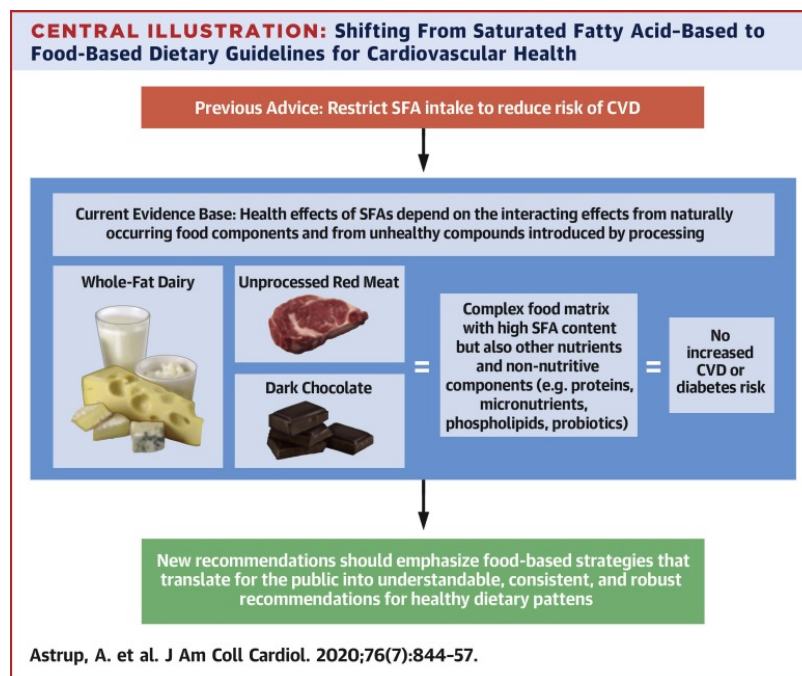


Why Whole Milk should be returned as a choice in schools

The federal prohibition of Whole Milk in schools allows only fat-free and 1% low-fat milk to be served and restricts flavored milk to fat-free status. In the Smart Snacks rules, USDA also prohibits Whole Milk from being offered as an à la carte beverage or vending machine option. Since these rules were put in place a decade ago, the BMI scores of students and rate of obesity and diabetes among young people have increased dramatically. At a minimum, this prohibition has not had the desired effect, and may exacerbate the problem.

School lunch and breakfast provide nutrition at the peak of the day when students need to be at their best. Allowing students to choose the milk they love and will drink, by allowing Whole Milk as a choice, assures nutritional equity so students from food-insecure homes, who most rely on school meals, also have true access to milk's powerhouse nutrition.

- Whole Milk is **standardized to 3.25% fat**.
- Whole Milk has a **healthy matrix of complex and beneficial fatty acids**, mono- and poly-unsaturated as well as saturated, including Omega 3s.



■ Several foods containing saturated fatty acids, such as whole milk, full-fat dairy and unprocessed meat, **are not associated with increased cardiovascular disease or diabetes risk**. Reviews of the science show no robust evidence for the current limit on saturated fat consumption, especially for children.

■ Research on milkfat, specifically, showed a **healthier net effect on cholesterol levels**: HDL levels were significantly raised but with zero effect on LDL when whole milk and full-fat dairy foods were regularly consumed.

- A study showed children consuming Whole Milk had **40% less risk of being overweight**.
- Studies show the milkfat in Whole Milk slows the rate of carbohydrate (lactose) absorption to **increase satiety, reduce hunger cravings, level blood sugar swings and reduce digestive sensitivity**.
- Moderate consumption of milkfat is associated with **improved mood and cognition**.

- Whole Milk promotes **absorption of essential fat-soluble vitamins**, for example:
 - Vitamin D is a fat-soluble vitamin and a nutrient of concern. A recent Pediatric Review showed 61% of young people suffer from Vitamin D deficiency. A study published in the American Journal of Clinical Nutrition showed children drinking Whole Milk **absorbed three times the Vit. D** as those drinking low-fat (1%) milk. Another study showed children drinking non-cow-milk, even with added Vit. D, were deficient in Vit. D status compared with children drinking cow's milk.
 - Vitamin A and K are also fat-soluble nutrients of concern found in milkfat. Whole Milk is a natural significant source of Vit. A that is more absorbable and environmentally-friendly compared with the Vitamin A Palmitate that must be added to fat-free and low-fat milk in order to list it on the label.

- **Students prefer the taste of Whole Milk and therefore consume it.** A Pennsylvania middle / high school did a 2019-20 school year trial for grades 7 through 12, which could be a template for more milk choice trials. It showed that something as simple as offering a choice of milkfat options, including Whole Milk, within school meals can significantly change the amount of milk chosen, consumed, and NOT discarded:
 - Students showed a 3 to 1 preference for Whole Milk vs. low-fat milk
 - 50% increase in milk consumption
 - 65% of students in the survey said they chose milk more often
 - 95% reduction in the volume of discarded milk (fewer students threw away milk)

- When students can choose the milk they love, they **benefit from 13 essential nutrients, including nutrients of concern** like Calcium, Vitamins A, D, B12, B5, B6, Potassium, Riboflavin, Phosphorus, Niacin, Thiamin, Zinc, Magnesium. Recent data show 40% of kids 3 to 11 do not get enough calcium, 50% do not get enough potassium and 80% do not get enough Vit. D. Whole milk delivers all three in a package students prefer, and the fat content improves absorption.

- There are a total of 21 minerals and 13 vitamins in milk, as well as 8 grams of power protein -- **high-quality complete protein** containing all 9 amino acid building blocks for health. This nutrition powerhouse is only realized if students like and consume it.

- **For immune system support**, Vitamin D and protein amino acids found in milk have been highlighted. The milkfat in Whole Milk helps with absorption and preference so children get these immune-supporting essentials.

- Whole Milk choice within school meals is **beneficial for concerns about the health of growing bones** as the medical community cites increased fractures and scoliosis. The fat makes the milk taste better and aids in absorption of Vit. D needed with the Calcium for growing bones.

- While there are more calories in 8 ounces of Whole Milk than 8 ounces of fat-free milk, those **calories are not empty**, and the milkfat calories provide satiety, which is important for maintaining a healthy weight.

- When the fat is kept in the flavored milk, **less sugar is added!** That's a big win too!

References

Saturated Fats and Health: JACC State-of-the-Art Review

<https://www.onlinejacc.org/content/early/2020/06/16/j.jacc.2020.05.077>

Whole Milk consumption by children reduced risk of overweight and obesity by 40%:

<https://www.sciencedaily.com/releases/2019/12/191230104810.htm>

Whole Milk consumption by children improved Vitamin D status <https://www.acsh.org/news/2016/11/29/whole-milk-better-low-fat-kids-vitamin-d-status-10498>

Children drinking only cow's milk had better Vit. D levels than those drinking non-dairy alternatives, even if Vit. D was added <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4234713/?fbclid=IwAR0GH1LLniGguDIgTC3BzdAaKt-UDyQBzDIwi4kJBADMfXHJ8fhfP2pPKwE>

Whole Milk linked to reduced diabetes risk: <https://www.npr.org/sections/thesalt/2016/04/18/474403311/the-full-fat-paradox-dairy-fat-linked-to-lower-diabetes-risk?>

The negative image of milkfat is weakening <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5867544/>

U.S. nutritionists call for limits on saturated fat intake to be lifted <https://www.bmj.com/content/371/bmj.m4226>

The American Journal of Clinical Nutrition, Vol. 104, Issue 6, December 2016, Pages 1657-1664 <https://academic-oup-com.eres.qnl.qa/ajcn/article/104/6/1657/4668588>

Prev Med Rep. (U.S. Nat'l Library of Medicine, National Institutes of Health) 2017 Dec 8: 1-5

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5552381/>

Full-fat dairy consumption could reduce risk of type 2 diabetes, Diabetes.co.uk, the global diabetes community, April 8, 2016 <https://www.diabetes.co.uk/news/2016/apr/full-fat-dairy-consumption-could-reduce-risk-of-type-2-diabetes-95576109.html>

Effect of whole milk consumption compared with skimmed milk (fat-free/low-fat) on fasting blood lipids in healthy adults..., December 11, 2017, European Journal of Clinical Nutrition 72, 249-254 (2018)

<https://www.nature.com/articles/s41430-017-0042-5> Further explanations:

<https://www.diabetes.co.uk/news/2018/jan/full-fat-milk-improves-cholesterol-levels-90626725.html?fbclid=IwAR1ko6NAoB6rZWE6OP-1e4lMaLITJdT9pwEtTnOteKVMb7YYlv5qVRnPaGo>

"The Childhood Obesity Epidemic, how the Federal guidelines to improve our diets made our children fat," by Dr. Richard C. Theuer, adjunct professor in the Dept. of Food, Bioprocessing and Nutrition Sciences at North Carolina State University. Dr. Theuer reports the science behind the fatty acids in whole milk helping prevent and manage diabetes, which is on the rise among children and teens, along with obesity.

New York City registered dietitian, certified diabetes educator and author Laura Cipullo, writes: *"When someone eats full-fat dairy versus low-fat dairy, the fat will actually delay the absorption of the milk's sugar. As a result, blood sugar rises more slowly over a longer period of time. Consequently, insulin follows this same pattern. Less circulating insulin means less risk for the development of insulin resistance and diabetes. Full-fat dairy is lower in lactose, making it easier for individuals with lactose intolerance to digest compared to low-fat or no-fat dairy. Meanwhile one specific fatty acid contained in dairy is known to aid in gastrointestinal health, and according to a 2013 review from Polish researchers, may actually hold promise in the treatment of IBS and promoting healthy gut bacteria."*