



CHOCOLATE MILK

TASTY NUTRITION

NUTRITION IS EVERYTHING.

Good nutrition is vital to our children. Moms want it. Schools want it. Everyone agrees. But are they getting it? **Many kids are still falling short on important nutrients they need – including some key nutrients in milk.** Lowfat milk is packed with essential nutrients that help kids grow into strong and healthy adults. Both white and flavored milk are an excellent source of calcium, vitamin D, riboflavin and phosphorus, and a good source of protein, potassium, vitamin A, vitamin B12 and niacin.

But the fact is, due to the growing number of choices available, and the increased consumption of water, juices and nutrient-void sodas, kids are not drinking as much milk as we might think. A recent survey conducted among 1,505 moms of kids between the ages of 1-18 found that **only 29% reported serving milk to their children at dinner.**¹ Recent research suggests only kids ages 1-3 are actually meeting their recommended daily servings.²



BUT ARE KIDS GETTING ENOUGH?

AN 8 OUNCE SERVING GIVES KIDS AS MUCH...



Calcium as 2¼ cups of broccoli



Potassium as one small banana



Magnesium as 1 cup of raw spinach



Vitamin A as two baby carrots



Phosphorus
as 1 cup of kidney beans



Vitamin D
as 3½ ounces of cooked salmon

KIDS ARE MISSING IMPORTANT NUTRIENTS.

Experts agree that America's kids are still falling short in important nutrients. In fact:

- 9 out of 10 teen girls and 7 out of 10 teen boys **don't get the calcium** they need³
- More than half of kids and teens **don't get enough phosphorus**³
- 7 out of 10 teen girls **fall short in vitamin D** intake; and, vitamin D is so important to kids, experts recently doubled the vitamin D recommendations⁴

Milk is the top source of calcium, vitamin D, potassium and phosphorus in the American diet.⁵

THIS IS **NO** TIME TO
BE DISCOURAGING MILK
CONSUMPTION BY KIDS.





FLAVOR IS PART OF THE SOLUTION.

Milk drinkers tend to have better quality diets that are richer in essential nutrients compared to non-milk drinkers.⁶ Lowfat chocolate milk provides the same nine essential nutrients as white milk. Studies show that children who drink flavored milk drink more milk overall, meet more of their nutrient needs and do not consume more added sugars or fat, and are not heavier than non-milk drinkers.^{6,7}

On average, **the added sugars in flavored milk account for less than 2% of the total added sugars in American teens' diets, while sodas and fruit drinks provide more than 50%⁸.** As children move into adolescence their milk intake often decreases while their soft drink consumption can double. Lowfat flavored milk can be a good strategy to help prevent the switch.

NUTRITION EXPERTS SUPPORT FLAVORED MILK.

The nation's leading health and nutrition organizations recognize the valuable role that milk can play in meeting daily nutrient needs. They acknowledge that **the small amount of added sugars* in flavored milk is an acceptable trade-off for the nutrients provided.** A 2006 clinical report from the American Academy of Pediatrics suggested that lowfat or fat-free flavored milks with modest amounts of added sweeteners are generally recommended to help optimize the bone health and calcium intake of children and adolescents.

And the American Heart Association states “when sugars are added to otherwise nutrient-rich foods, such as sugar-sweetened dairy products like flavored milk and yogurt...**the quality of children's and adolescents' diets improves,** and in the case of flavored milk, no adverse effects on weight status were found.”

*About 12 grams or 3 teaspoons per 8 ounces.



WITHOUT FLAVOR, CONSUMPTION DROPS.

Data show that students choose flavored milk 70% of the time. But many schools are feeling pressure to remove flavored milk from the lunchroom. That could significantly lower milk consumption, according to one recent industry study. **In 58 schools that removed or limited flavored milk options, milk consumption dropped a dramatic 35%, on average.** In fact, five of the schools saw consumption drop by more than 50%. That's according to an analysis of the consumption data from those schools.⁹

And while one might assume that the drop in consumption is temporary, the research suggests otherwise. Forty schools that were in their second year of a limited or no flavors policy did not see students moving to white milk. **Students still consumed 37% less milk in year two**, on average, compared to when they had flavored milk available.⁹

This drop in consumption is of special concern because if kids skip a serving of milk at school, **they're not likely to replace it at home – putting them at greater risk for a nutrient shortfall.** In fact, one study found that only those children drinking milk at lunch met their recommended daily intake of calcium.¹⁰

SCHOOL IS A
KEY PLACE
WHERE
KIDS DRINK
MILK.





REPLACING
MILK'S NUTRIENTS
IS HARDER
THAN YOU
THINK.

Discovering a drop in milk consumption

was just one finding of the study. Nutrient modeling was conducted as an important part of the study as well, to determine the impact of flavored milk removal on student nutrition. The findings suggest that the resulting drop in milk consumption **equates to a substantial loss in daily nutrients.** They reveal that nutrients can't be replaced by another beverage or beverages, but must come from a combination of foods commonly served in schools.⁹

To replace the nutrients lost from the decline in milk consumption:

- **Required 3-4 food items** to match milk's nutrient contribution.
- **Added back more calories and fat** than were being reduced.
- **Added back roughly half of the sugar,** netting a savings of only 15-28 grams per week.
- **Cost an incremental \$2,200-\$4,600** annually per 100 students.



REPLACING MILK'S NUTRIENTS? BETTER GRAB A BIGGER TRAY.



If flavors aren't available and students choose orange juice fortified with calcium and vitamin D instead of white milk, you would still need to replace the remaining missing nutrients by ADDING: $\frac{1}{2}$ cup of diced cantaloupe, 100g of apple with skin and $\frac{1}{2}$ cup of cooked baked beans. That would add 171 more calories than drinking chocolate milk.

THEY'RE CALLED ESSENTIAL FOR A REASON.

Calcium 30% DV: Helps build and maintain strong bones and teeth. It helps reduce the risk of stress fractures and osteoporosis later in life. Plays a role in promoting normal blood pressure.

Vitamin D 25% DV: Helps absorb calcium for healthy bones.

Phosphorus 20% DV: Works with calcium and vitamin D to help keep bones strong.

Riboflavin 20% DV: Helps convert food into energy. Plays a vital role in the development of the central nervous system.

Protein 16% DV: Helps build and maintain lean muscle. Contains all the essential amino acids (the building blocks for protein).

Vitamin B-12 13% DV: Helps build red blood cells and helps maintain the central nervous system.

Potassium 11% DV: Helps regulate the balance of fluids in the body and plays a role in maintaining a normal blood pressure.

Vitamin A 10% DV: Important for good vision, healthy skin, and a healthy immune system.

Niacin 10% DV*: Helps the body's enzymes function normally by converting nutrients into energy.



Milk's nine essential nutrients can help kids and teens grow healthy and strong.

Daily Values reflect current nutrition recommendations for a 2,000 calorie-a-day diet.

*As niacin equivalents



THEY LOVE THE FLAVOR.
THEY NEED THE NUTRIENTS.

1. Harris Interactive Survey, January 2010.
2. Kranz S, et al. Children's dairy intake in the United States: Too little, too fat? *J Pediatr.* 2007;151:646-646.
3. Moshfegh A, et al. What We Eat in America, NHANES 2001-2002: Usual nutrient intakes from food compared to dietary reference intakes. U.S. Department of Agriculture, Agricultural Research Service. 2005.
4. Bailey RL, et al. Estimation of total usual calcium and vitamin D intakes in the United States. *J of Nutr.* 2010;140:817-822.
5. Fulgoni VL, et al. Food sources of calcium, phosphorus, vitamin D, and potassium in the U.S. *FASEB J.* 2010;24:325.1.
6. Murphy MM, et al. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effects on weight status in U.S. children and adolescents. *J Am Diet Assoc.* 2008;108:631-639.
7. Johnson RK, et al. The nutritional consequences of flavored milk consumption by school-aged children and adolescents in the United States. *J Am Diet Assoc.* 2002;102:853-856.
8. Murphy M, et al. Beverages as a source of energy and nutrients in diets of children and adolescents. *FASEB J.* 2005;19:275.4.
9. 2009 Study "The Impact on Student Milk Consumption and Nutrient Intakes from Eliminating Flavored Milk in Schools," conducted in 58 elementary and secondary schools. Funded by the Milk Processor Education Program (MilkPEP) and conducted by Prime Consulting Group, presented at the School Nutrition Association Annual National Conference 2010.
10. Johnson RK, et al. The association between noontime beverage consumption and the diet quality of school-aged children. *J of Child Nutr and Mgmt.* 1998;2:95-100.

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