

## **Three Daily Servings of Reduced-Fat Milk: An Evidence-Based Recommendation?**

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### FROM ABSTRACT:

In light of research linking sugar-sweetened beverage consumption to obesity, the US Department of Agriculture, the American Academy of Pediatrics, and other organizations have formulated recommendations on healthy beverages. These guidelines consistently recommend limiting consumption of all calorie-containing liquids, except reduced-fat milk, of which people in most age groups are encouraged to consume 3 cups daily. This article questions the scientific rationale for promoting reduced-fat milk consumption at these levels in children and adults and reconsiders the role of cow's milk in human nutrition.

### KEY POINTS FROM THIS ARTICLE

- 1) "Few randomized clinical trials have examined the effects of reduced-fat milk compared with whole milk on weight gain or other health outcomes."
- 2) "Beverage guidelines presume that the lower calorie content of reduced-fat milk will decrease total calorie intake and excessive weight gain." However, the "substitution of refined starch and sugar (ie, high glycemic index carbohydrate) for fat might actually cause weight gain."
- 3) High glycemic index carbohydrates (refined grains, sugary beverages, and sweet desserts) are associated with weight gain, whereas whole milk is not.
- 4) Studies show greater rates of weight gain with the consumption of reduced-fat milk compared with whole milk.
- 5) When compared with carbohydrates, saturated fat increases cardioprotective high-density lipoprotein cholesterol. Consumption of high glycemic index carbohydrates increases triglycerides, "producing combined effects that appear to be worse than those of saturated fat."
- 6) Among 53,644 adults followed up for 12 years, replacement of saturated fat with high glycemic index carbohydrates was associated with a significantly increased risk for myocardial infarction.

- 7) Consumption of sugar-sweetened, flavored (eg, chocolate) milk “clearly undermines diet quality, especially in a population with excessive sugar consumption.”
- 8) “Humans have no nutritional requirement for animal milk.”
- 9) “Adequate dietary calcium for bone health, often cited as the primary rationale for high intakes of milk, can be obtained from many other sources.”  
“Throughout the world, bone fracture rates tend to be lower in countries that do not consume milk compared with those that do. Moreover, milk consumption does not protect against fracture in adults.”
- 10) “The nutritional benefits of high milk consumption may not outweigh the negative consequences.”
- 11) “Dairy milk evolved to promote the growth of grazing animals at high risk for predation when small. The consequences of lifetime human exposure to the growth factors in milk have not been well studied. Milk consumption increases serum concentrations of insulin-like growth factor-1, an anabolic hormone linked to prostate and other cancers. In addition, modern industrial methods maintain dairy cows in active milk production throughout successive pregnancies, resulting in a milk supply with high levels of reproductive hormones. Consumption of dairy products probably increases the likelihood or severity of prostate cancer.”
- 12) “The recommendation to replace whole milk with reduced-fat milk lacks an evidence basis for weight management or cardiovascular disease prevention and may cause harm if sugar or other high glycemic index carbohydrates are substituted for fat.”
- 13) These authors advocate:
- “Avoid recommending reduced-fat over whole milk.”
  - “Focus on limiting consumption of sugar-sweetened milk.”

#### COMMENTS FROM DAN MURPHY

Since reading the 1998 book ***Milk: the Deadly Poison*** by Robert Cohen I concluded that cow’s milk is not good for human consumption. There is also a great chapter on milk in the 2001 book ***The Crazy-makers: How the Food Industry is Destroying Our Brains and Harming Our Children*** by Carol Simontacchi.