Fact Sheet:
Balancing Food Education and Nutrition Goals in School Meal Programs

School meals are a crucial point of leverage to instill healthy eating habits at a young age and combat diet-related disease, especially for the many students who rely on free and reduced-price school meals as their primary source of nutrition. USDA has rightly recognized that school meals not only need to be healthy but need to help children recognize what healthy food looks like beyond the cafeteria. However, current FNS regulations requiring plant-based protein foods to be “visually recognizable” create barriers for school food operators to serve healthy, plant-based sources of protein. By updating these regulations, FNS can allow greater variety in healthy choices while maintaining its goal to teach children how to build a healthy plate.

More Plant-Based Proteins in School Meals are Needed to Align with U.S. Dietary Guidelines and Accommodate All Students

The Dietary Guidelines for Americans (DGA) notes that while youth meet or exceed the recommended servings for meats, poultry, and eggs, they are under consuming vegetables, beans, peas, lentils, nuts, seeds, and soy products. The DGA specifically states that “replacing processed or high fat meats with beans, peas and lentils” would help to “increase dietary fiber, a dietary component of public health concern.” Yet, Friends of the Earth’s research has shown that animal products dominate school menus, and very few plant-based options are available in most school districts, due in part to barriers created by USDA’s school nutrition standards and meal pattern guidance. Further, students are increasingly asking for plant-based options at school, and a lack of plant-based entrees is forcing many children to bring lunch from home, have incomplete school meals, or skip school meals altogether.

FNS’ Current “Visually Recognizable” Requirements Create Barriers to Expanding Plant-Based Food Options

In August 2016, FNS published guidance requiring tofu and soy products to be “visually recognized” as a meat substitute to fully credit in the School Meal Programs. FNS expanded the scope of this requirement in recent guidance to include all food components, providing that if a “dish does not contain at least ⅛ cup of a recognizable component then the blended foods do not contribute to the meal requirements.”

FNS has already relaxed guidance to permit pureed beans/peas/lentils added to smoothies as well as red lentil pasta to credit as a vegetable towards the weekly ½ cup legumes requirement to increase options for operators to meet vegetable requirements. However, this flexibility does not allow either the smoothie or lentil pasta to meet the full M/MA component standard, even when served in sufficient quantities, unless served with cheese, meat, or “recognized” meat alternate. FNS was right to provide these flexibilities for pulses in smoothies and red lentil pasta to count toward the vegetable requirement, but there is no justification for not extending this same flexibility to these foods served as M/MA. It is illogical that a red lentil pasta served with broccoli would not be creditable as M/MA, but a red lentil pasta served with beef would be creditable as M/MA. In fact, the former option is more likely to support DGA recommended intakes of vegetables and fiber-rich proteins, which are both under-consumed by students.

Examples of healthy options that operators indicated they would like to serve if this rule were not in place include:

- Veggies with a dip made of soft tofu
- Pureed bean and lentil soups and dips
- Pasta with red lentil Bolognese
- Lasagna with tofu “ricotta”
- Sweet potato and chickpea tots
- Fruit smoothies with silken tofu
- Chickpea or lentil patties
FNS’ “Visually Recognizable” Requirement May Inadvertently Disincentivize Scratch-Cooking

A result of operating within a complex set of regulations is that many schools have turned to CN-labeled processed foods that they know will meet the guidelines instead of scratch-cooking. This results in the overexposure of children to processed food items that mimic fast food. While the processed foods children see in schools, such as pizza, may be reformulated to have fewer calories, saturated fat, and sodium than restaurant or store-bought pizza, students, unaware of the difference, may be inadvertently conditioned to choose processed items outside of school. Allowing school culinary professionals more flexibility to serve whole plant-based ingredients in a variety of forms will make scratch cooking more approachable for some schools, exposing kids to delicious scratch-cooked foods in school that will inspire them to seek those same foods outside of school.

Children Can Learn Healthy Food Comes in Various Forms

Food recognition for children is generally gained through experience. If children can learn that chicken nuggets contain protein, children can learn that protein can come in the form of a pulse-based pasta as well. In fact, part of what we want to teach kids is that plant-based sources of protein are highly versatile and can come in many forms. If a student does not like the texture of whole black beans in a taco, they may still love a black bean dip. A student might not care for a lentil salad but would love a lentil Bolognese sauce that reminds them of the beef Bolognese they have tried before. If students are exposed to more plant-based options in school and walk away learning how to incorporate a greater variety of healthy foods into their diets in a way that is delicious and appealing, that would be a success for our school meal programs.

FNS Can Allow “Unrecognizable” Pulses and Tofu Products While Still Teaching Children How to Build a Healthy Plate

Friends of the Earth acknowledges that FNS understandably wants to avoid “hiding” healthy foods or reverting to nutrient-based menu planning. Consulting with stakeholders, Friends of the Earth compiled a few considerations for FNS to offer operators more flexibility to credit plant-based sources of protein in different forms while achieving its goals around nutrition education.

1. Allow whole foods to be served in forms that are not visually recognizable. Blended or pureed whole foods retain valuable macronutrients as opposed to extracts or supplements, which can lose vital nutrients during processing.

2. Require that menu items including foods that are not visually recognizable be labeled to include the name of the food that isn’t visually recognizable. For example, the chickpeas in USDA’s tasty tots recipe could credit toward M/MA if the dish is labeled “sweet potato and chickpea tots.”

3. Allow schools to serve foods that are not visually recognizable if the food is likely to be found in that form outside of the cafeteria. For example, students are likely to encounter pureed bean soups and dips outside the cafeteria but probably would not find broccoli blended into a meaty tomato sauce.

4. Allow foods to credit when served in forms that are not visually recognizable only when the dish does not contain more than a de minimis amount of added sugar and saturated fat. This would prevent “hiding” healthy foods in desserts, where the benefits of increasing consumption of whole plant-based foods could be outweighed by the cost of increasing consumption of unhealthy foods like sugar and saturated fats.

In conclusion, by allowing pulses and tofu products to be served in more forms, FNS could foster greater alignment with the Dietary Guidelines, allow school food operators more flexibility and creativity in offering a greater variety of healthy foods, reduce the regulatory complexities that disincentivize scratch-cooking, help to accommodate students who prefer or require plant-based options, and teach students how to make healthy food choices.
I. USDA, FNS, SP53 CACFP 21-2016.


III. Id. at 34.


V. USDA, FNS, supra note i.


VII. Id; See also USDA, FNS Memo SP40 CACFP17 SFSP17-2019, Smoothies Offered in Child Nutrition Programs (Sept. 23, 2019). Available at https://www.fns.usda.gov/cn/smoothies-offered-child-nutrition-programs.


IX. Id; See also, USDA, Food Buying Guide for Children Nutrition Programs: Section 2- Vegetables (last updated 4/19/2022), 2-2, available at https://foodbuyingguide.fns.usda.gov/Appendix/DownLoadFBG.


XII. Slyter K, 8 Proven Tips on How to Get Kids to Eat Healthy (April 1, 2019), Rasmussen University, available at https://www.rasmussen.edu/degrees/education/blog/how-to-get-kids-to-eat-healthy/.
