Milking the Dairy/Weight Loss Debate

By ACSH Staff — July 25, 2005

Milk has earned a healthy reputation: adding strength to bones and providing protein, multiple vitamins, and minerals, among other benefits. Its recent hype as a weight loss aid is still being debated, with studies showing mixed results.

In 2003, the National Dairy Council (NDC) and International Dairy Foods Association (IDFA) launched its "Healthy Weight with Dairy" campaign, also known as 3-A-Day [1]. This controversial ad campaign has suggested that "getting calcium and protein from low-fat or fat-free milk could help you lose more weight than just reducing calories," and dairy products have been branded with phrases such as "lose more weight" and "burn more fat." [2] These claims are based mainly on research done by Dr. Michael Zemel, a nutrition professor at the University of Tennessee who started his research in the late 80s. Dr. Zemel is quoted as saying that, with a modest calorie cut, those who consume three daily servings of dairy will lose up to twice as much fat as those who do not eat dairy. The IDFA and NDC both say they have full confidence in the science supporting the claims [3].

Dr. Zemel's research has found that calcium from dairy accelerates weight loss during caloric restriction and inhibits diet-induced obesity more than calcium supplements, at least in mice [4]. When similar studies were carried out on humans, there was a markedly accelerated weight and body-fat loss with a high-dairy, calorically-restricted diet, as compared to equally calorie-restricted but low-dairy diets. Earlier this year, the National Dairy Council published a nine-page booklet entitled Dairy and Weight Management -- A Look at the Science, which lists major findings in favor of dairy's weight loss powers, excerpted from studies done on this subject. Associations with weight loss have been found, and the clinical trials controlled calorie intakes, but of course the observational and epidemiological trials cannot do so. In some studies no connections were made between dairy consumption and decreased weight. [5]
Though the benefits promoted by the dairy industry are interesting, they have provoked strong opposition. Recently, a group called the Physicians Committee for Responsible Medicine (PCRM) has filed a class action lawsuit against the dairy industry and has filed petitions with the Federal Trade Commission and the FDA, complaining that the dairy industry is promising weight loss to bolster weak sales. They demand that a judge block such advertisement claims. PCRM officials point out that Dr. Zemel's trials were funded by the National Dairy Council, but Zemel affirms that the nearly $2.1 million dollars he has received from the group did not influence his findings. It must also be noted that the PCRM has become known as a radical, veganism-promoting organization, which views milk and all animal products as simply unhealthy. (Please see ACSH’s paper on such activist groups.) Despite the publicity given to the lawsuit, a spokesperson from the International Dairy Council said that this suit has been brought only to a Virginia state court and has not been made a federal case.

In August 2004 the U.S. Dietary Guidelines Commission declared that the issue is still an area of emerging science; there is not enough clear evidence to support a proclivity towards either weight loss or gain from dairy or calcium intake. Zemel's weight loss claims have been refined to explain that they work only "for people who eat a low-calorie diet and who are not already consuming three servings of dairy." Ultimately, it should be understood that calorie restriction and increased activity are the surest methods of weight loss, and there are no miracle foods or beverages that will cause weight to drop. Those who wish to lose weight should focus on a well-rounded, low-fat diet, such as the DASH diet, which was created as a means of controlling hypertension. Followers of this plan consume more low-fat dairy foods, fruits, and vegetables. A randomized study found that such diets lowered blood pressure and provided ample amounts of calcium. If consumers want to include dairy in their diets to take advantage of the possibility that it may aid weight loss, the DASH diet is a good place to start. While weight loss may not yet be a proven effect of dairy, the diet is nonetheless balanced and nutritious.

Loading up on dairy alone is surely not a solution to weight problems and may actually cause weight gain if it means excess calories are consumed above a person's typical daily total. Any foods with calories can contribute to obesity if intake of them is excessive, but low-fat dairy foods provide multiple nutrients and should be incorporated into a balanced diet.

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