

# California Climate-Friendly School Meals Resources & Menu Development

**Presentation for CACFP Roundtable**

**Nora Stewart & Lucy Hicks, Friends of the Earth**







# Support from Friends of the Earth



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# What is Climate-Friendly Food?

- Low carbon and water footprint
  - plant-based and plant-forward
- Produced using organic farming practices that sequester carbon in the soil
- Does not end up in the landfill
  - includes packaging and distribution

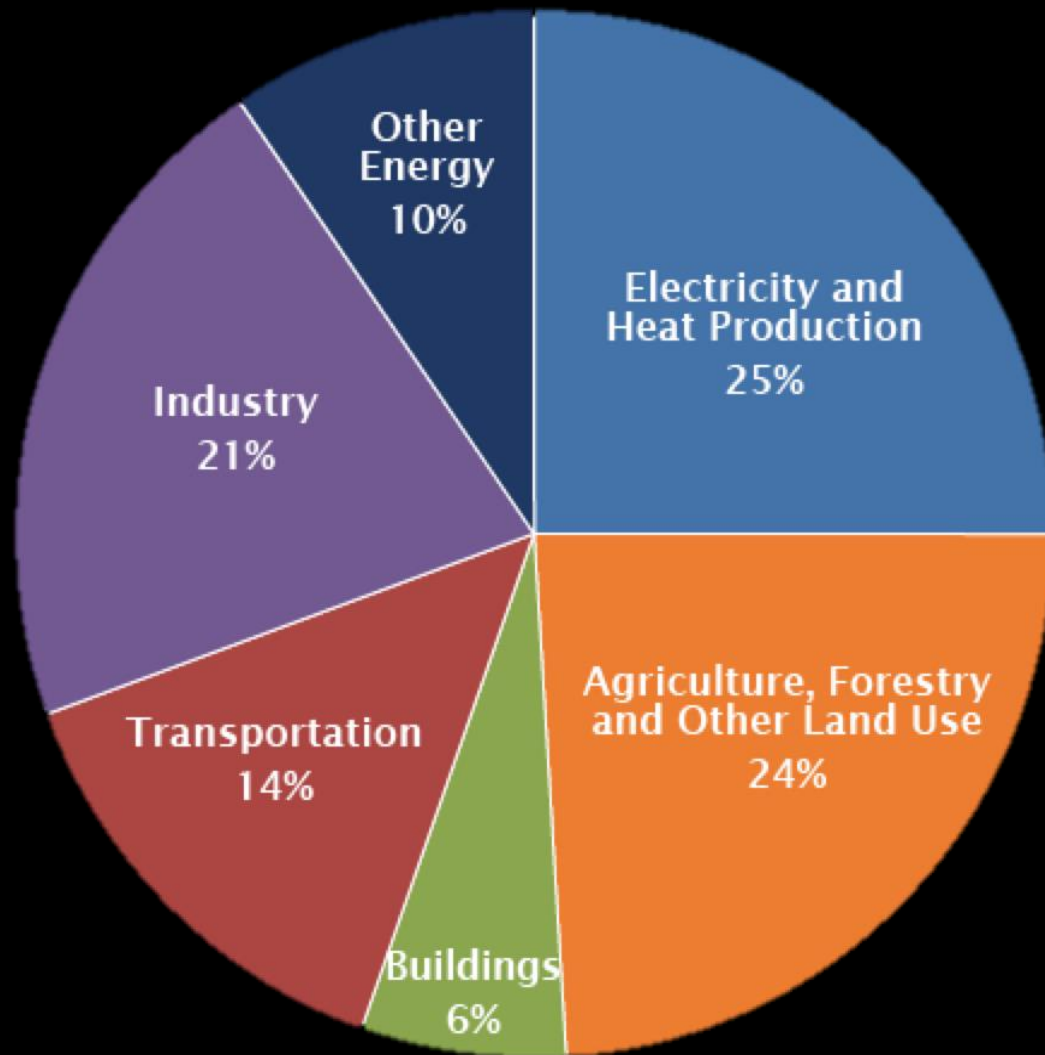


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**Food is a major driver  
of climate change**

Source: Environmental Protection Agency (EPA)



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14.5 percent of global emissions:



Livestock sector

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Exhaust from  
all vehicles

#WFD2016 | Source: [chathamhouse.org/publication/changing-climate-changing-diets](http://chathamhouse.org/publication/changing-climate-changing-diets)

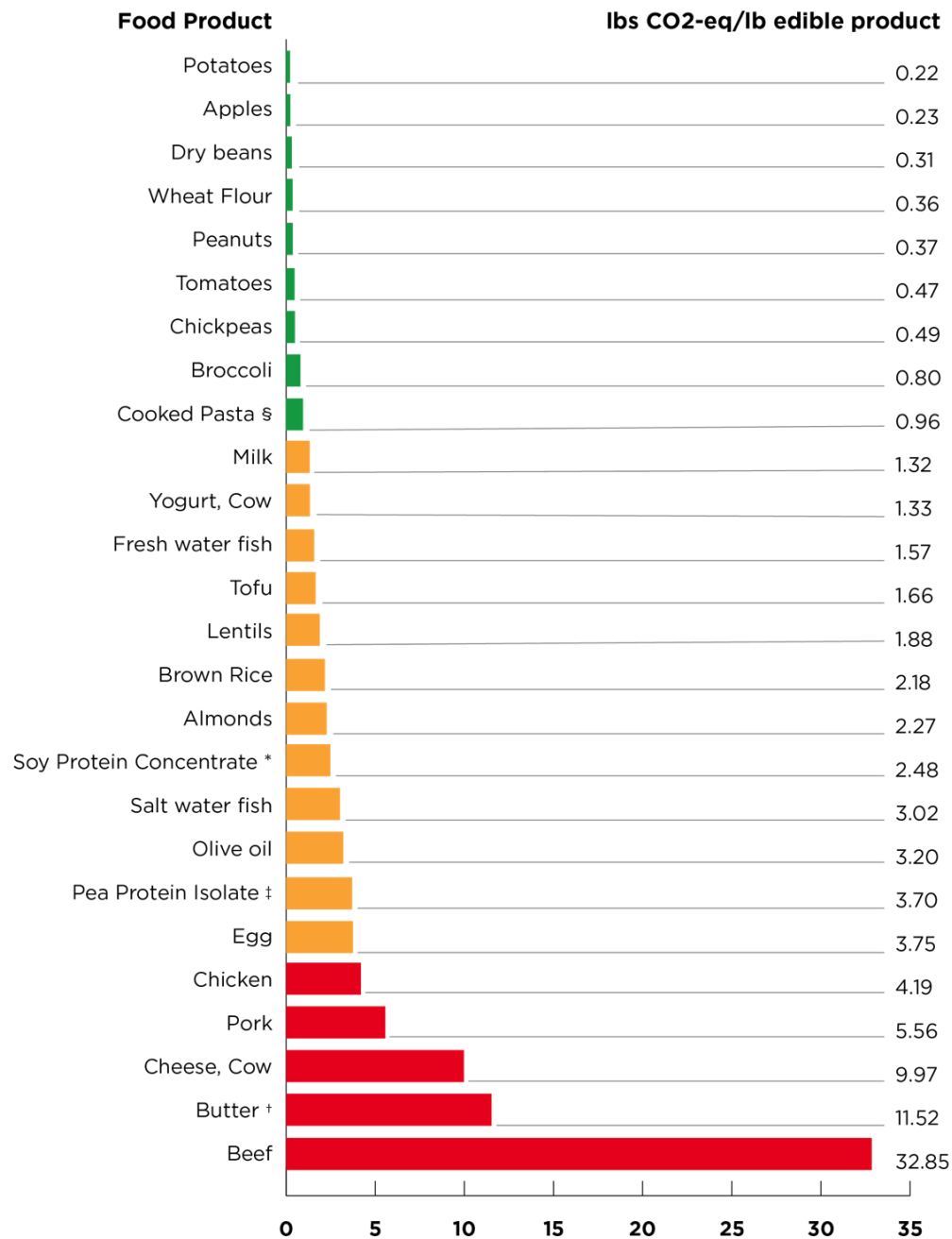
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Not all protein is  
created equal

**BEEF** has 15-100x the carbon  
footprint of beans & lentils

Source: Friends of the Earth, using data from Heller (2018)



## School Food Makes a HUGE Difference!

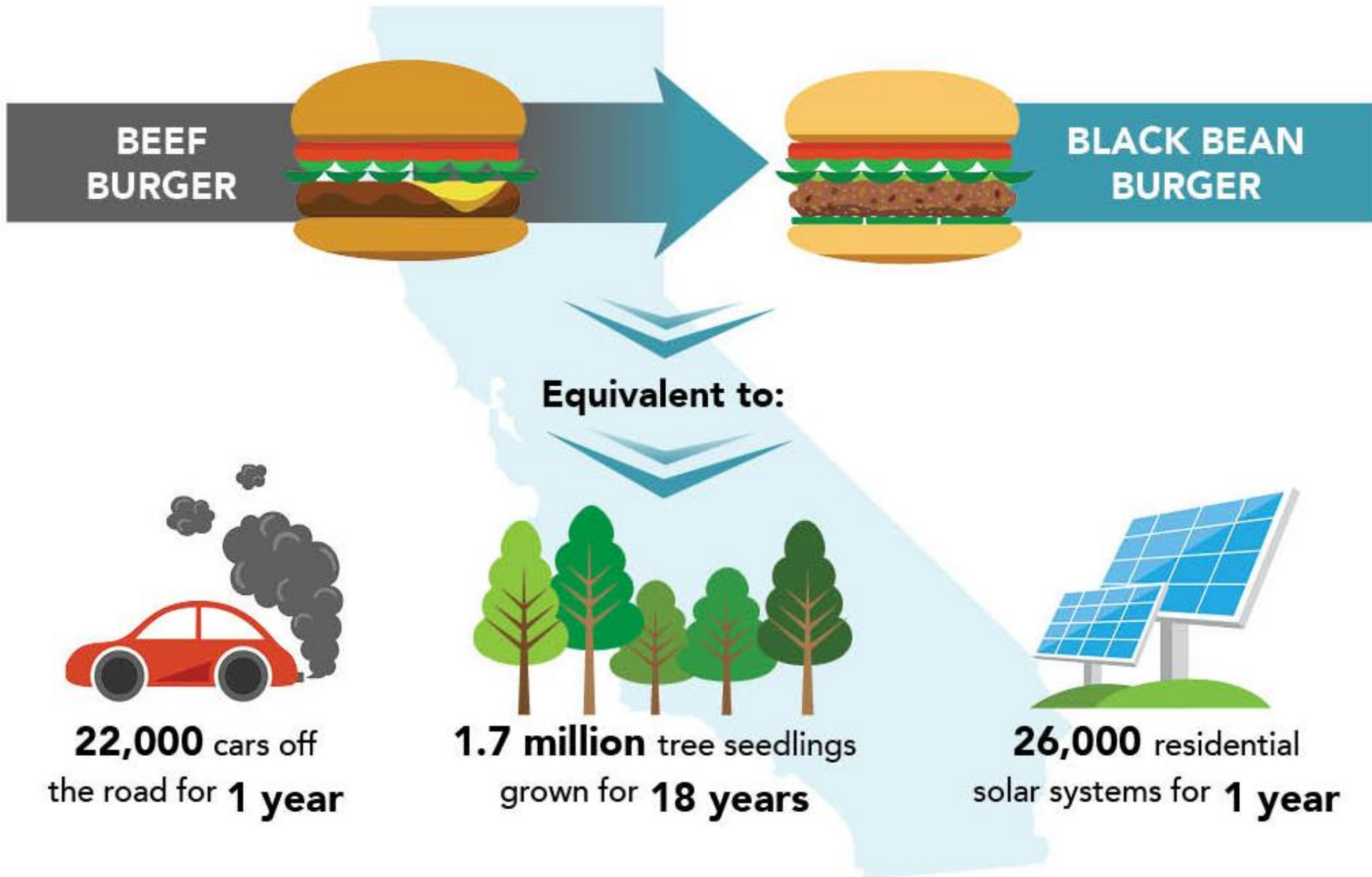
- California schools supply **540 million school lunches** every year to nearly 6 million students!
- More than half of students rely on free and reduced-price meals (pre-pandemic) for daily nutrition needs.
- Small shifts = big environmental and health differences!



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If all school districts in California swapped out a beef burger for a black bean burger, on just **one day per month**, it would **save 220 million lbs of CO<sub>2</sub>-eq.**





# Child's Preference & Racial Justice

- Plant-Based options can help children meet their dietary, religious, health or cultural needs.
- The National Institutes of Health estimates that 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. The majority of the global population (~68%) cannot digest lactose.
- Providing healthy, plant-forward school food is a vital tool for mitigating racial health disparities.





# Plant-Based and Plant-Forward?

Plant-based = foods that are entirely derived from plants

- Fruits, vegetables, beans, legumes, grains, etc.



*Lentil burger patty*

Plant-forward = meals that are made up of mostly plants

- Meat, poultry & dairy are treated as sides or condiments, not the main ingredient!



*Mushroom & Beef  
blended burger patty*



# Climate-Friendly School Food Options

## Healthy, Climate-Friendly Options

- Cauliflower Pasta Alfredo
- Vegetable Fajitas
- Chana Masala
- Mexican Rice Bowl
- Spinach, Pesto and Hummus Flatbread
- Less Meat/Better Meat – organic, pasture-raised, non-GMO (e.g., bean and organic beef chili)
- Less processed heat-and-serve Plant-Based Items (e.g., veggie burger)

## Less Healthy, Less Climate-Friendly

- Cheese Pizza
- Bean and Cheese Burrito
- Uncrustables
- PB&J
- Mozzarella Cheese Stick
- Highly processed foods (e.g., plant-based chicken nuggets)







# Barriers and Challenges

- Student Acceptance
- Cost
- Procurement
- Kitchen infrastructure
- Staffing



Kitchen staff at Tahoe Truckee USD prepare plant-based salads to-go, using locally grown, organic produce during COVID-19.



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# Finding Recipes That Work

- Culturally appropriate menu items
- Condiment or "flavor" stations
- Plant-based recipes that are popular with students! High take-rate



Sampling the Venice Beach Pasta Bake at Riverside USD, scratch-made with plant-based crumbles.



Vacaville USD purchased plant-based tamales from Alicia's Tamales Los Mayas!



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# Marketing Strategies

**This Travelin Taco**  
**is fighting**  
**climate change!**  
Try a Travelin Taco!

**Wow!**



ESD KIDS  


By using beans in our Travelin Taco we are keeping 82 metric tons of CO2 out of our atmosphere!  
Over the span of a school year this has the same impact as NOT burning 90,000 pounds of coal.

**Thai Basil Lentil Burger**  
Made with red lentils from Kandarian Organic Farm in Los Osos and buns from Edna's Bakery!



FOOD MATTERS  


**Lentil burgers are better for us and the planet!**



Uses 60% less water



16x Fewer Greenhouse Gas Emissions



Healthier For Us

When compared to beef burgers

**WHAT YOU EAT MAKES A DIFFERENCE!**  
*By serving **Mushroom Blended Burgers**, our district generates environmental savings equivalent to...*





**WATER**  
212,000 showers



**MILES DRIVEN**  
driving 620,000 miles



**COAL BURNED**  
275,000 pounds



**SMARTPHONES CHARGED**  
32,000,000 phones

 Calculations were based off the number of mushroom blended burgers served during the school year at San Diego Unified.  




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# School Districts Making the Shift!



Roasting winter squash at  
Encinitas Union Elementary



The very photogenic Thai  
Basil Lentil Burger from  
San Luis Coastal USD



Sampling the Venice Beach  
Pasta Bake at Riverside USD  
with scratch-made crumbles



Delicious Taco Salad at  
Capistrano USD



# Discussion Questions

- Name, Title, What type of program do you run?
- Are you currently serving plant-based items in your program?
- What goals do you have for serving plant-based items in your program? / Vision / What are your feelings towards climate-friendly food options?
- What challenges are you experiencing? Is it hard to implement with the current meal pattern?
- What kind of resources would be helpful for you in your menu development?





# Getting Started

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# Start Up Strategies

- **Start small:** Add PB items to menu 1x per week
- **Get involved with your kids:** Ask questions
- **Meet with parent groups:** Inspire students to help market PB items
- **Find local farms:** Connect with small local farms for fresh produce options
- **Work with a nutritionist or chef:** Or... if you have one, let them lead the project!



# Popular / Climate- Friendly Plant-Based and Plant- Forward Products

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Daiya Foods - plant-based cheese, burritos, pizza

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Banza Pasta - chickpea pasta, chickpea mac and cheese, chickpea pizza dough

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Hungry Planet – crumbles, patties, chubs, strips, crab cakes, packaged meals

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Hodo Foods – tofu products

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Mindful Meats – Organic, non-GMO beef

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Lightlife – Tofu products, PB pepperoni

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Don Lee Farms – PB black bean burgers, veggie bites, packaged meals

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ZenB Foods – pastas and sauces

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# Popular Climate-Friendly Plant-Based Recipes

- **Cauliflower Pasta Alfredo** – a creamy whole grain or plant-based pasta with a hint of lemon. Popular with K-5 students who like mac and cheese (Santa Barbara USD)
- **Thai Lentil Burger** – a mile-high lentil burger with added fresh vegetables. A hit with older students (San Luis Coastal USD)
- **Mediterranean Flatbread with Hummus** – a whole grain pita with hummus, pesto, tomatoes, and greens. Great grab and go item (Humane Society)
- **Three Bean Chili with Soy Chorizo** – hearty chili with kidney, garbanzo, and pinto beans and soy chorizo crumbles. A cold weather favorite. Serve with whole grain tortilla chips. (Escondido Union SD)

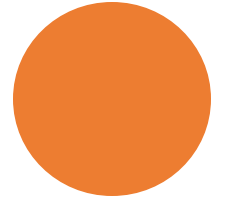


# More Popular Climate Friendly Plant-Based Recipes

- **Chana Masala with Lemon Rice** - garbanzo bean based vegetable stew that is popular with middle schoolers and high schoolers. Purchased from Sukhi's Gourmet Indian Food (Milpitas USD)
- **Mexican Rice Bowl (Vegan Burrito Bowl)** - chocked full of black beans, brown rice, corn salsa, and grilled vegetables. Similar to popular restaurant bowls (Campbell Union HSD)
- **Asian Pasta Salad** – crunchy whole grain or PB pasta salad with a ginger, lime, sesame dressing. Spring and summer favorite (Santa Barbara USD)
- **Black Bean Empanada** – whole grain calzone dough filled with black beans and Mexican spices. From Chef Ann Foundation (Brentwood USD)

# Strategies for Organic Purchasing

- Prioritize the Dirty Dozen list
- Peak/In-Season Purchasing
- "Less Meat, Better Meat"
- Plant-forward meals often cost less
- Buy in bulk – ie. bulk organic lentils
- Use general funds for organic priority items



## ORGANIC: THE DIRTY DOZEN

	Strawberries	#7		Peaches
	Spinach	#8		Cherries
	Kale	#9		Pears
	Leafy Greens	#10		Tomatoes
	Apples	#11		Celery
	Grapes	#12		Potatoes

Environmental Working Group (2020)



# Friends of the Earth Resources

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# Sign up for our Quarterly Newsletter!

<https://bit.ly/38lJeIG>

*Stay up-to-date on any new resources, opportunities, and key updates  
on all-things climate-friendly school food.*



# FOE Reports!

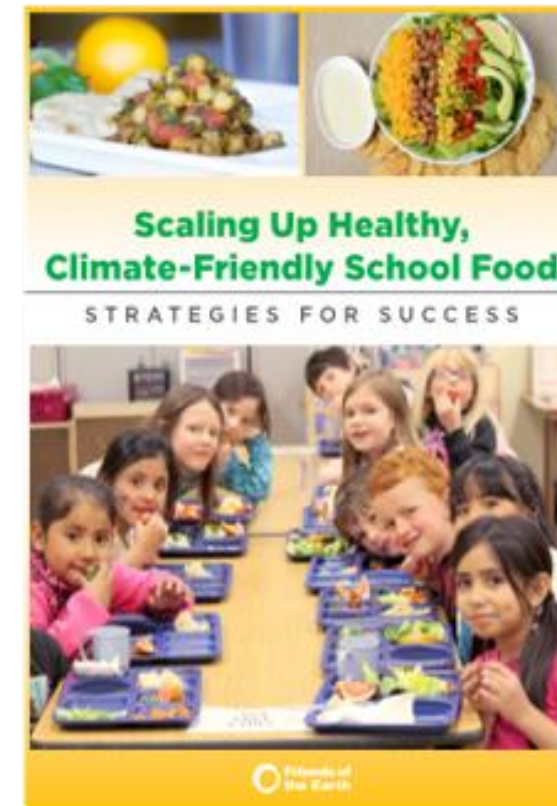


## Organic School Food: A Roadmap for Success



## The State of School Lunch in California

Opportunities for Improving the Health and  
Environmental Profile of School Food



## Scaling Up Healthy, Climate-Friendly School Food

STRATEGIES FOR SUCCESS



Climate-Friendly School Food Program Website:  
<https://foe.org/projects/school-food-purchasing/>



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# School District Case Studies

- San Luis Coastal USD
- West Contra Costa USD
- Encinitas Union Elementary
- Natomas USD
- Tahoe Truckee USD
- Morgan Hill USD
- Riverside USD
- San Francisco USD
- Novato USD
- Santa Barbara USD
- Boulder Valley SD, CO
- School District of Lee County, FL



## How a Rockstar **Lentil Burger** Inspired More Plant-Forward School Food



### SCHOOL DISTRICT PROFILE

Erin Primer, Director of Food Services  
San Luis Obispo, CA  
15 K-12 schools, 7,801 students  
294,252 lunches served annually (pre-Covid)  
33.7% free & reduced-price meals eligible (pre-Covid)  
Food Service Model: scratch cooking; local and organic farms; local food businesses

### Overview

What started as an experimental menu item shared by a Maine school district, **San Luis Coastal Unified School District (SLCUSD)**'s **Thai Basil Lentil Burger** has become one of the school's most popular plant-forward entrees. Concerned about lower school lunch participation, some school food service directors may be reluctant to offer plant-forward meals. However, many plant-based school lunches, like the Thai Basil Lentil Burger, are proving a big hit for students, school budgets and the planet! This story shows how a tasty, scratch-made, primarily plant-based burger (with egg as the only animal product) can be just as popular, if not more so, than commonly served meat burgers in K-12 schools. It also shows that educating students about how plant-forward foods make a difference for human health and the planet is a powerful motivational tool, especially when paired with fresh delicious menu items.

The **Thai Basil Lentil Burger**, made with locally grown organic lentils, is flavorful, climate-friendly, nutrient-dense, and cost-effective. Launched with other plant-forward menu items during the 2020-21 school year, it was successfully marketed for its wonderful flavor and climate benefits. Complementing the lentil burger, the district included Mighty Mariners chickpea pasta and Black Bean Fajitas in its plant-forward pandemic take-home meal kits. While families were not initially given the plant-forward option, once the lentil burger was introduced (twice a week) with its companion dishes, 30% of families chose the plant-forward meal kit.

Since plant-forward meals were introduced, the district has seen a significant increase in school meal participation. The fresh and local ingredients in these dishes helped boost participation from a few hundred thousand meals each year to more than one million meals annually. In contrast, some school districts that replaced scratch cooking with packaged foods have seen a decline in participation, despite the increased need for food assistance that communities have experienced during the pandemic.



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# Student Action Webpage



Action steps, guides, and other resources for students/student groups wanting to find out more and get involved in climate-friendly school advocacy!

[foe.org/school-food](https://foe.org/school-food)





# Food Service Director Video!

## What is climate-friendly food?



Foods with a low carbon and water footprint.  
(e.g. beans, lentils, veggie burgers)



Foods produced using organic farming  
practices that sequester carbon in the soil.



Foods that don't end up in the landfill.



Meet three Food Service Directors in California who are making climate-friendly, plant-based meals work in their school districts.



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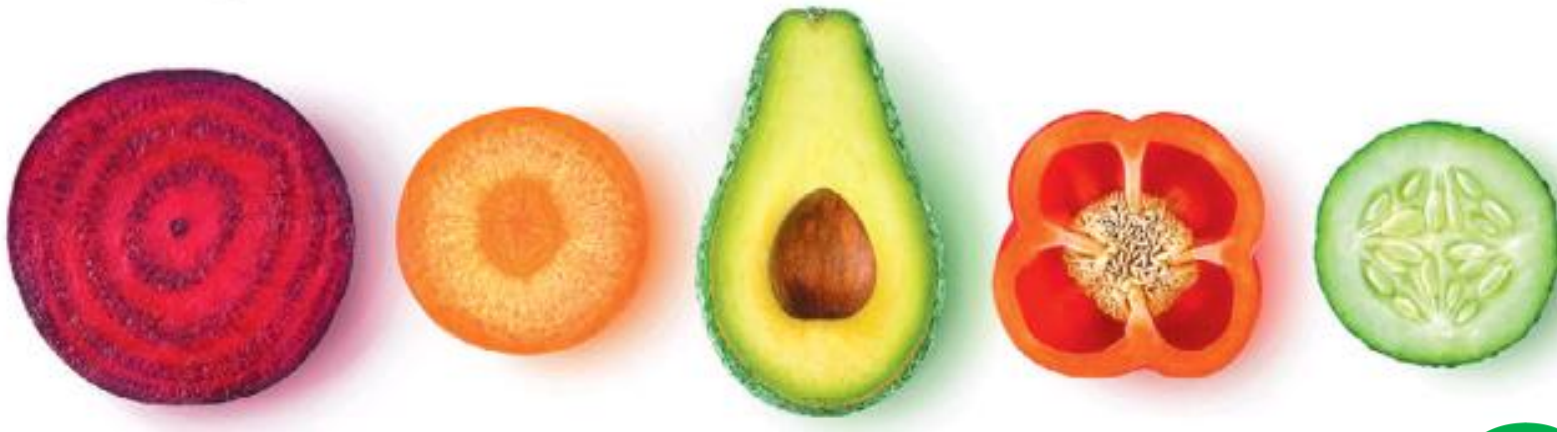
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# Questions?

Contact Nora Stewart or Lucy Hicks  
[nstewart@foe.org](mailto:nstewart@foe.org) | [lhicks@foe.org](mailto:lhicks@foe.org)



Thank you!



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