



**Friends of the Earth**  
**Climate-Friendly Food**  
For Healthy Kids and a Healthy Planet

# 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 entrées. 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 Marinara 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.

## **Thai Basil Lentil Burger**

Made with red lentils from Kandarian Organic Farm in Los Osos and buns from Edna's Bakery!



## Thai Basil Lentil Burger - Ingredients for Success

### Fresh, local and flavorful ingredients:

The Thai Basil Lentil Burger works exceptionally well for students due to its balance of flavors and textures (sweet, savory and tangy; crunchy, soft and moist), colorful visual appeal, fresh ingredients and skillful marketing. Purchasing bulk shelf-stable organic lentils helps make them more affordable. Using fresh-baked instead of frozen bread is an investment in quality that makes a big difference. Eggs and oats help bind the patty together, creating the right moisture balance—not too wet, not too dry. The delicious house-made coleslaw includes shredded cabbage, carrots, cucumbers, and a tart apple, adding a nice crunch atop the patty; and the burger is completed by a fresh, locally baked bun. Yum!

### Why are lentils so cool?

#### 1) They're good for the planet!

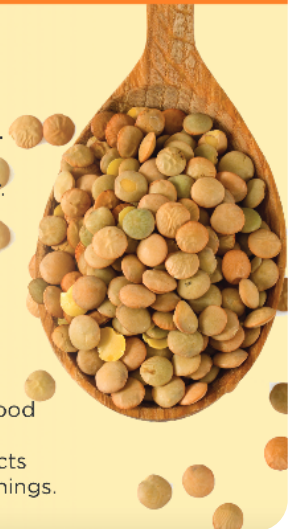
Lentils rank high as one of the best "climate-friendly proteins" with very low greenhouse gas emissions. Lentils, for example, use 65 percent less water and emit 16 times fewer greenhouse gases than beef. Lentils also fix their own nitrogen, reducing the need for chemical fertilizer.

#### 2) They're delicious, nutritious and affordable!

High in protein and fiber, they'll keep you fueled throughout the day while lowering cholesterol and protecting against illnesses like diabetes and colon cancer.

#### 3) Many organic lentils are grown in the USA!

Organic farming protects the earth for a healthy food future. Growing organic lentils builds healthy soils, reduces pesticide use, conserves water, and protects the health of people, pollinators and other living things.



**Organic and local products:** This delicious burger is made with organic red lentils, grown without synthetic pesticides or fertilizers, from Kandarian Organic Farms in Los Osos and fresh burger buns delivered three times a week from Edna's Bakery in San Luis Obispo. The school food service program is committed to supporting local businesses and farms by purchasing locally as much as possible.

**Other procurement sources:** The school district grows its own organic herbs for the burger recipe and relies on Department of Defense (DoD) Fresh, Brown Box and Sysco Ventura for other ingredients, such as apples and eggs.

**More plant-forward menu items:** Other plant-forward cost-effective menu items offered in the meal kit which gained popularity among students include Mighty Marinara chickpea pasta, Black Bean Fajitas, as well as a Garden Veggie Frittata. The organic pasta used in the first dish is purchased from a local vendor, Etto Pastificio Pasta in Paso Robles, CA, and is delivered in reusable bins, adding to its climate-friendly value.

## Balancing Labor and Cost

**Scratch cooking pays off in greater staff and student satisfaction:** The lentil burger is cost effective. Using her staff to do scratch cooking rather than heat-and-serve, Erin Primer, Director of Nutrition Services, believes that investing in her staff and their skills results in better quality food. For Primer, labor costs are roughly the same for scratch cooking as they are for heat-and-serve. Making scratch cooked food not only guarantees the employees work but also conveys that they and their contributions are valued. Erin has seen both staff and student satisfaction increase with higher quality foods. With more meals served, revenue has grown, in turn increasing the budget to offset any additional costs.





**Cost comparison with other veggie and meat patties:** The lentil burger is cost-competitive with other veggie burgers. A pre-made garden burger purchased by the district previously cost \$1.23 per patty, compared with the lentil burger at \$1.20 a patty. Given the quality, flavor and nutritional value of the scratch-cooked lentil burger, the choice is easy. The freshly made whole wheat buns cost just \$0.21 per bun, while the frozen bread once used by SLCUSD is significantly more expensive at \$0.30 each. The total cost of the lentil burger — including patty, bun and slaw — is \$1.45. A serving of fruit completes the meal at just less than \$.25 each.

Compared to ground beef patties from the USDA Commodity Food Program, scratch-cooked, plant-based burgers are often more expensive. That's because the USDA heavily subsidizes beef (and cattle feed) but does not subsidize lentils and other produce. Despite this disadvantage, when balanced with less costly plant-forward meals, such as the marinara pasta dish, scratch-cooked meals are very affordable.

### Cost comparisons of thai basil lentil burger patty

Product	Per patty cost*
<b>Thai basil lentil burger patty</b> (SLCUSD scratch made)	<b>\$1.20 per patty</b>
<b>Pre-made/package garden burger patty</b> (ready-made)	<b>\$1.23 per patty</b>
<b>Local raw ground beef party</b> (local, not organic, grass-fed, 100% beef patty)	<b>\$1.37 - \$1.47 per patty</b>

\*Prices can vary across different school districts. This data was gathered from San Luis Coastal

**Pandemic meal kits and pantry boxes:** During the pandemic, the lentil burger was part of the plant-forward meal kit rotation, enabling families to prepare this nutritious and tasty meal at home. Providing an easy-to-assemble, fun-to-eat meal kit hit many marks. It was simple to make, delicious, nourishing, healthy and better for the planet. Families received the pre-made patties, heated them up and assembled the burgers with the fresh buns in the kit. More recently, the program evolved to a new model: a weekly pantry box, with no meat or poultry. This plant-forward pantry box, complete with vegetables, fruit, bread, eggs and cheese, all sourced from local producers, has been overwhelmingly well-received. Primer believes the boost in participation is due to these fresh and locally sourced plant-forward healthy food boxes that families value.

## Operational Solutions

**From initial idea to scaling up:** The district's nutrition services staff used simple equipment to enable efficient production of patties and slaw, and solid planning to scale up and make this dish work. At first, nutrition staff determined the lentil burger recipe needed adjusting to improve its appeal. Students and nutrition staff sampled and gave feedback on the taste, texture and presentation. For example, feedback was given on the moisture level and texture of the burger. Cooking the lentils with just the right amount of time and water is key to creating a moist (but not mushy!) patty consistency.

***"Without taking risks, evolution can't happen. Taking risks means sometimes you fail in the short term to succeed in the long term."***

– Erin Primer,  
Director of Food Services

**Allowing a graceful learning curve:** The district encountered some tough trials in developing the lentil burger. At first, they undercooked the lentils, then added too much water. They initially sourced a white-fleshed Japanese sweet potato, which affected the texture and appearance, before determining that an orange-colored garnet yam had the right color and texture. Being willing to try new things enabled them to grow. For Primer, "Without taking risks, evolution can't happen. Taking risks means sometimes you fail in the short term to succeed in the long term." Primer and her staff allow themselves a kind of grace to make mistakes and improve.

**Staff training and simple equipment investments are key to success:** Staff training was essential to building scratch cooking skills and ensuring product quality and consistency. Staff learned to follow recipes, use the right measurements, handle food safely and store food correctly. Erin and her team have an incredibly positive "can-do" attitude toward improving and developing their menus. The team gives themselves grace when it comes to developing new skills to match their ambitions, which admittedly sometimes out-pace their culinary skills. Knife skills are key to improving their scratch cooking capacity. Staff have also learned more about cooking lentils, seasoning foods and creating new flavor combinations. You can check out the full recipe [here](#).

# Taste Tests, Student Engagement and Marketing Boost Participation

**Taste tests and student engagement:** By inviting student input and adopting their ideas, the district has gained student buy-in and participation. During the pandemic, district staff presented a summer virtual cooking class for high school students in partnership with their local library's Book to Action Program. Participating students prepared three plant-forward menu items at home, then shared a photo of what they made and give a detailed food review of the dishes. Students prepared and sampled the Thai Basil Lentil Burger, Sweet Potato Chimichurri Bowl, Outstanding Overnight Oats, a blended Chicken Chickpea Salad (a plant-forward dish that combines plant-based protein with less animal protein). The feedback was invaluable. Across the board, all students loved the Thai Basil Lentil Burger, whether they were meat eaters or vegetarian.

Plant-forward dessert ideas requested by students include Chocolate Chip Hummus, which tastes great paired with apple slices and costs only \$1 to make; and Chocolate Avocado Mousse, which uses healthy avocado fat instead of dairy to make a rich and creamy plant-based chocolate mousse. Yum!

**Marketing tips:** Marketing is a big key to the success of this burger's popularity. Primer uses the marketing software Canva to create menus, fliers, posters, social media posts and other promotions. The app has templates for creating fliers, posters, social media posts, logos, videos and presentations. Dietetic interns, parent volunteers and even students can help develop marketing materials using this tool.

**Participation drives everything:** The district's goal is to increase meal participation so that funds can be reinvested to purchase high-quality products and staffing costs. For the program to grow and evolve, increasing student participation is essential. The positive response to plant-forward meals confirms that the district is headed in the right direction. Prior to the pandemic (March 2020), the district served about 400,000 meals annually (7,500 students enrolled in the district). Since the pandemic, SLCUSD has served over 1M meals, between March 2020 to March 2021. Primer believes that the fresh plant-forward foods, sourced from local food producers, have made her program more popular.

***"Don't let perfection get in the way of good. At SLCUSD, there has been a positive response to plant-forward foods, even among meat eaters. Presenting plant-forward food as healthy, fresh and climate-friendly is an inclusive marketing strategy that everyone can be a part of."***

**- Erin Primer,  
Director of Food Services**

## Why Plant-Forward Food?



Food is at the nexus of both our public health and climate crises. The scientific evidence is clear: eating less meat is vital to reducing greenhouse gas emissions and curbing the rates of chronic, costly, diet-related disease. A conventionally produced beef burger is 16 times more carbon-intensive than the Thai Basil Lentil Burger and requires much more water. A [Friends of the Earth report](#) found that 94% of California School lunch entrees served feature animal proteins, while just 4% of entrées are plant-based. By shifting to more plant-forward food, schools can be a part of the public health and climate solution, nourishing healthier students and a more livable planet. Also, incorporating organic foods into school meals has the added benefit of supporting climate-smart farming practices that build healthier soil, while reducing both farmworker and children's exposure to pesticides.



**Superintendent, Dr. Prater, and student chef, Drew Vander Weele, preparing the delicious Thai Basil Lentil Burger.**