

**August 19, 2019**

**Dear School Boards, Teachers, School Foodservice, Medical and Nutrition Professionals, Athletic Coaches, Youth Advisors and Advocates, Parents, Grandparents, Citizens:**

Health, well-being and learning readiness are vital for our schoolchildren to succeed. Children need proper nutrition to grow, develop, and be attentive and ready-to-learn. Whole milk (3.25% fat) plays a role but is currently prohibited for children over 2 years of age in public schools and daycare centers because of Federal Dietary Guidelines. Currently, milk in schools is restricted to fat-free or low-fat (1% fat).

We want to bring your attention to the science on this issue and the legislative and regulatory efforts we hope you will join us in supporting -- *to bring back the choice of whole milk at school.*

In addition to individual letters of support, we ask that local School Boards and other governmental and non-governmental organizations pass resolutions in support of whole milk in schools and then communicate this with your Representatives and Senators in Washington.

Althea Zanecosky, MS, RD/LDN -- a registered dietician and nutrition professor at Montgomery County Community College -- testified at a June 18<sup>th</sup> hearing before the Pennsylvania House Agriculture Committee, stating: "The evidence is mounting to question the current advice of low-fat or fat-free milk, particularly in childhood."

She cited studies showing current fat-free / low-fat milk regulations contribute to low vitamin D status and higher body fatness, whereas the average child who drank whole milk had higher vitamin D status and lower body fat and less risk of obesity (see attachment).

A growing body of research disproves the theorized link between saturated fat and risk of cardiovascular disease, showing milkfat is neutral or beneficial (see attachment).

USDA studies of school lunch waste show that the fat-free and low-fat milk are the most frequently discarded items from the school meal. School foodservice personnel report that children discard the fat-free and low-fat milk they are served with their lunch, and purchase ala carte fruit juices, flavored waters, diet teas, diet colas, as well as Gatorade and Mountain Dew Kickstart beverages sweetened with a calorie-reducing blend of high fructose corn syrup and sucralose. While these reduced-calorie beverages meet federal guidelines, their concentrated sweetness conditions the palate to crave more, while providing little nutrition and no satiety.

Zanecosky notes that, "Whole milk provides proper nutrition and has a benefit called 'satiety' -- helping children feel fuller longer." Whole milk tastes better, so children consume it instead of replacing it -- helping reduce classroom distractions from hunger and cravings.

In addition, whole milk's satiety helps prevent and manage diabetes. New York City registered dietitian and certified diabetes educator Laura Cipullo writes: "When someone eats full-fat dairy versus low-fat dairy, the fat will actually delay the absorption of the milk's natural sugar. As a result, blood sugar rises more slowly over a longer period."

In regard to lactose intolerance. Cipullo explains: “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. One specific fatty acid contained in dairy... is known to aid in gastrointestinal health.”

We ask that you and/or your board, council, or organization help us support childhood health, well-being and learning readiness by supporting these measures:

**FEDERAL: Bipartisan U.S. House Bill 832 (*The Whole Milk for Healthy Kids Act*).** Allows schools to offer whole milk and whole flavored milk as well as 2% reduced-fat milk without additional paperwork. <https://www.congress.gov/bill/116th-congress/house-bill/832>

**FEDERAL: Bipartisan U.S. Senate Bill 1810 (*The Milk in Lunches for Kids Act*).** Allows whole milk (3.25% fat) and reduced-fat (2%) milk (regular and flavored) at school meals; revises regulations to exclude milkfat from the calculation of the average saturated fat content of a school meal. <https://www.congress.gov/bill/116th-congress/senate-bill/1810>

**FEDERAL: Bipartisan U.S. House Bill 1769 (*The Dairy Pride Act*).** Requires FDA to enforce dairy standards of identity as surveys show that up to 40% of consumers believe alternative beverages are nutritionally equivalent to real dairy milk, when they are not.

**FEDERAL: Comment to the Dietary Guidelines Advisory Committee.** Ask them to recognize the body of evidence to end saturated fat restrictions on children and allow whole milk in school. Write a simple comment here <https://www.regulations.gov/comment?D=FNS-2019-0001-6698>

**LOCAL / STATE IMPACT: School Boards and other organizations,** consider voting to pass a resolution supporting whole milk in schools and supporting the legislation referenced above and share your support with your Congressional delegation, asking them to co-sponsor the legislation.

*Thank you for your consideration and concern for the future of our children.*

**Sincerely,**

***Katie Sattazahn***

Womelsdorf, Pennsylvania  
representing the grassroots PA Dairy Advisory Committee

***Attached supporting information follows***

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*The grassroots PA Dairy Advisory Committee is made up of Pennsylvanians who are parents and grandparents and serve in their local communities as current and former school board members, school foodservice professionals, youth advisors, coaches, volunteers, and who are or have been involved in local family dairy farms.*

## **ATTACHMENT with SUPPORTING INFORMATION for WHOLE MILK in schools**

### **Whole Milk and Vitamin D Status**

Althea Zaneosky, MS, RD/LDN -- a registered dietician and nutrition professor at Montgomery County Community College -- testified at a June 18<sup>th</sup> hearing before the Pennsylvania House Agriculture Committee. She cited a 2016 study out of Canada, published in the *American Journal of Clinical Nutrition* (1) looked at over 2700 healthy children aged 1 to 6 and evaluated the fat content of their milk and its influence on weight and vitamin D status.

Consumption of whole milk (3.25% fat) showed significantly higher blood levels of vitamin D in children compared with consumption of low-fat (1% fat) milk. This is significant because a recent study in *Pediatrics* found that “50.8 million U.S. children and adolescents, representing 61% of the pediatric population, suffer from vitamin D deficiency.”

Vitamin D is a fat-soluble vitamin and is found naturally in milkfat. When this fat is removed to make fat-free or low-fat milk, vitamin D is added back in, but these results indicate this is not as bioavailable to the children consuming milk without the milkfat. The same can be said for alternative beverages that state on labels ‘fortified with vitamin D.’

Simply put, children who consumed whole milk had higher vitamin D levels than children who consumed low-fat 1% milk. In fact, it took 3 cups of 1% low-fat milk with the same vitamin D content “on paper” to reach the blood vitamin D levels of children who drank just 1 cup of whole milk (3.25% fat), showing that the nutrient dense profile of whole milk delivers more nutrition per calorie invested.

### **Whole milk and body fatness / obesity**

Professor Zaneosky testified that the average child who drank whole milk had lower body fat as measured by BMI z-score than the average child who consumed 1% low-fat milk. Furthermore, those who consumed whole fat milk had lower odds of severe obesity.

Studies supporting this conclusion are growing in number and include a 2017 Report in the *Journal of Preventive Medicine* (2) as well as a 2013 report in the *Archives of Disease in Childhood*.

Studies out of Harvard and Tufts Universities are also contradicting the low-fat/ fat-free milk regulations based on findings that regular consumption of whole milk and full-fat dairy products are associated with a lower risk of both obesity and diabetes. (3)

Additionally, Dr. Richard C. Theuer, adjunct professor in the Department of Food, Bioprocessing and Nutrition Sciences at North Carolina State University, in his official comment to USDA Food and Nutrition Services regarding the Dietary Guidelines, makes this point: “The reason given in support of feeding fat-free and low-fat milk to children is to promote health and to reduce the risk of major chronic diseases, including obesity. Indeed, reduced fat milk does play a role in overweight and obesity among children . . . by making it more likely!” he writes.

“Recent research documents that children consuming reduced fat milks are MORE likely to be overweight or obese. Fortunately, despite the ‘Dietary Guidelines for Americans,’ most parents do not feed their young children low-fat or no-fat milk,” writes Dr. Theuer, citing his references.

“Scharf et al (Scharf, Demmer, & DeBoer, 2013) found that the majority of young children drank whole or 2% milk (87% at 2 years, 79.3% at 4 years). O’Connor et al. (O’Connor, Yang, & Nicklas, 2006) studied preschool children and found 83% drank milk, with whole milk consumed by 46.5%, and only 3.1% and 5.5% consuming skim milk and 1% milk, respectively,” Dr. Theuer continues.

“Unfortunately, once children go to school or to a daycare setting that must comply with Federal rules, parents lose control over the beverage consumed by their children. The USDA Child Care Meal Pattern requires that ‘Milk served must be low-fat (1%) or non-fat (skim) for children ages 2 years and older and adults.’ Only low-fat milk and no-fat milk (and recently sugar-sweetened chocolate-flavored skim milk) are permitted in the School Lunch Program,” Dr. Theuer explains.

“Sugar-sweetened beverages subsequently displace whole milk in the diets of children, and these are known to encourage obesity (Harrington, 2008; Malik, Schulze, & Hu, 2006),” he adds further.

It is noteworthy here that ala carte beverages in school include fruit juices. The natural ‘sugar’ in whole milk is less than half the amount in apple juice. Additionally, juices, tea coolers, colas, sports and energy drinks, even flavored waters, are sweetened with a diet blend of high fructose corn syrup and sucralose to keep below the 60-calorie regulatory threshold. However, these beverages are even sweeter than whole chocolate milk, conditioning the palate to crave more sweetness and without the satiating fats and protein in whole milk and whole chocolate milk that is shown to curb these cravings.

### **Whole milk and diabetes**

Dr. Theuer reports the science behind whole milk’s benefits in preventing and managing diabetes, which is on the rise among children and teens, along with obesity. One reason was identified by New York City registered dietitian, certified diabetes educator and author Laura Cipullo, who 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 development of insulin resistance and diabetes.”

Dr. Theuer adds: “The study suggests that specific fatty acids contained in dairy, such as pentadecanoic acid and heptadecanoic acid (two odd-carbon fatty acids) may play special roles in risk reduction.”

### **Whole milk and learning-readiness**

Professor Zanecosky noted in her testimony before the Pa. House Ag Committee that “Whole milk provides proper nutrition and has a benefit called ‘satiety.’” The satiety of fats and proteins in whole milk help curb cravings and consumption of sugary beverages or snacks that do not provide milk’s nutrient-dense impressive nutrition profile. Proper nutrition and satiety can reduce distractions from hunger and carbohydrate craving. This can result in improved learning readiness via the satiety of whole milk offered during the school lunch or breakfast helping children feel fuller, longer. Dairy consumption, in general, has also been shown in studies to improve memory and cognitive health.

### **Whole milk and cardiovascular disease risk**

A growing body of research is also weakening the theorized link between the consumption of saturated fat found in animal foods like whole milk and one’s long-term risk of cardiovascular disease.

A recent crossover study published in the *European Journal of Clinical Nutrition* looked at whole milk, specifically, showing consumption led to **improved cholesterol levels** compared with drinking fat-free or low-fat (1%) milk.

Specifically, HDL levels were significantly raised but with zero effect on LDL when whole milk and full-fat dairy foods were regularly consumed – reflecting a healthier net effect on cholesterol levels. (4)

**Whole milk and digestive sensitivity**

Digestive issues are also calmed with whole milk vs. low-fat or fat-free. The grassroots PA Dairy Advisory Committee and the 97Milk.com social media interface hear from consumers with digestive sensitivities who are able to tolerate whole milk, but not the fat-free and 1% low-fat milk served in schools. A more balanced and natural matrix of fat, protein and carbohydrate is present naturally in whole milk. This is very important as a growing number of children and teens are said to be lactose intolerant.

Their parents choose whole milk at home, and yet they must drink low-fat and fat-free milk at school, experiencing digestive upset that leads to drinking no milk at all, or to being distracted during class by belly pain. Cipullo explains: “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.”

**Whole milk and nutrient density comparisons**

Whole milk contains 8 grams of complex fat, both saturated and unsaturated and with important functional fatty acids, including omega 3’s. This total combination of fats comprises just 3.25% of whole milk’s volume (12% of daily recommended value). For the small amount of fat and 50 to 60 more calories per cup of whole milk vs. low-fat milk, there are many benefits already discussed – especially for children governed against consuming it while spending most of their waking hours at daycare or school.

Whole milk contains 8 grams of protein – 25% more protein than soy beverage and 700 to 800% more protein than almond or coconut beverage. Compared with plant-based alternatives, the protein in Real Milk is also a higher quality complete protein containing 9 essential amino acids. While replacements are fortified with some nutrients, Whole Milk provides natural calcium that easily absorbed, and it naturally provides over a dozen other essential nutrients not found in alternatives. **Whole Milk keeps children fueled and full for learning.**

**WHOLE MILK**, Nature’s Nutrition Powerhouse  
8 ounces, 150 calories, delivers: **Virtually 97% Fat-Free!**



*Essential Nutrients by % of Recommended Daily Value (DV)*

_____	Iodine	35%
_____	Calcium	30%
_____	Vitamin D	25%
_____	Riboflavin	25%
_____	Phosphorus	20%
_____	**Protein	16%
_____	B12	13%
_____	Potassium	11%
_____	Vitamin A	10%
_____	Niacin	10%
_____	Vitamin B5	9%
_____	Thiamin(B1)	7%
_____	Zinc	7%
_____	Magnesium	6%
_____	Vitamin B6	4%
_____	Folate	3%
_____	Vitamins E & K	1%

SOURCE: USDA National Nutrient Database for Standard Reference (4/11) **97Milk.com**

\*The 3.25% (8 g) fat content of Whole Milk represents 12% recommended DV, including saturated, monounsaturated, polyunsaturated and omegas. \*\*\*The 5% carb content (12 g) represents 4% DV

Research References by footnote, (others directly cited in letter)

- 1) The American Journal of Clinical Nutrition, Vol. 104, Issue 6, December 2016, Pages 1657-1664, <https://academic-oup-com.eres.qnl.ga/ajcn/article/104/6/1657/4668588>
- 2) 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/>
- 3) 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>
- 4) 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-1e4IMaLITJdT9pwEtTnOteKVMb7YYIv5qVRnPaGo>

# An 8-ounce serving of milk, flavored or not, gives you the same.....



**Riboflavin** as 1/3 cup of whole almonds



**Vitamin D** as 3/4 ounce of cooked salmon



**Vitamin B-12** as 3 ounces of turkey



**Phosphorus** as 1 cup of canned kidney beans



**Protein** as 1 1/2 medium eggs



**Potassium** as one small banana



**Niacin** as 10 cherry tomatoes



**Calcium** as 10 cups of medium spinach



**Vitamin A** as 3/4 cup of broccoli

**WHOLE MILK- 8 ounces, 150 calories, delivers:**  
 Protein 3.5% (16% DV), Fat 3.25% (12% DV), carbohydrates 5% (4% DV), water 88%  
 (Standardized by weight)  
 (Calories by % recommended DV- daily value)

More on milk health go to:  
**97MILK.com**



# COMPARE MILK

Nutrient Facts Serving Size 1 Cup	Whole Milk 3.25% fat	1% Low-Fat Milk	Almond Beverage Milk, Unsweetened, Vanilla, Almondmilk	Soy Beverage Soy, Soybean Milk, Original	Coconut Beverage Coconutmilk
Calories	150	110	80	60	70
Total Fat	8 g	2.5 g	2.5 g	2 g	4.5 g
Total Carbs	13 g	13 g	14 g	5 g	6 g
Sugar	12 g	12 g	13 g	3 g	5 g
Sodium	125 mg	130 mg	150 mg	115 mg	65 mg
Protein	8 g	8 g	1 g	6 g	0 g
Calcium	30%	30%	45%	45%	35%
Vitamin D	25%	25%	25%	30%	10%
<b>Ingredients:</b> * % Daily Values on a 2,000 calorie diet	Milk, Vitamin D3	Reduced fat milk (1% milkfat), vitamin A, palmitate and vitamin D5	Water, almonds, cane sugar, calcium carbonate, natural flavors, sea salt, potassium citrate, potassium chloride, potassium sorbate, gellan gum, Vitamin A palmitate, Vitamin D2, D-Alpha-Tocopherol	Water, soybeans, cane sugar, calcium carbonate, sodium ascorbate, Vitamin A palmitate, Vitamin D2, Vitamin E, potassium citrate, potassium sorbate, B12, cane sugar, sea salt, natural flavor, Res A, Gellan Gum	Water, coconut cream, cane sugar, calcium carbonate, Vitamin E, Vitamin B12, potassium citrate, potassium sorbate, Phosphoric acid, sulfite, lecithin, gellan gum, locust bean gum, sorbic acid, natural flavor

\*Dairy milk has no added sugar!  
 \* Calcium is naturally bioavailable in real milk.

Learn more:  
**www.97milk.com**

