FLAVORED MILK:
Frequently Asked Questions and Answers

Q What is flavored milk?

A Flavored milk is cow's milk with added flavoring and sweetener; it's available in flavors such as chocolate, strawberry and vanilla flavors in low-fat and fat-free varieties.

Q How nutritious is flavored milk?

A Flavored milk contains the same nine essential nutrients as white milk, including calcium, vitamin D and potassium – nutrients of concern that many kids fail to get enough of.[1] On average, by the time they are 6 years old, children fall below the Dietary Guidelines for Americans' recommended daily dairy servings.[2] Milk consumption, including flavored, in children and adolescents, is associated with higher intakes of calcium, phosphorus, magnesium, potassium and vitamin A, compared to those who do not drink milk.[3] According to the 2010 Dietary Guidelines, moderate evidence shows that intake of milk and milk products is associated with better bone health, especially in children and adolescents, and reduced risk for cardiovascular disease and type 2 diabetes, and lower blood pressure in adults.[1] Flavored milk is a delicious way to help people of all ages consume essential vitamins and nutrients important for health.

Q Does the added sugar in flavored milk detract from its nutritional benefits?

A The added sugar in flavored milk does not detract from its nutritional benefits, but it may help improve the appeal of milk; therefore, helping to increase the consumption of milk for some children.[3-6] Flavored milk has essentially the same nutrient profile as white milk, with a difference of approximately 11g sugar[7] and research indicates sweetened, nutrient-dense foods such as milk and yogurt can contribute to improved nutrient intakes.[6] In fact, the American Heart Association recognizes the value of flavored milk stating, "when sugars are added to otherwise nutrient-rich foods, such as sugar-sweetened dairy products like flavored milk and yogurt and sugar-sweetened cereals, the quality of children's and adolescent's diets improves, and in the case of flavored milks, no adverse effects on weight status were found."[8] School-aged American children who drink flavored milk, do not have higher added sugar intakes compared to children who do not drink flavored milk.[6] Additionally, children in the U.S., who drink flavored milk, do not have higher Body Mass Indices (BMIs) compared to non-drinkers.[3]

Q What is the dairy industry doing to reduce sugars in flavored milk?

A Although flavored milk contributes only 4 percent of the added sugars in children's diets on average[9] and provides the same nine essential nutrients as white milk, the dairy community has been proactively working to improve flavored milk. Since 2007, the U.S. dairy industry has reduced added sugars by about 55 percent in the flavored milk offered in schools.[10] Today, all milk in schools is low-fat or fat-free,[11] and the majority of flavored milk is 150 calories or less, with an average of 122 calories – just 25 more calories than white milk.[10]

Q How does flavored milk fit into school nutrition programs?

A Flavored milk enables schools to address the nutrient, taste and health needs of the students they serve. The 2010 Healthy Hunger-Free Kids Act[12] requires that milk be consistent with the most recent Dietary Guidelines, mandating that school milk be low-fat (1%) or fat-free and regulations require that all flavored milks must be fat-free.

Q Some schools have taken flavored milk off of their menus. What is the impact of removing flavored milk from schools?

A A pilot study published in 2014 found that when flavored milk is removed from elementary schools, it may lead students to take less milk overall and drink less (waste more) of the white milk that is taken.[13] Here are some considerations regarding the removal of flavored milk from schools:

- A study showed that when flavored milk, such as chocolate milk, was not offered on certain or all days of the week there was a dramatic drop in milk consumption – about 37 percent.[4] The menu (which is subject to federal nutrition guidelines would require 3-4 additional foods to replace the nutrient deficit from a decline in milk consumption.[4] Furthermore, the replacement foods would contain more calories and fat and increase costs up to $4,600 more per 100 students.[4] A report released by the IOM in 2010 noted that if milk is not part of school lunch, it "leads to nutrient content that is well under 80 percent of the target for calcium and phosphorus, and also to shortfalls in potassium and/or riboflavin depending on the age-grade group. In addition, the vitamin D content of the meal would be very low."[14]
- Research by National Dairy Council has shown that if milk can be made more appealing to children, average daily participation in the lunch programs can increase.[15]

Q Do the sweeteners in milk cause tooth decay?

A Studies have confirmed a relationship between sugar consumption and tooth decay. However, in addition to good oral health practices, some dietary factors may be linked to a reduced risk of dental caries. Liquid sugars, like those found in flavored milk, can pass through the mouth quickly.[16] A faster transit limits contact time with tooth surfaces and as a result, liquid sugars may be less likely to contribute to caries compared to sugary foods that stay in the mouth longer, such as candies.[16] The American Academy of Pediatric Dentistry states nutrient-rich snacks providing "sound nutrition" can be served up to three times a day and highlight low-fat/fat-free chocolate milk and cheese as nutritious examples.[17]

Some studies have shown that dairy products favorably contribute to oral health when combined with proper hygiene. Milk contributes calcium, phosphorus and vitamin D, nutrients that likely play a key role in helping promote healthy teeth.[18] In fact, some studies show that milk-drinking children have lower caries frequency compared to non-milk drinkers, or children with caries have lower milk intake compared to children without caries, although more research is needed.[19]

Q Do the sweeteners in milk cause hyperactivity?

A No. Flavored milks contain less added sugar per 8-ounce serving than cola drinks. According to scientific research, sugar does not cause hyperactivity or affect behavior in children,[20,21] nor does it negatively interfere with mental performance.[21] On average, soft drinks contribute 4.4 teaspoons of added sugar and flavored milk contains 0.8 teaspoons of added sugar each day (children 2-18 years).[9]

Q Does chocolate in milk affect calcium absorption?

A No. Chocolate milk contains a small amount of oxalic acid, a compound found in cocoa beans and other plants that in sufficient quantities can affect calcium absorption.[22] The very small amount of this compound in chocolate milk has no significant effect on the availability of milk's calcium.

Q How much caffeine is in chocolate milk?

A An 8-ounce serving of chocolate milk contains approximately 2mg of caffeine.[7] According to the American Academy of Pediatrics, flavored dairy foods, such as chocolate milk, accounts for less than 5% of total daily caffeine intake in the collective diets of children and young adults ages 2-22 years.[23] Soda remains the largest caffeine contributor and close to 90% of caffeine intake comes from coffee, tea and soda in the collective diets of children and young adults (AAP).

Q Can you drink chocolate milk if you are lactose intolerant?

A Many people can tolerate up to 12g of lactose at once with no or minor symptoms, which is the amount in an 8-ounce serving of milk, and tolerance can be improved when milk is consumed in smaller amounts or consumed with other foods.[24] People can also try lactose-free varieties of white or chocolate milk. Lactose intolerance is a very individual condition and most people tolerate some amount of lactose. There are lactose intolerance-friendly solutions available from cow's milk and milk products.

For more information on flavored milk, dairy's nutrient package and health benefits, visit
www.nationaldairycouncil.org
or
www.thedairyreport.com.

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