Promoting healthy habits in schools through partnership with nonprofit hospital

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CEDARS-SINAI®
Objectives

• Leverage nonprofit hospitals’ community benefit efforts to support healthier school environments

• Describe strategies for implementing nutrition education programs in schools

• Analyze challenges in evaluating school-based nutrition education programs
Cedars–Sinai is a nonprofit, independent health care organization committed to improving the health status of the communities we serve through:

- Leadership and excellence in delivering quality health care services
- Expanding horizons of medical knowledge through biomedical research
- Educating and training physicians and other health care professionals
- *Enhancing access to care and providing community benefit to underserved populations*
Cedars–Sinai Direct Community Benefit

- COACH for Kids
- Community Health and Education
- Community Benefit Giving Office
- Healthy Habits
- Share & Care
Healthy Habits Programs

- **Students/Children**
  - 2\textsuperscript{nd} grade (10 units)
  - 3\textsuperscript{rd} grade (6 units)
  - 4\textsuperscript{th} grade (6 units)
  - School events
  - Summer program

- **Parents/Adults**
  - Healthy Habits for Families
  - Building Healthy Habits
  - Cooking Healthy Habits
  - Exercise in the Park
  - Step & Sweat Walking Group
  - Grocery Store Tour

- **Teachers**
  - Healthy Habits for Teachers
Communities Served

1. 24th Street Elementary
2. 6th Avenue Elementary
3. Alta Loma Elementary
4. Arlington Heights Elementary
5. Carson–Gore Academy
6. Cienega Elementary
7. Crescent Heights Elementary
8. Hobart Elementary
9. Marvin Elementary
10. Mid–City’s Prescott School
11. Queen Anne Elementary
12. Saturn Street Elementary
13. Shenandoah Elementary
14. Virginia Road Elementary
15. Wilshire Crest Elementary
16. Wilshire Park Elementary
17. Wilton Place Elementary
18. Los Angeles Elementary
19. Charles H. Kim Elementary
20. Cahuenga Elementary
21. Harvard Elementary
Healthy Habits by the Numbers (FY 18)

- 29,390 participant encounters
- 1,331 lessons/workshops
- 137 classrooms
- 3,830 individuals (unduplicated)
  - 3,297 students
  - 533 adults
HEALTHY HABITS

3rd Grade Workbook

Elementary

• **2nd Grade**
  o 10 units
  o MyPlate, setting the table, reading labels, washing hands, menu planning and healthy celebrations

• **3rd Grade**
  o 6 units
  o Food as fuel, healthy meal planning, grocery stores, reading labels, mindfulness, and culture

• **4th Grade**
  o 6 units
  o Where food comes from, fast food & processed foods, challenges to healthy eating, setting goals, physical activity (journaling, recommendations and evaluating PA levels)
Adult/Parent Programs

• **Healthy Habits for Families**
  - 8 weeks
  - Goal setting, chronic diseases, physical activity, mind–body connection, reading food labels, budget shopping, peer presentations

• **Building Healthy Habits**
  - 6 weeks
  - Portion control, power of praise, positive commands, reading food labels, routines, sugar sweetened beverages, healthy celebrations, enforcing rules

• **Cooking Healthy Habits**
  - 6 weeks
  - Food safety, knife skills, portion control, budgeting, supermarket myths, meal planning, substitutions, healthy celebrations
Healthy Habits: Adult/Parent Programs

- **Exercise in the Park**
  - 8 weeks summer program

- **Step & Sweat**
  - 6-8 week walking groups
  - Led by parent champions
  - Based on Arthritis Foundation’s Walk with Ease program
Evaluation: Elementary Programs

• Parent Feedback Form
  o Measures consumption of fruits, vegetables, water, junk food and sugary drinks, and physical activity levels
  o Communication between students and parents
  o Collected at four points over four-year period: 2nd grade pre, 2nd grade post, 3rd grade post, and 4th grade post

• Teacher Feedback
  o Observed behavior of students
  o Classroom changes
  o Personal changes

• Parent Handouts (2nd grade only)
Evaluation: Day in the Life Questionnaire (DILQ)

- Validated tool to measure fruit and vegetable consumption

- Asks students to recall food consumption from the day before:
  - 5 meals (breakfast, recess–snack, lunch, afterschool snack and dinner)
  - Physical activity (recess, lunch, afterschool)

- Modified version
  - Item #14 open ended questions on fruits and vegetables
  - Item #15 open ended question on physical activity
**Evaluation: Day in the Life Questionnaire (DILQ)**

- Administered at five points over a four-year period:
  - 2nd grade pre (baseline)
  - 2nd grade post
  - 3rd grade post
  - 4th grade post
  - 5th grade post (one year after Healthy Habits completion)

- Follow and track students over four years and as a cohort
Evaluation Results: 2nd Grade Pre–Post Matched Pairs

Fruit 5 Meals

- 2nd Pre: 0.65
- 2nd Post: 0.85
Evaluation Results: 2nd Grade Pre–Post Matched Pairs
Evaluation: 2nd Grade Pre–Post Matched Pairs

Physical Activity

2nd Pre: 8.24
2nd Post: 8.92
Evaluation: Across all Grades 2017–2018

[Graphs showing trends across different grades and years for the Mean of FruitMeals and Mean of all_fruits_item14.]
Evaluation: Across all Grades 2017–2018
Evaluation: Adult/Parent Programs

• Pre/Post Tests
  o Knowledge gains
  o Behavior changes

• Participant Feedback
Evaluation Results: Healthy Habits for Families

- Involve children in preparation of meals: PRE 69%, POST 60%
- Prepare homemade, healthy meals at least four days out of the week: PRE 84%, POST 84%
- Include five food groups in daily meals: PRE 76%, POST 79%
- Schedule personal time to do things you enjoy: PRE 51%, POST 58%
- Exercise five times a week for 30 minutes: PRE 49%, POST 59%
Evaluation Results: Healthy Habits for Families

I am confident in my ability to... (SA/A)

- Start a healthy lifestyle even if I have little or no support from my family: 94%
- Share and explain health-related information I learned with family and friends: 96%
- Workout at home and create simple exercise routines: 89%
- Plan balanced meals and shop for healthy ingredients: 90%
- Read and understand food labels to help me make healthy decisions: 89%
- Set health goals and take specific actions to reach my goals: 91%

PRE | POST
--- | ---
92% | 94%
96% | 92%
89% | 89%
90% | 89%
91% | 91%
Keys to Success

- Relationships with schools
- Program approach
- Focus on capacity building and outcomes
- Key messages and hands-on skills building
- Passionate and committed team
Challenges

- Working with schools
- Measuring behavior change
- Evaluating adult programs
- Current model is expensive
Next Steps for 2018–2019

- Health education internship for graduate public health students

- Expansion to six additional schools in Koreatown
  - Anticipated increase of 50% in students served

- New programs for parents
  - LAUSD pilot Healthy Habits for Families at ten sites

- Development of Train-the-Trainer for elementary curriculum

- Online version of Day in the Life Questionnaire (DILQ) on iPads

- Full three-year cohort for DILQ
Thank you!

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