

Senate Committee on Agriculture, Nutrition and Forestry

**Legislative Hearing to Review S. 222, the Whole Milk for Healthy Kids Act, and
Improving Children's Health**

10:00am, Tuesday, April 1st, 2025

Location: 328A Russell Senate Office Building

Hearing Witness

**Keith T. Ayoob, EdD, RD, FAND
Associate Clinical Professor Emeritus
Department of Pediatrics
Albert Einstein College of Medicine
New York, NY**

Thank you to Chairman Boozman, Ranking Member Klobuchar, and the Committee for the opportunity to speak to you about the Whole Milk for Healthy Kids Act (S. 222).

I am Dr. Keith T. Ayoob, Associate Professor Emeritus of Pediatrics at Albert Einstein College of Medicine in New York. For 33 years I directed the Nutrition Clinic as part of the Children's Evaluation and Rehabilitation Center, a large diagnostic and treatment center at Einstein. I am also a registered dietitian/nutritionist (RDN). I have been a clinician for over 30 years, and we serve mostly low-income minority children and families in the Bronx. Testifying before Congress is not typically part of my job. I am here because this issue matters to the children I see, so it matters to me.

Why Milk is in School Meals

Let me first address why milk is essential in school meals. Nearly 30 million children and adolescents participate in federal school meal programs every day, including breakfast and lunch. Milk in school meals offers 13 essential nutrients, including high-quality protein, calcium, phosphorous, vitamin D, and potassium, and is the number-one source of protein, vitamin D, calcium, and potassium for children ages 2-18. A plethora of scientific literature demonstrates that consumption of cow's milk provides children with better bone health, a lower risk for type 2 diabetes, and a lower risk for cardiovascular disease. Specifically, milk provides 22% of the calcium, 40% of the vitamin D and 10% of the potassium in the American diet. In sum, milk—including Whole Milk (3.25% milkfat), Reduced Fat (2%), Low Fat (1%), Skim (fat free), and lactose-free varieties—represents a nutrient package not found in any other single food or beverage.

Multiple versions of the Dietary Guidelines for Americans recommend increased intake of dairy products and identify dairy as an under-consumed food group.(DGA) This is true even

of many school age children, with between 68% and 76.2% of school age males and between 77.4% and 94.3% of school age females failing to meet recommended levels of dairy consumption. Among youth ages 9-13, 79 percent fall short of the Dietary Guideline's recommended dairy intake. (Dietary Guidelines Advisory Committee. 2020.)

School meals The School Breakfast Program provides 40% of the dairy needed by students each day and the National School Lunch Program provides 47%. We also know that most children prefer Whole Milk (3.25% milkfat) and Reduced Fat Fat (2%) milk.

Enactment of the Whole Milk for Healthy Kids Act would bring nutritious Whole Milk (3.25% milkfat) and Reduced Fat (2%) milk back to schools. Because most kids prefer the taste of these two milk varieties, I believe that milk consumption and school meals participation will increase if this bill is passed, leading to improved nutritional outcomes for our children.

Saturated Fat

Whole Milk (3.25% milkfat) and Reduced Fat (2%) Milk were served in schools for decades but were removed from school menus in 2010. As I understand it, lawmakers at the time wanted to keep saturated fat levels in school meals low, below 10% on average, to help reduce the risk of heart disease. I support risk reduction for heart disease. Let me explain why I have a hard time supporting fewer milk options in school.

Historically, we have viewed "saturated fat" monolithically, even though there are many different sources of saturated fats in our food. Since 2010, when Whole and Reduced Fat milk were removed as school meal options, the body of credible nutrition science has evolved and no longer supports a policy of allowing only fat-free and low-fat milk in schools.

A systematic review of studies that looked at cardiometabolic health in children ages 2 to 18 years found that consumption of dairy products including Whole and Reduced Fat milk had no association with cardiometabolic risk. (O'Sullivan, 2020)

Nutrition is not a static science. It is dynamic. It should be. We should constantly be learning, revising, and fine tuning our recommendations, as credible science keeps evolving. I am required to do at least 75 hours of continuing education every 5 years in order to maintain my RDN credential and to keep current with nutrition science.

I will also tell you that I did not come to my position quickly or without careful thought and scrutiny of the evidence. It's not easy for me to change my views about nutrition. As a pediatric nutritionist, I advised parents for years to withhold introduction of potentially allergenic foods until the age of 2 to 3 years, if their infant had a higher risk of being food-

allergic. Then, credible research came along that totally upended my position: introduce potentially allergenic foods as soon as other solids are introduced, which means at 6 months of age, because this significantly reduced the likelihood of allergic reactions. If you think I did that easily, I did not. But I also knew I had to look at the credible evidence, and that evidence made the difference.

Even the 2025 Dietary Guidelines Advisory Committee, when examining the relationship between food sources of saturated fat, made a specific conclusion addressing dairy that found, “No association between substituting or replacing one form of dairy with another form of dairy on CVD. This included comparisons between milk, yogurt, cheese & buttermilk.” And when looking at the science on milk’s effect on growth and risk of obesity in children, the DGAC identified some evidence that, “Consumption of higher-fat dairy milk compared to lower-fat dairy milk by younger children may be associated with favorable growth and body composition, and lower risk of obesity during childhood.”

Several years ago, the Australian Heart Foundation revised their position statement to include dairy foods at all fat levels, unless there is presence of elevated blood cholesterol.

Saturated fat doesn’t exist in isolation in foods. In dairy, it is bound to protein, occurring in a “dairy matrix.” In this form, the body appears to handle it differently. Dairy foods that contain protein in this dairy matrix do not seem to produce the negative cardiometabolic effects that other saturated fats do; when they are in a protein-fat network that occurs in dairy foods like milk, yogurt, and cheese, they appear not to increase bad cholesterol and to lower the harmful portion of bad cholesterol. Can other foods lower bad cholesterol and reduce CVD risk? Absolutely, but they’re not able to provide the 13 essential nutrients in milk. (Dunne, 2023; de Goeds, 2015; Nicholl, 2021; Schmidt, 2021)

Obesity

I work primarily with Black and Hispanic children. Obesity rates are higher in this population. That said, obesity prevalence in 2010 was 17% (<https://www.cdc.gov/nchs/products/databriefs/db82.htm>). It’s even higher in the population I work with – about 25% in each of these groups (<https://www.cdc.gov/obesity/childhood-obesity-facts/childhood-obesity-facts.html>).

Numerous systematic reviews have found higher fat milk consumption to be associated with lower childhood obesity. (O’Sullivan, 2020; Dougkas, 2019; Kang, 2019)

Obesity is a complex, multi-faceted issue. There seems to be a tendency for various groups to blame obesity on a single food or ingredient: sugar, junk food, soda, high-fructose corn syrup, and so on. It’s not that simple. Moreover, since the removal of Whole Milk and

Reduced Fat milk in schools, obesity prevalence has increased. Clearly, milk was not the issue here. It wasn't the cause and it's not the cure.

Taking this a step further, if children are not drinking milk at school because the school doesn't have the type of milk they prefer, one would postulate that they would lose weight. There's no evidence this is happening or that it has happened for this reason.

When a food has more calories than a comparator food, it's easy to assume that substituting a lower calorie option would help curb overall calorie intake. This is not always the case for a number of reasons. For example, those who consume nuts daily (most research has been done on almonds, walnuts, peanuts and pistachios) tend to be less at risk for being overweight and obesity. With milk, research has consistently shown that consumers of whole milk are no more likely to be overweight or obese (Nicholl et al, 2021). In terms of other health risks, higher dairy consumption, irrespective of dairy fat content, has been associated with lower risk for insulin resistance syndrome (Pereira et al, 2002).

Many of my patients over the years, especially adolescents and teens, have told me that the school meal doesn't always leave them feeling full. The relatively small amount of fat in Whole Milk, amounting to two scant teaspoons of total fat of which only about a teaspoon is saturated, can provide a satiating effect for some students, especially those who consume Whole Milk and Reduced Fat Milk at home.

Calcium Crisis

No matter what type of milk is offered in school, none of it is nutritious unless students drink it. And they don't drink it often enough. The reason the Dietary Guidelines Advisory Committee considers calcium, potassium, and vitamin D as "nutrients of concern" is because the vast majority of Americans do not consume the recommended amounts of these nutrients. A glass of dairy milk has 3 of these 4 nutrients of concern. Missing that glass of milk at lunch is not likely to be made up during the rest of the day.

Some policymakers assume that "if schools don't serve the type of milk children want, then over time they'll drink the milk that is offered." The assumption is that the children will adapt over time. That may work at home but it doesn't work in school. Kids will adapt – but not the way we'd like them to. They'll adapt by learning to hold off quenching their thirst for a few more hours until the school day is over. Then they'll head to a convenience or corner store and buy a 20- or 24-oz. bottle of some flavored drink that has a ton of added sugar and lots of empty calories.

Moreover, I believe that giving children the kind of milk option they like can encourage participation in the school meals program, and that's my goal. Most of the children I see

are from low-income families. In a study of low-income children, 77% of their daily milk intake comes from school meals (Cullen et al, 2016).

Bringing back milk options that kids like can mean that, while they come back for the milk, they'll stay for the meal, which is my goal. The milk might be a delivery vehicle, as with whole grain cereal and fruit, or simply a great thirst quencher at lunch, that completes the meal. That school meal – breakfast or lunch – may be the most balanced meal they have all day.

In summary, credible evidence has shown that limiting dairy milk options in schools is a solution in search of a problem. Returning Whole (3.25%) and Reduced Fat (2%) milk to school meals and child nutrition by enacting the Whole Milk for Healthy Kids Act, along with low-fat (1%) and non-fat milk, including lactose-free versions, which are already in these programs, provides more milk options for children to choose from, which will make it easier for them to get all of the nutrients they need in their diets.

REFERENCES

Australian Heart Foundation Position Statement on Heart Healthy Eating:

<https://assets.contentstack.io/v3/assets/blt8a393bb3b76c0ede/blt9ddc5fa8a9af4f6d/Dairy-Heart-Healthy-Eating-Dietary-Position-Statement.pdf>

Cullen KW, Chen TA. The contribution of the USDA school breakfast and lunch program meals to student daily dietary intake. *Prev Med Rep.* 2016 Nov 28;5:82-85. doi: 10.1016/j.pmedr.2016.11.016.

Dietary Guidelines for Americans, 2020-2025, available at:

<https://www.dietaryguidelines.gov/>

Dietary Guidelines Advisory Committee. 2020. Scientific Report of the 2020 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Agriculture and the Secretary of Health and Human Services. Online Materials, Table 1.15. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. Available at:

<https://www.dietaryguidelines.gov/2020-advisory-committee-report>

Dougkas A, Barr S, Reddy S, Summerbell CD. A critical review of the role of milk and other dairy products in the development of obesity in children and adolescents. *Nutr Res Rev.* 2019 Jun;32(1):106-127. doi: 10.1017/S0954422418000227. Epub 2018 Nov 27. PMID: 30477600; PMCID: PMC6536827.

Dunne S, McGillicuddy FC, Gibney ER, Feeney EL. Role of food matrix in modulating dairy fat induced changes in lipoprotein particle size distribution in a human intervention. *Am J Clin Nutr.* 2023 Jan;117(1):111-120. doi: 10.1016/j.ajcnut.2022.10.002. Epub 2022 Dec 15. PMID: 36789929.

Kang K, Sotunde OF, Weiler HA. Effects of Milk and Milk-Product Consumption on Growth among Children and Adolescents Aged 6-18 Years: A Meta-Analysis of Randomized Controlled Trials. *Adv Nutr.* 2019 Mar 1;10(2):250-261. doi: 10.1093/advances/nmy081. PMID: 30839054; PMCID: PMC6416041.

Nicholl A, Deering KE, Evelegh K, et al. Whole-fat dairy products do not adversely affect adiposity or cardiometabolic risk factors in children in the Milky Way Study: a double-blind randomized controlled pilot study. *Am J Clin Nutr.* 2021;114(6):2025–2042. doi:10.1093/ajcn/nqab288.

O'Sullivan TA, Schmidt KA, Kratz M. Whole-Fat or Reduced-Fat Dairy Product Intake, Adiposity, and Cardiometabolic Health in Children: A Systematic Review. *Adv Nutr.* 2020 Jul 1;11(4):928-950. doi: 10.1093/advances/nmaa011. PMID: 32119732; PMCID: PMC7360438.

Pereira MA, Jacobs DR Jr, Van Horn L, Slattery ML, Kartashov AI, Ludwig DS. Dairy consumption, obesity, and the insulin resistance syndrome in young adults: the CARDIA Study. *JAMA.* 2002 Apr 24;287(16):2081-9. doi: 10.1001/jama.287.16.2081. PMID: 11966382.

Schmidt KA, Cromer G, Burhans MS, et al. Impact of low-fat and full-fat dairy foods on fasting lipid profile and blood pressure: Exploratory endpoints of a randomized controlled trial. *Am J Clin Nutr.* 2021;114:882–892. doi:10.1093/ajcn/nqab131.

Scientific Report of the 2025 Dietary Guidelines Advisory Committee:
<https://www.dietaryguidelines.gov/2025-advisory-committee-report>