

ChangeLab Solutions

Healthy Food at School

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Presented in partnership with the Network for a Healthy California



ChangeLab Solutions

We partner with state and local leaders to improve health in communities, especially the underserved.

We research legal and policy questions, draft policy language, and train community leaders to put these ideas to work.



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Agenda

- Introduction
- HHFKA and beyond
- Snap-Ed \$ for impact in Chico
- PSE options



POLL:

Are you currently working on making school food options healthier?

Why Focus on Schools?

- Key part of American life
- Health & Achievement
- Key resource in at-risk communities
- Leaders in improving options
- Framework for PSE Options

KEY NETWORK OPPORTUNITIES IN SCHOOLS

Harvest of the Month
nourish food + community
Let's Active Move Schools
LET'S MOVE CA
TEAM California for Healthy Kids
POWER UP Your School
Growing Healthy Students
CALIFORNIA FARM to SCHOOL
Changing Lives, Saving Lives
Healthy Behaviors INITIATIVE
healthcorps

KEY NETWORK OPPORTUNITIES IN SCHOOLS

- PowerPlay!
<http://www.cdph.ca.gov/programs/cpns/Pages/ChildrensPowerPlayCampaign.aspx>
- Nourish
<http://www.nourishlife.org/>
- Health Corps
<http://healthcorps.org/>
- Farm to School
<http://www.cafarmtoschool.org/>
- Let's Move Schools
<http://www.letsmoveschools.org/>
- Team California
<http://www.cde.ca.gov/eo/in/tchk.asp>
- Healthy Behaviors Initiative
<http://www.ccscenter.org/afterschool/Healthy%20Behaviors%20initiative>

GOING BEYOND HHFKA REQUIREMENTS

- HHFKA
 - School Meals
 - Competitive Foods
 - Wellness Policies
- State Laws
- CDE & LEAs
- Going beyond...

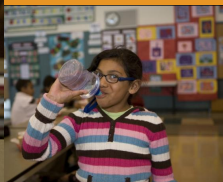


USDA COMPETITIVE FOODS RULE



- Interim Final Rule issued 6/17/13
- Will take effect in 2014–5 school year
- These are *minimums*

<http://www.fns.usda.gov/cnd/governance/legislation/allfoods.htm>



POLL:

In California, stronger competitive food rules already prohibit many sugar-sweetened beverages. **Do you favor policies that would prohibit sports drinks from high schools?**

Questions?

USING OUR SNAP-ED \$ FOR IMPACT



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STATE OF AFFAIRS

Child and adult obesity rates continue to rise despite community efforts



STATE OF AFFAIRS

IOM recent report (August 2, 2013)

- **U.S. Obesity-Prevention Efforts Fall Short**
 - During the past 20 years, there has been a dramatic increase in obesity in the US- the No. 1 country with the highest incidence of obesity worldwide
- Recommends more evaluations
 - Determine how well obesity-prevention programs and policies are being implemented
 - Determine which interventions work best

STATE OF AFFAIRS

Preschool obesity rates **dropping**

CDC report (August 6, 2013)

- Small significant declines in obesity among low-income preschoolers were found in 18 states
- CDC speculates improvement is due to WIC and Let's Move Initiatives
 - Really?
 - How do we know these two programs worked?
- We must evaluate what works and what doesn't





SNAP-Ed funding for 11 years

What have we learned?

- Go beyond nutrition education
 - Handouts & materials (nutrition facts, newsletters and recipes)
- Child and family engagement IMPORTANT
 - Cooking demonstrations and cooking in the home
 - Tasting the foods with recipes
- Environmental change IMPORTANT
 - Availability/access to healthy foods at school and home
 - Convenience of healthy foods at school and home

CNAP INTERVENTIONS

Harvest of the Month (HOTM) provided to 120 schools in 21 districts

- 35,000 fruit or vegetable HOTM tastings each month
- Additional HOTM cooking demonstrations and tastings
 - Hands-on
 - Child engagement
 - Parent and teacher engagement
- [Farmer of the Month](#) showcased
- 3-4 exposures each month



CNAP INTERVENTIONS



CNAP staff providing cooking demonstrations in the classroom



HOTM peppers used in a veggie roll up

EVALUATING OUR WORK: 2011-2012

Plate Waste Study - Data Collection Activities

1. Use kitchen production records
2. Verify by observing behaviors
 - Trays with unique ID numbers distributed to students
 - Photograph trays after children select all foods
 - Photograph trays just before children throw trays away



Example of a HOTM student lunch tray before and after consumption.

2011-2012 PLATE WASTE OBSERVATIONS

Two observations periods at five schools
Four days during each observation period

Two study groups:

- HOTM Intervention (three schools)
- Control (two schools)



2011-2012 PLATE WASTE OBSERVATIONS

Results

- HOTM students select significantly greater number of servings of fruits and vegetables than control students
- HOTM 1st graders significantly increased their fruit and vegetable consumption from the first to last observation
- HOTM students are 3.7 times more likely than control students to consume more vegetables following the intervention

GOOD NEWS! – CONTINUING

Researchers at Cornell and elsewhere are creating environmental changes to nudge positive behaviors

- Inexpensive/cost-efficient
- Easy



But does it work in Chico?

Photographs in Lunch Tray Compartments and Vegetable Consumption Among Children in Elementary School Cafeterias

To the Editor: To increase healthy eating among children, the US government has recommended providing more vegetables in school lunches¹ and schools are attempting to comply.² Children, however, still consume insufficient amounts of vegetables.³ We attempted to increase vegetable consumption by placing photographs of vegetables in school lunch tray compartments. We expected these photographs to induce to the children that others typically select and place vegetables in those compartments and that they should do so too.⁴

Methods: Vegetable consumption was compared on a control day (February 7, 2011) with an intervention day (May 9, 2011) in an elementary school kindergarten through fifth grade of approximately 600 students in Redfield, Minnesota. Approximately 79% of students in this school district

compared using 2-sample tests of proportions (percentage taking each vegetable) or 2-sample mean comparisons (grams consumed). Post-hoc tests were compared using Microsoft Excel 2010; a P value of less than .05 was the cutoff for statistical significance.

Results: The intervention was associated with an increase in the percentage of students taking green beans from 0.3% (42/666) to 14.8% (96/647) (Table; $z=5.04$, $P<.001$), and the percentage of students taking carrots from 11.6% (77/666) to 36.8% (238/647) ($z=10.70$, $P<.001$). The amount of green beans eaten by students who took them did not differ between the control day (mean of 19.0 g) and the intervention day (mean of 19.1 g; $t=0.008$, $P=0.93$). Overall, the intervention was associated with a significant increase in the amount of green beans consumed per student exposed (from mean of 1.2 g to 2.8 g; $t_{110}=38.88$, $P<.001$). The amount of carrots eaten by students who took them was significantly higher on the control day (mean of 31.0 g) than the intervention day

WHAT IS BEHAVIORAL ECONOMICS (BE)?

Influencing the behaviors (e.g. purchasing decisions) of others at the point of selection

What influences food/beverage selection?

- Cost
- Convenience/default choice
- Taste
- Social marketing
- Impulse/irrational

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Behavioral Economics (BE)

- Altering the environment to help improve healthy lunch selections

Behavioral Strategies for promoting white milk



1. Make acquiring chocolate milk more effortful (e.g. ask for it)



2. Make white milk more prominent

CNAP 2011 -2012 BE MILK STUDY RESULTS
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Students who had to ask for chocolate milk **were less likely** to select chocolate milk

- Increasing the effort needed to access a food may be an effective way to change behavior

Please ask for chocolate milk if you want it

Making white milk more prominent **did not** significantly increase selection of white milk

Goto, et al. (2013) Do environmental interventions impact elementary school students' lunchtime milk selection? *Journal of Applied Economic Perspectives & Policy*, 35 (2): 360-376.

CNAP USING BEHAVIORAL ECONOMICS
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Changes in the cafeteria

Behavioral Economics (BE)

- Using environmental factors to help improve healthy lunch selections

BE ideas:

- 1. Signage
- 2. Verbal nudge
- 3. Food placement




Example of an elementary school cafeteria salad bar.

BEHAVIORAL ECONOMIC IDEAS

1. Signage:

- Using colorful, attractive signage
 - "Fresh fruit and veggies today!"
 - "New & Improved!"
- Posting menus **BEFORE** students are in line
 - Display the age targeted creative/descriptive names on posters or menu boards outside the cafeteria?
- Rename items on garden bar
 - Contest for students or staff to select the name?
 - "Super strawberries!"
 - Display /place names next to food item in the garden bar
- Using photographs on tray compartments



BEHAVIORAL ECONOMIC IDEAS

2. Verbal nudge:

- a. Suggestive selling
 - o "What vegetable would you like?" vs. "Would you like a veggie?"
 - o "Here are your carrots." vs. "Do you want carrots?"
- b. Prompting
 - o "Please take your carrots." or "Don't forget your carrots."
- c. Bragging
 - o Let kids know what you are doing to promote healthy foods
 - o Tell parents, staff and kids about healthy options you are providing
 - Tell them you use whole wheat flour in the pizza dough vs. whole wheat pizza?

BEHAVIORAL ECONOMIC IDEAS

3. Food placement:

- a. Place fruits/veggies at multiple locations in the line
- b. Make the healthier items the first in the line and move the less healthy entrees further out of reach
 - o Place entrée with more calories behind entrée with less?
- c. Placement of less preferred items next to a more preferred item
 - o Beans next to sugar peas?
- d. Identifying negative trigger foods
 - o Removing French fries?
 - o Removing ranch dressing?
- e. Reducing the number of choices or "irrelevant alternatives" from the lunch line
 - o Removing mixed greens and broccoli?

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Don't forget your veggies!

2012-2013 PLATE WASTE OBSERVATIONS

- Three observation periods at four schools
- Five days during each observation period
- Control school dropped out during 2nd observation

Four groups:

1. Behavioral Economic Signage (BES)
2. BES + Behavioral Economic Environment change (BEE)
3. Behavioral Economic Signage and HOTM (BEH)
4. Control



2012-2013 PLATE WASTE OBSERVATIONS

Behavioral Economics Interventions

- Behavioral Economic Signage (BES):
 - Using posters and signs encouraging students to select fruits and vegetables, and pictures of lunch trays matched to the day's available fruits and vegetables
- BES and Behavioral Economic Environment change (BEE):
 - Using posters and signs (as described above) while also increasing the amount of fruits and vegetables present, and using low-calorie vinaigrette rather than ranch dressing.
- Behavioral Economic Signage and HOTM (BEH):
 - Using posts and signs (as described above) in addition to the HOTM curriculum
- Control (CON):
 - No treatment



2012-2013 PLATE WASTE OBSERVATIONS

Results

- Behavioral Economic Signage (BES):
 - No overall significant changes in fruit and vegetable selection and consumption
- BES and Behavioral Economic Environment change (BEE):
 - Vegetable selection rates increased for all grades
 - Students select a higher amount of vegetable servings than the other interventions
- Behavioral Economic Signage and HOTM (BEH):
 - Significant increase in fruit selection and consumption



IN SUMMARY

Engage children and families

Observe the environment, document what can be easily changed and make it happen

- o Availability and convenience of healthy foods must be possible or the nutrition education will have no impact



Questions?



POLICY:

Written statement of organizational position, decision or course of action. (Such as ordinances, resolutions, mandates, guidelines, or rules)



SYSTEMS:

Changes in organizational procedures (such as personnel, resource allocation, programs)



ENVIRONMENT:

Physical, observable changes in the built, economic, and/or social environment.



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www.changelabsolutions.org/publications/district-policy-healthy-vending

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www.changelabsolutions.org/publications/healthier-vending-municipalities



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www.changelabsolutions.org/publications/Wellness-policy-water

3. Wellness Policies

- Nutrition
- Physical education & physical activity
- Health education
- Safe & healthy school
- Student wellness services
- Staff wellness
- After School

4. Prohibiting Advertising in Schools



Can prohibit:

- All food and beverage advertising; or
- Advertising of foods and beverages not permitted to be sold on campus

Restricting Food and Beverage Advertising in Schools

Schools can have a powerful role in promoting healthier eating habits and supporting an environment of physical activity. The fact that children face so many choices of advertising in their schools is a challenge to their ability to make healthy choices.

February 2012

nplan

Maine's Law Banning Food Ads in Schools

Understanding the Law

In many schools, food and beverage are advertised everywhere – in hallways and cafeterias, on classrooms and athletic facilities, on yearbooks and newsletters, and in morning newsletters and school websites. Today, they are also being advertised on school buses and in school uniforms.

February 2012

www.changelabsolutions.org

5. Healthy School Food Zones

The collage features three articles from nplan.org:

- salud today**: "Study: Fast-Food Chains Near Urban Schools Affect Obesity More among Blacks, Hispanics". Includes an image of a burger and fries.
- SCHOOL**: "Creating a Healthy Food Zone Around Schools: A First Step for Advocates". Includes photos of two children.
- Model Healthy Food Zone Ordinance**: "Creating a Healthy Food Zone Around Schools: A First Step for Advocates".

Questions?

RESOURCE:
Network for a
Healthy California




www.championsforchange.net

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**CHAMPIONS
for CHANGE**
Network for a Healthy California

This webinar was produced by the California Department of Public Health's [Network for a Healthy California](#) with funding from USDA SNAP, known in California as CalFresh (formerly Food Stamps). These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious foods for better health. For CalFresh information, call 1-877-847-3663.

For important nutrition information, visit www.cachampionsforchange.net.
