How important do you think nutrition education is in the work we do?
Agenda

- Overview of Session
- Nutrition Bill of Rights
- PSE approach
- SLM of CA infrastructure
- California Spotlights
- Closing
Speakers

- Shannan Young, Food Systems Program Manager, Dairy Council of California
- Heather Reed, Nutrition Education Consultant, California Department of Education
- MaryAnn Mills, Smarter Lunchrooms Movement Program Manager, UC CalFresh Nutrition Education Program
Session Objectives

- Consider how key partners at the state and local level collectively create a movement for systems behavior change in schools.
- Synthesize ways to innovate nutrition education by integrating with wellness policy and the cafeteria environment to create a culture of wellness in schools.
- Discover how California schools leverage SLM to market their nutrition programs within their communities.
The Nutrition Education Bill of Rights

Heather Reed, MA, RDN
Nutrition Education Consultant
California Department of Education
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Are our students ready to be healthy eaters for life?
Consider the State Park
Outdoor Bill of Rights

- Discover California’s past
- Splash in the water
- Play in a safe place
- Camp under the stars
- Explore nature
- Learn to swim
- Play on a team
- Follow a trail
- Catch a fish
- Celebrate their heritage
Now...
A Healthy Eaters’ Bill of Rights

Write down:

- 1-2 nutrition skills or experiences students need to know, do, or have by the time they are 18 years old.

- Share with your neighbor
California Department of Education

Nutrition Competencies

What students should know and be able to do at each grade level

- **All grade levels**
- **Nutrition specific content areas**
- **Aligns with common core**
Nutrition Education Continuum

Promotion
- Posters
- Bulletin Boards
- Newsletters
- Marketing

Activities
- Taste Testing
- Planning
- Purchasing
- Cooking
- Food Safety

Curriculum

Common core standards
Impact of Each

Promotion
- Impulse
- Visual Influence

Activities
- Visual Influence
- Knowledge

Curriculum
- Knowledge
- Decision Making

Systems approach enhanced by policy and environmental supports
Nutrition education is any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food- and nutrition-related behaviors conducive to health and well-being.

Nutrition education is delivered through multiple venues and involves activities at the individual, community, and policy levels.

The Smarter Lunchrooms Movement of California: Why PSE Approach?

Shannan D. Young, RDN, SNS
Program Manager, Food Systems
Syoun@DairyCouncilofCA.org
California is Home to:

- **6.2 million students**
  - 4.3 million students a year eat school meals
  - 58.6% free and reduced

- **1,028 school districts**
  - 10,366 schools

- **58 counties with County Offices of Education**

- **61 Local Health Departments**
CDC Childhood Obesity Facts

• Child obesity has more than doubled in children and quadrupled in adolescents in the past 30 years.1, 2

• The percentage of children aged 6–11 years in the United States who were obese increased from 7% in 1980 to nearly 18% in 2012. Similarly, the percentage of adolescents aged 12–19 years who were obese increased from 5% to nearly 21% over the same period.1, 2

• In 2012, more than one third of children and adolescents were overweight or obese.1

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Averages for US Children

- Underweight (≈3.5%)
- Normal weight (≈65%)
- Overweight or obese (≈31.5%)
Academic Achievement

Academic performance
- Class grades
- Standardized tests
- Graduation rates

Education behavior
- Attendance
- Drop out rates
- Behavioral problems at school

Students' cognitive skills and attitudes
- Concentration
- Memory
- Mood
Creating Healthy Students

Healthy eating and physical activity are linked with:

- Academic Success
- Health and Well-being
- Risk for Obesity
- Risk for Chronic Conditions (e.g., osteoarthritis)
- Risk for Chronic Diseases (e.g., Type 2 diabetes)
School Meals
Building Blocks for Healthy Children

- Access to nutritious, low-cost meals
- Support growth and development
- Foster healthy eating habits
- Safeguard children’s health
- Based on Dietary Guidelines for Americans
- Increase availability of key food group
Inadequate Nutrition:

Participating in school breakfast or lunch programs was associated with improvement in grades, standardized test scores and school attendance. After adding specific nutrients (fruits, vegetables and dairy products) missing from students’ diets, their academic performance improved.

http://www.chronicdisease.org/?page=SchoolHealthPubs&hhSearchTerms=%22do+health+and+education+agencies%22
US Consumption Compared to MyPlate

U.S. consumption in relation to MyPlate food group recommendations, 2011

Note: Rice data were discontinued and thus are not included in the grains group.

1Based on a 2,000-calorie diet.

Why School Meals are so important to students' health and academic success?

School Meals prepare scholars' brains to learn ...
**Prep Methods: Perception vs. Reality**

Approximately 30% of parents say schools frequently fry and microwave foods, even though school FSDs rarely use these methods. There's a clear gap in what parents THINK is happening and what actually IS happening at school.

- **Done at Home**
- **Parents Perceptions of School**
- **Actual Operator**

<table>
<thead>
<tr>
<th>Method</th>
<th>Done at Home</th>
<th>Parents Perceptions of School</th>
<th>Actual Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baked</td>
<td>80%</td>
<td>59%</td>
<td>60%</td>
</tr>
<tr>
<td>Grilled</td>
<td>71%</td>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>Roasted</td>
<td>60%</td>
<td>40%</td>
<td>53%</td>
</tr>
<tr>
<td>Steamed</td>
<td>76%</td>
<td>49%</td>
<td>35%</td>
</tr>
<tr>
<td>Sautééd</td>
<td>40%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Boiled</td>
<td>40%</td>
<td>11%</td>
<td>27%</td>
</tr>
<tr>
<td>Microwaved</td>
<td>34%</td>
<td>11%</td>
<td>21%</td>
</tr>
<tr>
<td>Braised</td>
<td>30%</td>
<td>14%</td>
<td>21%</td>
</tr>
<tr>
<td>Fried</td>
<td>5%</td>
<td>14%</td>
<td>30%</td>
</tr>
<tr>
<td>Poached</td>
<td>8%</td>
<td>8%</td>
<td>12%</td>
</tr>
</tbody>
</table>

**K-12 SCHOOLS**

**Perception Gaps Key to K-12 Participation Opportunities**

Developing strategies for addressing parental mis-perceptions about school food may be the biggest opportunity K-12 FSDs have to grow their programs and participation rates, says Datassential.
School Meals getting lots of attention

- Child Nutrition Reauthorization underway
- Focus is on obesity prevention, equity
- Sodium and whole grain flexibility major topics
- Food waste concerns, with focus on F/V
- School Breakfast and Summer Foodservice Programs support for increasing participation
- Nutrition education vs. behavioral economics (SLM)
- PBA in School Meals research
Schools Role in Obesity Prevention: National Results
Survey by Field Research Corporation on behalf of Kaiser Permanente

83% adults favor the new USDA school nutrition standards

83% parents feel nutrition education is highly important

71% adults endorse extending new standards beyond mealtime

9 out of 10 parents say K-12 schools should play a role in reducing obesity in their community

http://share.kaiserpermanente.org/article/survey-americans-expect-schools-to-lead-in-preventing-
Teachers see connection of good nutrition + health with Common Core and school meals.

Teachers were recently surveyed to identify their perceptions of how nutrition education impacts students’ food choices and relates to Common Core State Standards. Of 500 teachers, the survey completion rate was 38% (190 teachers).

73% observe students making healthier food choices in the school cafeteria after nutrition lessons.

They (students) love making healthy choices when they have the knowledge!

Teacher, EGUSD SHAPE Program

Nearly 75% state they are more likely to encourage students to eat school breakfast or lunch because of their participation in the district’s nutrition education program (SHAPE).

What teachers have to say!

● “They are choosing to try more fruits and vegetables than in the past.”
● “I have observed them bringing to school healthier snacks.”
● “My kids are WAY more aware of the food groups and why they need a balanced diet!”
● “My students are more willing to try new foods and/or willing to try foods that they didn’t like before.”

Teachers are more likely to use nutrition concepts to teach Common Core.

75% feel confident they can include nutrition education for their students
63% state they will use the subject of nutrition to teach Common Core
79% feel prepared to tie nutrition to ELA Common Core
65% feel prepared to tie nutrition to Math Common Core
Systematic Review of Community-Based Childhood Obesity Prevention Studies

- American Academy of Pediatrics
- Published July 12, 2013
Successful PSE strategies are evidence-based, multisector community collaborations that create changes to make healthier lifestyle choices an easy and feasible option for every member of the community.
The Smarter Lunchrooms Movement of California: Taking Nutrition Education to the Next Level

MaryAnn Mills
Smarter Lunchrooms Movement Program Manager
UC CalFresh Nutrition Education Program
mamills@ucdavis.edu
“Implementing a variety of approaches such as multi-level interventions and community and public health approaches in addition to individual or group-based (direct) nutrition education to deliver effective, evidence-based nutrition education and obesity prevention programming.”
5 SOLUTIONS FOR CHANGING OUR COMMUNITIES

ON THEIR OWN, ANY ONE OF THESE FIVE SOLUTIONS MIGHT HELP SPEED UP PROGRESS IN PREVENTING OBESITY, BUT TOGETHER, THEIR EFFECT WOULD BE REINFORCED, AMPLIFIED, AND MAXIMIZED.

STRENGTHEN SCHOOLS AS THE HEART OF HEALTH.

EAT WELL!

MAKE HEALTHY FOODS AVAILABLE EVERYWHERE.

FRESH PRODUCE AVAILABLE!

MILK AND DAIRY AVAILABLE!

MARKET WHAT MATTERS FOR A HEALTHY LIFE.

ANYONE AND EVERYONE CAN BE A LEADER AND PLAY A PART IN IMPLEMENTING THESE FIVE SOLUTIONS. WHAT CAN YOU DO TO HELP SOLVE OUR OBESITY PROBLEM?

INTEGRATE PHYSICAL ACTIVITY EVERY DAY IN EVERY WAY.

ACTIVATE EMPLOYERS AND HEALTH CARE PROFESSIONALS.
Healthy Students

- Nutrition Education
- School Wellness Policy
- Cafeteria
Gaps

- Target audience
- Limited staff
- Funding limitations

Table 3: Nutrition Education Funding Per Participant in FY 2008 by Program

<table>
<thead>
<tr>
<th>Program</th>
<th>2008 Funding (Millions)</th>
<th>Participants¹ (Millions)</th>
<th>Dollars per Year Per Participant²</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP³</td>
<td>$314.1</td>
<td>28.4</td>
<td>$11.1</td>
</tr>
<tr>
<td>Team Nutrition</td>
<td>13.3</td>
<td>50.3</td>
<td>0.3</td>
</tr>
<tr>
<td>WIC-Nutrition Ed</td>
<td>358.0</td>
<td>8.7</td>
<td>41.1</td>
</tr>
<tr>
<td>WIC-Breastfeeding Promotion</td>
<td>131.8</td>
<td>1.5</td>
<td>87.8</td>
</tr>
<tr>
<td>FDPIR Nutrition Aides</td>
<td>1.2</td>
<td>0.09</td>
<td>13.8</td>
</tr>
</tbody>
</table>

¹ All programs based upon average monthly participation unless otherwise noted here. Team Nutrition participation is based on total school enrollment in the National School Lunch Program (NSLP). WIC Breathing Promotion participants include pregnant and breastfeeding women only.
² Per participant nutrition education dollars are based on unrounded program funding totals not shown.
³ Includes $1.99M in SNAP-ED resources used at the Federal level.
SLM of CA Collaborative
Delivery Model Before the SLM of CA Collaborative

- Classroom Education
- Policy
- Research Based

Nutrition Education in Schools
Delivery Model

Systems Approach to Creating a Culture of Healthy Eating

Partnerships

Research Based

Systems
Policy
Environment

Healthy Kids
The Smarter Lunchrooms Movement

- Started in 2009 by the Cornell Center for Behavioral Economics
- Uses behavioral economics to “nudge” students to make healthy choices
- Evidence-based strategies that improve child eating behaviors and thus improve the health of children
SLM Strategies in Action

Increased fruit consumption by 18%

Vegetable consumption increased by 25%

It's not nutrition until it's eaten!

The Name Game

Use cool or appealing labels to describe foods

- Carrots → X-Ray Vision Carrots → Doubled the consumption of carrots

- Bean Burrito → Big Bad Bean Burrito → Increased burrito consumption by more than 40%! (It could have been more, but they sold out in the second of three lunch periods!)
Moving the Salad Bar

Daily Salad Sales increased 200-300% within two weeks!!
SNAP-Ed Students Consume 2xs More Fruits and Vegetables

- 3 times more likely to select a vegetable
- 2 times likely to select both F/V
- 2 times the variety of vegetables
- 2 times vegetable servings
Competitive Food and Beverage Policies

- Increase availability and selection of healthier options
- Associated with lower proportions of overweight or obese students

http://www.bridgingthegapresearch.org/_asset/2s58k7/WEB-FINAL-competitive_foods_issue_brief-1.pdf
Technical Advising Professionals (TAPs) partner with schools to guide and support the implementation of the SLM of CA model.
Multi-Systems Approach Best Practices
Marysville Joint Unified School District

Nutrition Education
- After school program
- Early Childhood
- Parent Education

School Wellness Policy
- Reinforce cafeteria and nutrition education initiatives
- Implemented and monitored in all schools

Cafeteria
- Smarter Lunchrooms Movement
- Fresh Fruit and Vegetable Grants
Comprehensive Nutrition Education

Eating Smart • Being Active®

STARS After School Programs

California Head Start Association

Smarter Lunchrooms Movement California
District-Wide Cafeteria Interventions
Cafeteria Outcomes

White Milk
- Improving Placement
- Increasing Number of Servings
- Sales DOUBLED!

Fruit
- Increasing Fruit Displays
- Adding signage
- 44% Score Increase!

Establishing Relationships with Partners
Providing Trainings to Food Service Staff
Implementing SLM
69% Increase in Reimbursable Meal Sales!
School Wellness Policy

Supporting a Healthy Nutrition Environment

- School Health Council
- Nutrition Education and Physical Activity Goals
- Guidelines for Reimbursable Meals
- Implementation and Evaluation
Team Nutrition SLM of CA
CDE awarded FNS grant  FFY 2015-2017

48 California schools received mini grants
•  SLM
•  Nutrition Education
•  Policy
•  Evaluation
Los Angeles USD VIDEO

FOOD COACH
CORNELL PROGRAM AT LAUSD HELPS KIDS MAKE BETTER FOOD CHOICES

LAURA BENAVIDEZ
INTERIM LAUSD FOOD SERVICE DIRECTOR
Team Nutrition SLM of CA

**Nutrition Education**
- Aligned with SLM:
  - Classroom education
  - Front Line Staff Training

**Policy**
- SLM in LSWP
- Procedure Manuals
- HealthierUS School Challenge

**Cafeteria**
- Smarter Lunchrooms Movement
- Tastings, posters

**Systems**
- Policy
- Environment
Nutrition Education & SLM

- CA Dept. of Public Health
  - Harvest of the Month activities
- UC CalFresh NEP
  - Curriculum
- Dairy Council of CA
  - Curriculum
- Team Nutrition
  - Curriculum and Posters
What Success Looks Like!

- \( \uparrow \) in meal participation
- \( \uparrow \) in consumption
- \( \downarrow \) food waste
- \( \uparrow \) student satisfaction
Twin Rivers USD: 29 Schools Awarded US Healthier School Challenge

- 6 Gold
- 20 Silver
- 4 Bronze
- Strong Wellness Policy & Committee
- Wellness Programs
  - Fresh Fruit and Vegetable Program Grant
  - Supper Program
  - Salad Bars
  - Dairy Council of California Nutrition Education Curriculum
  - Smarter Lunchrooms
  - Harvest of the Month
  - Campus Produce Market
  - Neal the SEAL Classroom Nutrition Education
  - Chef Rio Cooking Cart
  - Chef Rio Contract
  - Jr Chef Program
Chef Rio
Cooking Cart
Delivery Model

Systems Approach to Creating a Culture of Healthy Eating

Partnerships

Research Based
Thank You!

- Shannan Young, Food Systems Program Manager, Dairy Council of California
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