

# MAKING

# THE

for healthy, freshly prepared school meals



# CASE

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## Learning in the Real World<sup>©</sup>

Learning in the Real World

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Learning in the Real World is a publishing imprint of the Center for Ecoliteracy, a not-for-profit, tax-exempt organization. Learning in the Real World offers resources to support schooling for sustainability, stories of school communities, and the ecological framework that informs the work of the Center.



## CENTER FOR ECOLITERACY

The Center for Ecoliteracy is pleased to offer these resources to assist you in making the case for healthy, freshly prepared school meals.

Our intention is to craft an array of tools that may be used to further collaboration among school administrators and other educators, school board members, parents, and nutrition services professionals—all working together for the sake of academic success and better health for students and communities.

Every day, people working in nutrition services see the importance of nutritious, appealing school meals. The materials we present here are intended to demonstrate to decision makers how school meals help them meet their responsibilities by maximizing opportunities for academic achievement and promoting the safety and health of the students in their care. We also include findings that offer reassurance that improving school food can be good for district finances and the economic well-being of communities.

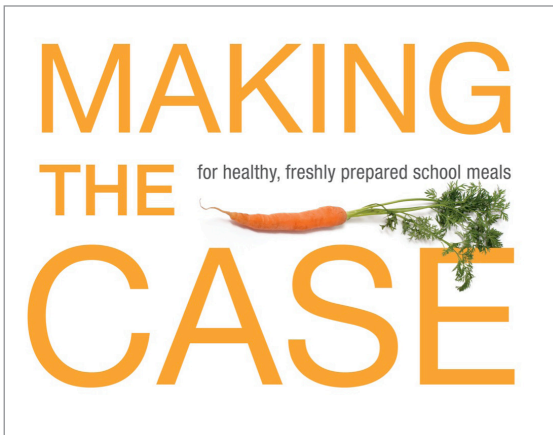
In the nearly twenty years we have worked in this field, we have seen the growth of a movement on behalf of high-quality, healthy, freshly prepared school food. We are constantly inspired by the dedication, creativity, and commitment of people who are leading that movement in their districts and school communities, and are glad we are able to share these resources with you.

We are deeply grateful to TomKat Charitable Trust for its support for this project and its longtime commitment to health, education, and care for the environment.

Sincerely,

Zenobia Barlow

Executive Director, the Center for Ecoliteracy



## We listened.

And we heard that you want others to understand that healthy, freshly prepared school meals are not only important, but possible—every single school day.

We're behind you. So we did what we've been doing for nearly 20 years at the **Center for Ecoliteracy**: we interviewed successful food service directors, stakeholders, and staff, we gathered research from around the country, and we created **Making the Case**—tools we hope you find helpful in your work with district business partners and parents.

Making the Case includes research in **Health, Academic Achievement, and Finances** to provide you with important facts. We listened to successful food service professionals who shared best practices and helpful tips for making the case for change. We discovered that some nutrition services directors have the best chance for success when they make compelling presentations to **their school district superintendents, school boards, or business managers**; others succeed by appealing directly to **parents or teachers**. Some use a combination of these approaches. We hope this document provides insight on how to appeal to a variety of audiences.

As a companion to this document, we have developed a **PowerPoint presentation** to help you make the case to your leadership. Every school district is different and every presenter is unique. We invite you to adapt the presentation to make your case your way.

**Making the Case** is available at:

[www.ecoliteracy.org/downloads/making-case](http://www.ecoliteracy.org/downloads/making-case)

# 6

## SIX REASONS SCHOOL BOARDS AND ADMINISTRATORS SHOULD CARE ABOUT SCHOOL MEALS

The food served in school meals has multiple impacts on districts' ability to fulfill their responsibilities. Here are six reasons to care:

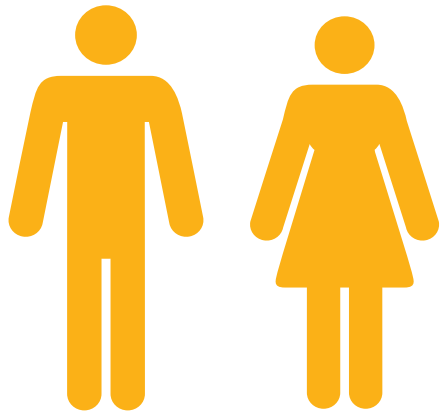
1. School districts, led by their boards and administrators, are responsible for providing maximum opportunities for academic success, maintaining the safety and health of students, and contributing to the well-being of their communities.
2. Nutrition is strongly linked to academic achievement. The 44 million school breakfasts and lunches served daily in the US are important in determining if students get the nutrition they need to succeed academically. Students, on average, consume about 35 percent of their daily calories at school.<sup>1</sup> Many consume half or more of their calories at school.<sup>2</sup>
3. School meals are especially critical for many students. In 2012, 49 million Americans, including 15.9 million children, lived in food insecure households. One out of five households with children reported food insecurity.<sup>3</sup> Some schools are now serving breakfast, lunch, afternoon snacks, milk supplements, and dinner, and sending home backpacks with food for weekends.
4. Healthy, attractive meals can be good for districts' finances. Healthy students are absent less often, so districts receive more attendance-based funding. Students who are not healthy also place a greater burden on districts' health, counseling, and special education services. Better meals, which need not be expensive to produce, often lead to increased participation in the meal program and thereby increase revenue.<sup>4</sup>
5. The purchasing power of school districts—school cafeterias are the largest “restaurants” in many places—impacts their regions. A 2011 report calculated that every dollar spent locally for school food adds \$1.86 to the economy, and every job created by a district's purchasing results in an overall increase of

# 6

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2.43 jobs.<sup>5</sup> Collectively, schools and other large institutions can help create enough demand to support sustainable regional agriculture.

**6.** There is public support. 2013 research by the Field Research Corporation for Kaiser Permanente indicated that 90 percent of adult respondents believed that schools should be involved in reducing obesity; 64 percent believed K–12 schools should play a *major* role.<sup>6</sup> Polling has shown that school bond and parcel tax measures have been made more attractive to voters by including provisions to improve school nutrition programs.<sup>7</sup>



## SCHOOL MEALS AND ACADEMIC PERFORMANCE

More and more evidence supports an association between nutrition and student academic performance. Among the findings from a variety of studies:

- Improving school meals can make an almost immediate difference in students' academic achievement.<sup>9</sup>
- Inadequate consumption of key food groups deprives children of essential vitamins, minerals, fats, and proteins that are necessary for optimal cognitive function.<sup>10</sup>
- Increased fruit and vegetable consumption and reduced dietary fat intake have been significantly linked to improved academic performance.<sup>11</sup>
- Increases in participation in school breakfast programs are associated with increases in math and reading test scores, daily attendance, class participation, and reductions in tardiness and absenteeism.<sup>12 13</sup>
- Children who eat breakfast at school perform better on standardized tests than those who skip breakfast or eat breakfast at home.<sup>14</sup>
- Dietary intake is likely to work synergistically in combination with other factors such as physical activity and sleep.<sup>15</sup>
- Undernourished children are more likely to be hyperactive, absent, or tardy; have more behavioral problems; repeat a grade; and require more special education and mental health services.<sup>16</sup>
- Anemic children tend to do poorly on vocabulary, reading, and other tests. Iron deficiency can increase fatigue, shorten attention span, decrease work capacity, reduce resistance to infection, and impair intellectual performance.<sup>17</sup>
- Nutrient deficiencies, refined sugars and carbohydrates, pesticide residues, preservatives, and artificial colorings in food have all been associated with altered thinking and behavior and with neurodevelopmental disorders such as Attention Deficit/Hyperactivity Disorder.<sup>18</sup>



## SCHOOL MEALS AND ACADEMIC PERFORMANCE

- Schools that removed soft drinks from vending machines experienced less tardiness, fewer disciplinary referrals, and higher math scores.<sup>19</sup>
- Food insecure children learn at a slower rate than their peers, leaving them further and further behind as they progress through the educational system.<sup>20</sup>
- Adolescent students who consider themselves overweight or obese—whether or not they meet standard medical definitions—have been found to have lower grades.<sup>21</sup>





## SCHOOL MEALS AND STUDENT NUTRITION AND HEALTH

Research is demonstrating significant links between students' diets, including school meals, and their health. Among the findings from a variety of studies:

- Fewer than 10 percent of California children consume the minimum recommended daily servings of fruits and vegetables, according to a 2009 report of the Centers for Disease Control and Prevention.<sup>23</sup>
- Participants in National School Breakfast and Lunch programs are less likely to have nutrient inadequacies; more likely to consume fruit, vegetables, and milk; and less likely to consume desserts and snack food than children who do not.<sup>24</sup>
- Students who eat school meals provided through the National School Lunch Program and the School Breakfast Program are more likely to be at a healthy weight.<sup>26</sup> Students are less likely to gain weight during the school year when in school than during the summer when school is out.<sup>27</sup>
- When schools offered snacks in lunchtime à la carte or vending that were mostly or entirely healthful, students responded with improvements in their diets.<sup>28</sup>
- Low-income school-aged children have better overall diet quality than those who eat breakfast elsewhere or skip breakfast.<sup>29</sup>
- School-aged children have a higher daily intake of fruit, vegetables, milk, and key nutrients like calcium, vitamin A, and folate on days they eat federally funded supper at afterschool programs compared with days they do not.<sup>30</sup>
- In 2010, more than one-third of children and adolescents in the US were overweight or obese,<sup>31</sup> but authorities credit recent changes in school food with a leveling or decrease in obesity in several cities and states.<sup>32 33</sup>
- Obese children are more likely to have bone fractures that keep them away from school<sup>34</sup> and more likely to develop hypertension, diabetes, sleep apnea, menstrual abnormalities, impaired balance, and



## SCHOOL MEALS AND STUDENT NUTRITION AND HEALTH

orthopedic problems at an earlier age than their normal-weight peers.<sup>35</sup>

- Overweight children may experience increased bullying, which is related to poorer mental health and decreased physical activity.<sup>36</sup>
- While obesity affects both genders and all racial and age groups, low-income children and food insecure children may be at even greater risk.<sup>37</sup>
- Poor oral health has been associated with decreased school performance, difficulty remaining alert and engaged in a learning environment, and poor self-esteem.<sup>38</sup>



## SCHOOL MEALS: FINANCIAL IMPLICATIONS

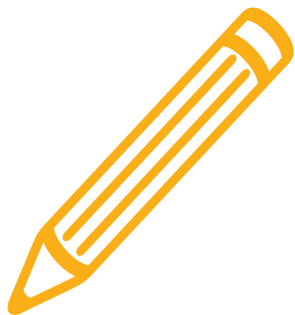
According to the Centers for Disease Control and Prevention, “A growing body of evidence suggests that schools can have strong nutrition standards and maintain financial stability.”<sup>39</sup> Among the findings from a variety of studies and from reports by school districts:

- Research and local success stories indicate that improving food quality increases meal program participation and revenue, and that quality improvements to the food and meal service need not be expensive.<sup>40</sup>
- In a three-year study published in 2012, schools serving healthier options had more excess revenue over expenses than schools that did not.<sup>41</sup>
- School lunches made with USDA foods that were more scratch cooked were healthier and no more expensive to prepare than those that were processed off-site.<sup>42</sup>
- Researchers have identified numerous effective low-cost ways to reconfigure the lunch line and use other “smarter lunchroom” techniques to guide students to smarter choices.<sup>43</sup>
- Programs to improve food in English schools were found to have fast results and to be “very cost-effective.”<sup>44</sup>
- A Robert Wood Johnson Foundation/Pew Charitable Trust assessment found that school districts that adopted strong nutrition standards for snack and à la carte foods and beverages did not experience a decrease in overall revenue.<sup>45</sup>
- A University of California study sponsored by The California Endowment concluded that “students and parents overwhelmingly approve” of the Healthy Hunger-Free Kids Act changes that went into effect in 2012–2013. After implementation of the program, meal participation rates fluctuated only slightly or increased at schools in seven of the ten districts studied.<sup>46</sup>



## SCHOOL MEALS: FINANCIAL IMPLICATIONS

- In states that determine funding in part by average daily attendance, each day a student is present increases district income. Undernourished students have less ability to resist infection and are more likely to become sick and miss school.<sup>47</sup>
- A University of Pennsylvania study estimated that obese students have 20 percent more absences.<sup>48</sup> In another study, obesity was a better predictor of absenteeism than any other factor.<sup>49</sup>
- Eating a healthy breakfast is associated with reductions in absenteeism<sup>50</sup> and nurse visits.<sup>51</sup> Serving breakfast in the classroom has been the most effective way to increase participation in breakfast programs.<sup>52 53</sup>
- California districts would have received more than \$365 million in additional federal aid in 2010–2011 if students eligible for free and reduced-price meals participated in school breakfast at the same rate as they participated in school lunch.<sup>54</sup>
- Children classified as hungry are twice as likely as those who are not hungry to receive special education services, and twice as likely to have repeated a grade.<sup>55</sup> The total cost of educating a child requiring special education services is nearly double the annual expenditure for a child without special needs (US Department of Education).<sup>56</sup>
- California students miss an estimated 874,00 school days annually due to oral health problems, costing local school districts approximately \$28.8 million (2010 figures).<sup>57</sup>
- Surveys of prospective voters prior to bond measure (Oakland, 2012) and parcel tax (Davis, 2007) votes showed that measures that benefitted the school districts in a variety of ways were *more attractive to voters* because of the inclusion within the measures of provisions to improve school food.<sup>58</sup>
- Students annually discard millions of dollars worth of uneaten food.<sup>59</sup> At the same time, studies show that children respond well to school nutrition programs if they are given food choices and if the foods offered are attractive, fresh, convenient, kid-friendly, culturally appropriate, and served at the proper temperature.<sup>60 61</sup>



## NOTES

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<sup>2</sup> Action for Healthy Kids (2012). *The Learning Connection: What You Need to Know to Ensure Your Kids Are Healthy and Ready to Learn*, p. 8.

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<sup>3</sup> A. Coleman-Jensen, et al (2013). “Household Food Security in the United States 2012.” US Department of Agriculture Economic Research Service. [www.ers.usda.gov/publications/err-economic-research-report/err155.aspx#.Uml1LCS4B\\_k](http://www.ers.usda.gov/publications/err-economic-research-report/err155.aspx#.Uml1LCS4B_k).

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<sup>6</sup> Field Research Corporation (2013). “Nationwide Findings from the 2013 Kaiser Permanente Childhood Obesity Prevention Survey,” pp. 6–8. [xnet.kp.org/newscenter/pressreleases/nat/2013/downloads/2013-KP-Childhood-Obesity-Prevention-Survey-Findings.pdf](http://xnet.kp.org/newscenter/pressreleases/nat/2013/downloads/2013-KP-Childhood-Obesity-Prevention-Survey-Findings.pdf).

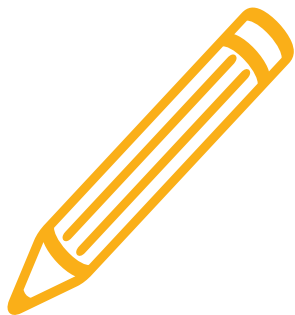
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<sup>8</sup> James F. Bogden, Martine Brizius, and Elizabeth M. Walker (2012). *Fit, Healthy, and Ready to Learn* (Arlington, VA: National Association of State Boards of Education), Chapter E, p. 5.

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<sup>12</sup> California School Boards Association (2012). *Student Wellness: A Healthy Food and Physical Activity Policy Resource Guide*, p. 5. [The publication cites eight references on this point.]

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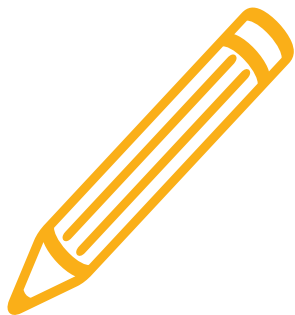
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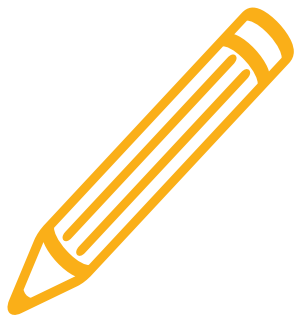
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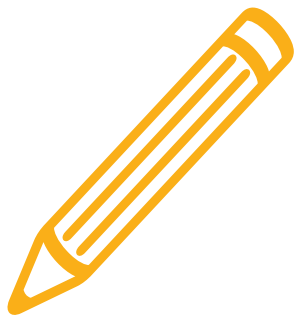
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## NOTES

banning deep fryers in school kitchens, switching to lower-fat milk, and establishing a districtwide school wellness policy.

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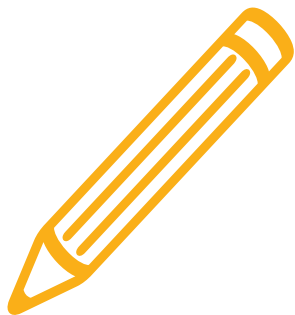
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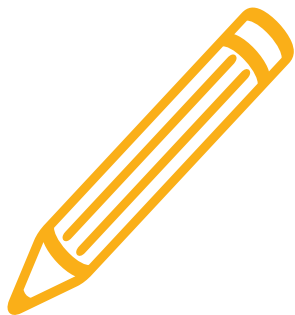
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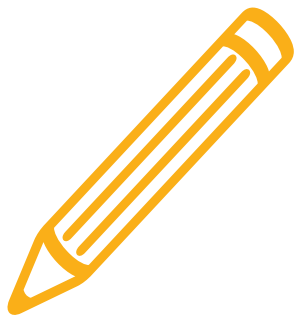
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## QUOTES

### Some inspiring and useful quotes about school meals include:

School is the biggest restaurant chain in every city and every town. Only nobody knows it.

—David Binkle, Director, Food Service, Los Angeles Unified School District

School food reform is part of the basic work we have to do to correct systemic injustice, pursue equity, and give our children the best future possible.

—Tony Smith, Former Superintendent, Oakland Unified School District

Getting staff engaged in training has been the biggest advantage in our success.

—Sandy Curwood, Director, Food and Nutrition Services, Ventura Unified School District

Breakfast helps kids get to school on time. And they go to the nurse less.

—Gary Petill, Director, Food and Nutrition Services, San Diego Unified School District

Does fresh food cost more? It might, but participation and revenue will far outweigh the cost.

—Scott Soiseth, Director, Child Nutrition Services, Turlock Unified School District

[On why scratch cooking is cost-effective] I've seen statistics that show that packaging can represent 50% of the food cost. You save a second time by not having to dispose of that packaging.

— Marc Zammit, Vice President, Corporate Sustainability Initiatives, The Compass Group, from the Center for Ecoliteracy's *Rethinking School Lunch Guide*

I didn't talk a lot about unhealthy food. I took out the unhealthy and gave them a choice between healthy and healthy.


—Rodney Taylor, Student Nutrition Director, Riverside Unified School District

We can help create a culture—imagine this—where our kids ask for healthy options instead of resisting them.

—First Lady Michelle Obama

# MAKING THE CASE

for healthy, freshly prepared school meals



MAKING THE CASE

School meals are a **big opportunity** for positive change.

How big?


School is the biggest restaurant chain in every city and every town. Only nobody knows it.

David Binkle  
Director, Food Service  
Los Angeles Unified School District

What do the **numbers** look like?

## BREAKFAST

About 13 MILLION a day, or 2.2 BILLION a year



## LUNCH

About 31 MILLION a day, or 5.2 BILLION a year

USDA

# 35%

Percent of daily calories that an average child eats at school

Action for Healthy Kids

# 50%+

Many children get more than half of their calories at school.

Journal of the American Dietary Association

Why does this matter?

Making the Case Powerpoint slides

Because school districts have a **significant role** to play in the well-being and academic achievement of children.

And freshly prepared, healthy school meals are part of the strategy that **helps districts succeed.**

How?

Improved school meals can make an almost **immediate** difference in academic achievement.

Journal for Health Economics

And they have a **positive effect** on attendance and test scores, too.

California School Board Association; Emery University

School meals are **especially important** for some students.

**49** MILLION

Number of Americans who lived in **food insecure households** in 2012

USDA

**15.9** MILLION

Number of **children** who lived in **food insecure households** in 2012

USDA

**1** out of **5**



U.S. households with children who report food insecurity

USDA

**Making the Case Powerpoint slides**

In addition to alleviating hunger, healthy school meals help to promote **overall student health.**

This is especially significant when you consider one of the biggest health challenges in the history of this country — **obesity.**

**1 out of 3**

American children are overweight or obese

Journal of the American Medical Association

**1 out of 2**

In some communities it's half.

Journal of the American Medical Association

**Obesity** is a better predictor for absenteeism than any other factor.

A study cited in Fit, Healthy, and Ready to Learn

Obese children often have **health problems** including bone fractures, hypertension, and diabetes that cause them to **miss school.**

Pediatrics

When students miss school, they **fall behind academically** and become **socially isolated.**

In states that determine funding by average daily attendance, each day a student is absent **decreases district income.**

Schools with healthy eating programs have **significantly lower rates** of obesity.

Kaiser Permanente



And those same healthy meals also help **increase participation** which increases revenue.

## Examples from the field

In California, **Turlock Unified** increased participation by **300%** when the district launched a campaign to promote its fresh offerings to students.

Center for Ecoliteracy



Does fresh food cost more? It might, but participation and revenue will far outweigh the cost.

Scott Soiseth  
Director, Child Nutrition Services  
Turlock Unified School District

At **San Diego Unified**, participation increased from **18 to 25 million** meals a year when food carts were used to serve healthy school meals.

Center for Ecoliteracy

Breakfast helps kids get to school on time. And they go to the nurse less.

Gary Petill  
Director, Food and Nutrition Services  
San Diego Unified School District

In **Ventura County**, average daily participation **doubled** when **five districts worked together** to improve the quality of their meals.

Center for Ecoliteracy

Getting staff engaged in training has been the biggest advantage in our success.

Sandy Curwood  
Director, Food and Nutrition Services  
Ventura Unified School District

Making the Case Powerpoint slides

Working collectively, schools can help create enough demand to support **sustainable regional agriculture...**

...as has been demonstrated in so many successful **farm-to-school** programs.

These successes can translate into **local prosperity.**

**\$1 = \$1.86**

Every dollar spent locally equals \$1.86 added to the economy.

Ecotrust

**1 JOB = 2.43 JOBS**

Every job created by a district's purchasing results in an overall increase of 2.43 jobs.

Ecotrust

The power of healthy school meals is well recognized by the **public.**

**2013**

Kaiser Permanente Survey

**64%**



Adults who agree schools should take a **major** role in reducing obesity

Kaiser Permanente

**78%**



Adults who agree healthier school meals affect academic performance

Kaiser Permanente

88%



Adults who favor new USDA meal standards

Kaiser Permanente

Some communities have used this support to advance **successful ballot measures.**

In fact, surveys have shown that ballot measures are **more attractive** when they include provisions for improved school meals.

Center for Ecoliteracy

Here's an example...

In 2012, Oakland schools sought funding for improved facilities, including a **new central kitchen, education center, and a 1.5-acre campus farm.**

It was called **Measure J.**

**\$475** MILLION

to improve school facilities in Oakland

**83.6%**

percent by which measure J passed

It's a huge success and a vision we all can share.


Healthy children.

Improved learning outcomes.

Healthier local economies,  
including more jobs.

More prudent use of our  
resources, including  
natural resources.

And the opportunity to make  
a real and lasting  
contribution  
to the future.

MAKING  
THE  
CASE  
for healthy, freshly prepared school meals  




CENTER FOR  
ECOLITERACY

With thanks to the Center for Ecoliteracy  
[www.ecoliteracy.org](http://www.ecoliteracy.org)



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## CENTER FOR ECOLITERACY

### About the Center for Ecoliteracy

The Center for Ecoliteracy advances ecological education in K–12 schools. In order to create resilient communities that live in harmony with the natural world, students need to experience and understand how nature sustains life. Founded in 1995, the Center engages with school communities, foundations, filmmakers, and other change agents to further smart, hopeful, and vital education. We offer books and resources, professional development, and strategic consulting. Our work is based on systems thinking, leadership dynamics, and how young people learn. We affirm that nature is our teacher and that sustainability is a community practice.

Best known for our work related to food, culture, health, and the environment, we address issues at multiple levels, from the local to the national. Rethinking School Lunch Oakland is a comprehensive project to redefine school food in a large, urban school district, from procurement and facilities to teaching and learning. California Food for California Kids™ is our initiative to incorporate fresh, seasonal food in school meals; preserve the environment; and promote local and regional economies. Our Food Systems Project, identified as one of the top ten USDA grants in a decade of food security efforts, helped inspire the creation of district wellness policies across the country. Our downloadable Rethinking School Lunch publications include *Making the Case for Healthy, Freshly Prepared School Meals*; our planning framework, the *Rethinking School Lunch Guide*; and our cookbook and professional development guide, *Cooking with California Food in K–12 Schools*.

Learn more at [www.ecoliteracy.org](http://www.ecoliteracy.org).