian cancer. *Lancet* 1989;2:66-71.
13. Outwater JL, Nicholson A, Barnard N. Dairy products and breast cancer: the IGF-1, estrogen, and bGH hypothesis. *Medical Hypothesis* 1997;48:453-61.
14. Chan JM, Stampfer MJ, Giovannucci E, et al. Plasma insulin-like growth factor-1 and prostate cancer risk: a prospective study. *Science* 1998;279:563-5.
15. World Cancer Research Fund. *Food, Nutrition, and the Prevention of Cancer: A Global Perspective*. American Institute of Cancer Research. Washington, D.C.: 1997.
16. Cadogan J, Eastell R, Jones N, Barker ME. Milk intake and bone mineral acquisition in adolescent girls: randomised, controlled intervention trial. *BMJ* 1997;315:1255-60.
17. Scott FW. Cow milk and insulin-dependent diabetes mellitus: is there a relationship? *Am J Clin Nutr* 1990;51:489-91.
18. Karjalainen J, Martin JM, Knip M, et al. A bovine albumin peptide as a possible trigger of insulin-dependent diabetes mellitus. *N Engl J Med* 1992;327:302-7.
19. Bertron P, Barnard ND, Mills M. Racial bias in federal nutrition policy, part I: the public health implications of variations in lactase persistence. *J Natl Med Assoc* 1999;91:151-7.
20. Jacobus CH, Holick MF, Shao Q, et al. Hypervitaminosis D associated with drinking milk. *N Engl J Med* 1992;326(18):1173-7.
21. Holick MF. Vitamin D and bone health. *J Nutr* 1996;126(4suppl):1159S-64S.
22. Clyne PS, Kulczycki A. Human breast milk contains bovine IgG. Relationship to infant colic? *Pediatrics* 1991;87(4):439-44.
23. Iacono G, Cavataio F, Montalto G, et al. Intolerance of cow's milk and chronic constipation in children. *N Engl J Med* 1998;339(16):1100-4.