



I. Introduction – Executive Summary

As our climate crisis intensifies and more than half of Americans suffer from diet-related disease, California’s school nutrition service staff have heeded the urgent call to make school food healthier and more climate-friendly.^{1,2} This report highlights Friends of the Earth’s menu analysis comparing 2019 and 2022 school menu entrées served at the 25 largest school districts across the state. We found that, despite a host of barriers during the coronavirus pandemic, there were remarkable improvements in the frequency, quality and variety of plant-based entrées featured.

In October 2022, 68% of California’s largest school districts served plant-based entrée offerings daily or weekly, compared to only 44% of school districts in October 2019. High school and middle schools noticeably served plant-based offerings more frequently, with 14 out of 25 schools (56%) offering a plant-based entrée every day compared to 9 out of 25 (36%) in 2019. The number of elementary schools offering weekly plant-based entrées has more than tripled, from 4 out of 25 (16%) of elementary schools in 2019 to 14 out of 25 (56%) in 2022.

Across California, school districts are adding healthier, more ethnically diverse, whole-food, plant-based entrées on menus. These entrées — including tofu Katsu rice bowls, vegetarian lo mein, plant-based tamales and sticky Sichuan dumplings — reflect the diversity of students’ cultural, philosophical, religious, and health preferences. Out of all vegetarian entrée offerings, warm entrées increased by 5%, and in contrast to three years ago, less nutrient-dense nut-butter sandwich offerings decreased by 9%, suggesting an increase in higher-quality plant-based entrée offerings which are heartier and more beneficial for students.

These improvements come amidst major pandemic challenges as well as far-reaching school food

policy reforms from the California legislature that will deliver significant improvements in the quality, sustainability and access to school meals across the state, including:

- Implementation of the Universal Meals Program in 2021, allowing all students to eat breakfast and lunch for free regardless of income status.
- A first-of-its-kind Farm to School Incubator Grant Program, awarding \$25.5 million in 2022 with a priority on sourcing organic and climate-smart food. An additional \$50 million was included in the state budget for farm-to-school programming in 2023-24.
- Historic investments allocated in the state’s school meal programs, including \$600 million to upgrade school kitchen infrastructure and to provide staff training; and \$100 million to implement “school food best practices,” including offering plant-based, sustainably produced and California-grown foods and expanding scratch cooking, as well as accommodating students with restricted diets.

As California continues to lead the way on progressive school food policy reforms, our analysis of California’s school lunch entrées and trends since 2019 suggests that these investments are beginning to pay off but that more work is needed to reduce barriers to serving healthy, climate-friendly, plant-based entrées.

Two notable examples of where more work is needed are the prevalence of processed meat and cheese-heavy entrées. Nearly one in five entrées served in California’s top 25 school districts include processed meat, a known carcinogen. Another concern is the growing number of cheese-based entrées on California’s lunch menus, accounting for 57% of all menu entrées— raising climate concerns that we detail in [Section IV](#).

WHAT IS A PLANT-BASED MEAL?

Plant-based entrées (as opposed to salads or a side of fruit) are the main course of the meal, utilizing beans, peas, lentils and/or soy products as the main protein component. A plant-based meal contains no animal products or byproducts (e.g., no milk, yogurt, cheese or meat products).

Current Plant-Based Trends and Key Findings

Increased Daily Options of Plant Based Entrees

Significantly more districts provided plant-based options daily or weekly in 2022 (68% of districts) compared to 2019 (44% of districts). 14 of the largest 25 school districts offer a plant based meal daily.

Better Quality and Diversity of Plant-Based Options

There are significant improvements in the quality and diversity plant-based entrees, with new items added such as teriyaki tofu, vegan tamales and chana masala.

Increased Number of Plant-Based Entrees

The frequency of plant-based entrees increased by 16%, yet they still account for only 8% of all entrées offered.

Reduced Frequency of Meat-Based Entrees

The frequency of meat-based entrees decreased slightly by 4% yet accounted for nearly half (48%) of all entrées on the menu in 2022.

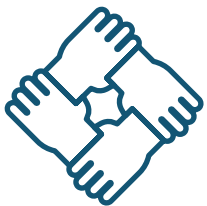
Significant Increase in Processed Meat

The number of entrees with processed meat increased by 11%, to nearly one-fifth (18%) of all entrées offered in 2022.

Menus Frequently Feature Cheese-Heavy Entrees

More the half (57%) all offerings on school menus contain cheese, and some of these also include meat (e.g., pepperoni pizza).

Why Plant-Based Entrées?



FOR EQUITY: Ensuring consistent access to plant-based options helps accommodate students who are following plant-based diets for religious, health, philosophical or other reasons. A recent Chartwells poll found that

37% of students said they would eat school lunch more often if there were more vegetarian and vegan choices. People of Color are three times more likely to follow a plant-based diet than white people, so providing plant-based options is especially important for racial equity.⁴



FOR HEALTH: Leading public health organizations all encourage fiber-rich, plant-forward diets. Expanding plant-based options would foster greater alignment with the Dietary Guidelines

for Americans,⁶ which recommend increasing consumption of beans, peas and lentils; increasing dietary fiber (which comes from plants); and replacing processed meats (e.g., hot dogs, sausages and bacon) with plant-based proteins.



FOR DIETARY NEEDS: Providing dairy-free entrées better meets the dietary needs of a wide variety of students. According to the National Institutes of Health, 95% of Asian Americans, 60 to 80% of African Americans, 80

to 100% of American Indians, and 50 to 80% of Hispanic people are unable to process lactose.⁵



FOR CLIMATE: This generation's students are bringing their climate activism to the cafeteria. Reams of scientific studies^{7,8,9} show that industrial animal agriculture plays a major role in driving climate change and

that plant-rich diets are a highly effective way to reduce our impact on the climate.