# Race and the New School Milk Requirements 

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In July 2022, transitional U.S. Department of Agriculture (USDA) requirements for milk in school meals went into effect. ${ }^{1}$ These requirements further ensconce milk as a nutritional cornerstone of the USDA's school breakfast and lunch programs, with milk serving as a key source of calcium, vitamin D , potassium, and calories for children. ${ }^{2}$ Though the federal government has long promoted milk in schools, the new requirements go beyond simply encouraging students to drink milk. Under the now-current rules, schools "must offer" students milk in school breakfasts and lunches. ${ }^{3}$ At the same time, schools "must not promote or offer water, juice, or any other beverage as an alternative selection to fluid milk." ${ }^{4}$ To meet students' nutritional needs, schools can provide milk and only milk.

For most White students, this emphasis on milk may be frustrating, but little more. Around $90 \%$ of people of Northern European and Scandinavian ancestry are lactose tolerant, meaning that they can digest milk. ${ }^{5}$ For Black, Hispanic, Jewish, Asian, and Native American students, the USDA's milk rules pose more

[^0]of a problem. Only about half of African-American children can digest milk, ${ }^{6}$ with similar rates of lactose tolerance observed among Mexican Americans. ${ }^{7}$ That number is lower for American Jews (30\%), Asian Americans (10\%), Southeast Asians (2\%), and Native Americans (between $0-15 \%$, depending on tribal affiliation). ${ }^{8}$ There is a stark racial divide in lactose tolerance in the United States: most White children are lactose tolerant; most non-White children are not.

The USDA's nutritional requirements do little to account for these differences. The federal government dictates that schools must include milk with school lunches and breakfasts and that schools cannot offer a milk alternative, which applies with equal force in White communities as it does in non-White ones. Indeed, the only exception to this rule is for students who obtain a written statement from their parents or guardians, or from a doctor. ${ }^{9}$ Even then, the school can only provide a milk substitute that meets a designated set of nutritional standards-which most soymilks, almond milks, coconut milks, and oat milks do not. ${ }^{10}$

There are entire schools, and even entire school districts, in which few students are lactose tolerant. ${ }^{11}$ Although it is possible that some students in such communities will obtain the requisite statements from their parents or physicians to be exempted from the USDA's milk requirements, it is unlikely that all or most such students will. Many students may not even know they are lactose intolerant: because lactose intolerance presents in childhood (infants are nearly all lactose tolerant), few students will enter school knowing that they cannot digest milk. Nor, for that matter, is it likely that schools will consistently provide milk alternatives to those students who furnish the required parent or physician statement. Public school employees are already stretched thin and burdened by red tape, with the resulting failures too often falling on the shoulders of students

[^1]with additional or exceptional needs. Indeed, school districts are increasingly relying on student workers to fill the crucial staff roles tasked with tracking and honoring these dietary exceptions. ${ }^{12}$

Lactose intolerance is not typically a dangerous condition, but it can be a distressing one. Symptoms include nausea, cramps, vomiting, gas, bloating, and diarrhea, any of which can be severe following the consumption of even only a small amount of lactose. ${ }^{13}$ These symptoms typically present within thirty minutes to two hours-well within the school day, when students are learning. And although different dairy products contain different amounts of lactose, milk contains the most of all, about 12-13 grams of lactose per carton of skim or whole milk. ${ }^{14}$ The USDA's strict milk requirements thus present students with a choice between eating a nutritionally unsound meal and physical effects ranging from discomfort to repeated trips to the bathroom or school nurse.

And this may not, in fact, be the worst of it for lactose-intolerant students. Many schools interpret the USDA's guidelines to give students no choice at all, and require all students to not only take milk in school meals but to actually drink it. ${ }^{15}$ Yet lactose-intolerant students who drink milk may get little nutritional benefit from doing so, feeling all of the discomforts of lactose intolerance without reaping the nutritional benefits of milk: "Studies have suggested that some of the nutritional benefits of milk may be lost when a lactase-deficient individual consumes milk. Not only does this person fail to receive the calories normally supplied by the undigested carbohydrates; resultant diarrhea may lead to loss of protein as well."16

The USDA's reliance on milk to meet the nutritional needs of students has never been solely about the needs of students. The National School Lunch Program was established in 1946 with a "clear economic goal" of "encouraging domestic consumption of the nation's agricultural commodities" and "avoiding waste of surplus crops." ${ }^{17}$ Milk is no exception. There has been a "decrease in

[^2]demand for dairy products over the past forty years," which has led to an "oversupply of milk that the USDA must dispose of." ${ }^{18}$ The USDA does so primarily through its school meals programs and the Special Milk Program, which subsidizes milk in schools, childcare institutions, and eligible camps that do not participate in the federal meals programs. ${ }^{19}$ Indeed, disposing of surplus dairy is such a significant factor in the USDA's policymaking around milk that one scholar has pointed to it as "the best example of the surplus products in school feeding programs. ${ }^{\prime 20}$ There are countless ways of meeting students' nutritional needs that do not rely on a product that few non-White students can digest-but none that so effectively support the dairy industry.

That the USDA relies on these meal programs to dispose of excess commodities is not a reflection of the programs' unimportance. For many students eligible for free meals, $70 \%$ of whom are not White, school breakfasts and lunches provide most if not all of their daily calorie consumption. ${ }^{21}$ Indeed, by some estimates, "six to eight million Black students' and thirteen million students of color's diets' consist almost entirely of what the USDA feeds them at school. ${ }^{" 22}$ This is all to say, the stakes of these programs are high. ${ }^{23}$

The USDA's milk requirements are not set in stone for either the mediumor long-term future. The current restrictions are part of the agency's "transitional standards," which will be in effect for only one or two years: the standards are intended to "give schools a clear path forward as they build back better from the pandemic." ${ }^{24}$ This presents an opportunity for foundational change. At an absolute minimum, the USDA should reverse its current default position that schools cannot provide milk alternatives as a matter of course. Making milk alternatives available to only those who furnish written exceptions makes little sense in a system in which there are entire schools and districts in which few students can digest milk.

Such a reform should, moreover, be coupled with a change in the USDA's reimbursement rates to better facilitate schools in providing students with milk alternatives. As part of its school meals programs and the Special Milk Program,

[^3]the USDA reimburses schools for a portion of the cost of milk purchased. Milk replacements, however, tend to be significantly more expensive than regular milk. That is particularly true for lactose-free milk, which is the one milk alternative currently permitted by the USDA's requirements-but is rarely served in schools due to its high cost: lactose-free milk typically costs 200-250\% what regular milk costs. ${ }^{25}$ The USDA does not compensate for such price differences in its reimbursements provided to schools. For example, the current reimbursement formula for many schools participating in the Special Milk Program is $\$ 0.27$ per half-pint milk served, regardless of what kind of milk is served. ${ }^{26}$ This means that a school wishing to accommodate lactose-intolerant students must make up for those costs by drawing on other sources of funding. Few schools currently do so for lactose-free milk, and there is little reason to believe that they will for soymilk, oat milk, coconut milk, almond milk, or other milk alternatives.

Each of these reforms is within the USDA's statutory mandate ${ }^{27}$-but they may not go far enough. Ideally, the statute should be amended to allow the USDA to do more than simply broaden its milk requirement and reimbursement scheme. The USDA should be permitted to design an approach to school breakfasts and lunches that is more inclusive at the outset, and be built around nutritional guidelines that do not require milk to meet the nutritional needs of students. ${ }^{28}$ Milk currently serves as an important source of calcium, protein, and calories in school meals, none of which are particularly challenging nutritional needs to fill. Nuts, beans, seeds, and tofu, for example, are all naturally high in protein, calcium, and calories-and are easily incorporated into a range of meals. ${ }^{29}$ And numerous additional foods are fortified with calcium, including orange juice and cereal, and protein is found in a wide range of dietary items, such as meat, fish,

[^4]eggs, and cereal. ${ }^{30}$ Milk is far from the USDA's only option for ensuring that students eat nutritionally complete meals.

The U.S. government puts significant resources into ensuring that K-12 children are adequately fed in schools, as it should. But we can do better. So long as milk is the centerpiece of the USDA's nutritional plan, students who cannot digest milk-predominantly non-White students-will be forced to seek accommodations and exceptions and, all too often, be left behind.


[^0]:    DOI: https://doi.org/10.15779/Z38P26Q48N
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    1. USDA, MEAL REQUirements Under the National School Lunch Program and SCHOOL BREAKFAST PROGRAM: QUESTIONS AND ANSWERS FOR PROGRAM OPERATORS UPDATED TO Support the Transitional Standards for Milk, Whole Grains, and Sodium Effective July 1,2022 ("MEAL REQUIREMENTS Q\&A") 1 (2022). The transitional requirements will be in effect for school years 2022-2023 and 2023-2024, at which point a new long-term rule will replace them.
    2. 7 C.F.R. 210 at *6993.
    3. Id.
    4. Id.
    5. Gabrielle Bloom and Paul W. Sherman, Dairying Barriers Affect the Distribution of Lactose Malabsorption, 26 EVOLUTION \& HUMAN BEHAVIOR 301.e1, 301.el (2005). Moreover, people of Caucasian descent tend to develop the symptoms of lactose intolerance at more advanced ages. Sam Baker, How Race and Age Factor in Lactose Intolerance, KERA NEWs (Mar. 21, 2016, 8:20 AM), https://www.keranews.org/health-science-tech/2016-03-21/how-race-and-age-factor-in-lactoseintolerance.
[^1]:    6. Razib Khan, Lactose Tolerance/Intolerance, GENE EXPRESSION (Jan. 19, 2004), http://www.gnxp.com/MT2/archives/001681.html.
    7. Gabrielle Bloom and Paul W. Sherman, Dairying Barriers Affect the Distribution of Lactose Malabsorption, 26 Evolution \& Human Behavior 301.e1, $301 . e 21$ (2005).
    8. Id. These reported rates are of adults. Rates of lactose tolerance among school-aged children are likely higher than adults, but still low. Yuexin Yang, Mei He, Hongmei Cui, Lihua Bian, and Zhu Wang, The Prevalence of Lactase Deficiency and Lactose Intolerance in Chinese Children of Different Ages, 113 Chinese Med. J. 1129 (2000), (reporting that $60 \%$ of Chinese children in the 3-5 year-old age range could digest milk, but only $13 \%$ in the $7-8$ year-old range).
    9. MEAL REQUIREMENTS Q\&A, supra note 1, at 27-28. Schools "may" also provide lactosefree milk that meets designated nutritional standards. See 7 C.F.R. § 215.7a.
    10. 7 CFR § $210.10(\mathrm{~d})(3)$ (setting out nutritional requirements). Soymilk comes close. See USDA, Food Data Central Search Results, Soymilk, https://fdc.nal.usda.gov/fdc-app.html\#/fooddetails/1097542/nutrients.
    11. I taught in one. The Crazy Horse School District, where I taught before law school, is located on the Pine Ridge Reservation and has a $100 \%$ American Indian/Alaska Native enrollment. See National Center for Education Statistics, Search for Public Schools, Crazy Horse School, https://nces.ed.gov/ccd/schoolsearch/school_detail.asp?Search=1\&DistrictID=5900113\&ID=5900113 00114; see Note 8 (reporting rates of lactose intolerance for Native Americans as high as $100 \%$ ). My students were regularly uncomfortable after school breakfasts and lunches.
[^2]:    12. Leticia Miranda, Short-Staffed School Districts are Hiring Students to Serve Lunch and Answer Phones, NBC NEWS (Aug. 27, 2022), https://www.nbcnews.com/business/economy/short-staffed-school-districts-are-hiring-students-serve-lunch-rena44905.
    13. Lactose Intolerance, MAYO CLINIC, https://www.mayoclinic.org/diseases-conditions/lactose-intolerance/symptoms-causes/syc-20374232.
    14. Foods High in Lactose, WEBMD (Oct. 22, 2022), https://www.webmd.com/diet/foods-high-in-lactose.
    15. See, e.g., Alisa Fleming, Does the School Lunch Program Have the Right to Require Kids to Take Milk?, GoDAIryFree (Aug. 16, 2010),
    https://www.godairyfree.org/ask-alisa/ask-alisa-does-the-school-lunch-program-have-the-right-to-require-kids-to-take-milk; Interviews with teachers on the Pine Ridge Reservation; Interviews with teachers on the Rosebud Reservation.
    16. Frank Oski, Don’t Drink Your Milk (1996); see also Bernard Cochet, André Jung, Marthe Griessen, Paul Barthholdi, Philippe Schaller, and Alfred Donath, Effects of Lactose on Intestinal Calcium Absorption in Normal and Lactase-Deficient Subjects, 84 GASTROENTEROLOGY 935 (1983) (finding that "the effect of lactose on calcium absorption is dependent on intestinal lactase activity").
    17. J. Amy Dillard, Sloppy Joe, Slop, Sloppy Joe: How USDA Commodities Dumping Ruined the National School Lunch Program, 87 OR. L. REV. 221, 229 (2008).
[^3]:    18. Andrea Freeman, Unconstitutional Food Inequality, 55 HARV. C.R.-C.L. L. REV. 840, 882 (2020).
    19. Id. (recognizing that " $[\mathrm{m}] \mathrm{ilk}$ is the only subsidized commodity with its own program").
    20. J. Amy Dillard, Sloppy Joe, Slop, Sloppy Joe: How USDA Commodities Dumping Ruined the National School Lunch Program, 87 OR. L. REV. 221, 229 (2008).
    21. Andrea Freeman, Unconstitutional Food Inequality, 55 HARV. C.R.-C.L. L. REV. 840, 880 (2020).
    22. Id. at 880-81.
    23. In addition to the in-school distraction of milk-related discomfort, an emerging body of research attributes a range of longer-term physical and cognitive effects for students who do not get enough to eat, including deficits in alertness, attention, memory, visual processing, and problem solving. See, e.g., Charles E. Basch, Breakfast and the Achievement Gap Among Urban Minority Youth, 81 J. SCHOOL HEALTH, 635, 637 (2001) (collecting studies).
    24. USDA, USDA Helps Schools Build Back Better, Issues Transitional Nutrition Standards for Coming School Years, Food And Nutrition Service, U.S. DEPARTMENT OF AGriculture (Feb. 4, 2022), https://www.fns.usda.gov/news-item/usda-0037.22.
[^4]:    25. Compare, e.g., Lucerne Milk Reduced Fat 2\% Milkfat - 64 Fl. Oz., Jewel OsCO, https://www.jewelosco.com/shop/product-details.136010016.html (\$1.99/ea) with Lucerne Milk Reduced Fat Lactose Free - 64 Fl. Oz., Jewel OSCO, https://www.jewelosco.com/shop/productdetails. $136010478 . \mathrm{html}$ (\$4.99/ea). Lactose-free milk may also be a disfavored option due to concerns with its taste or even just ignorance as to its fungibility with regular milk. See, e.g., Koushik Adhikari, Lauren Dooley, Edgar Chambers IV, Natnicha Bhumiratana, Sensory Characteristics of Commercial Lactose-Free Milks Manufactured in the United States, 43 LWT - Food Science \& TECH. 113 (2010).
    26. Fed. Reg. Vol. 87 No. 142, 44329-44336. The only instance in which the increased cost of a milk alternative impacts the reimbursement provided to schools is for schools offering free milk through the Special Milk Program, and even then, the USDA's reimbursement formula (which is based on the "average cost of a half-pint of milk") fails to fully account for the additional costs. Id.
    27. See 42 U.S.C. § 1758.
    28. Indeed, there is substantial disagreement about whether the nutritional benefits of milk outweigh its costs, even for those students who can digest milk. See, e.g., Andrea Freeman, The Unbearable Whiteness of Milk: Food Oppression and the USDA, 3 U.C. IRVINE L. REV. 1251, 1252 (2013) (decrying milk from a nutritional standpoint).
    29. Health Foods High in Calcium, WEBMD (Oct. 22, 2020), https://www.webmd.com/diet/foods-high-in-calcium.
