10 Steps to a Healthier You: Initial Evaluation Findings

PATRICIA BARRETO MD MPH
KARINA PEREZ PEREZ MS RD
MAY 13, 2016
10 Steps to a Healthier You
Lifestyle Training

• Collaboration between the Pediatric Healthy Lifestyle Center (PHLC) and the Healthier Kids Foundation of Santa Clara County

Primary prevention childhood obesity in Santa Clara County
Established in 2006
- Full-time subspecialty practice
- Department of Pediatrics in the Santa Clara County Health and Hospital System
- PHLC Mission:

“To provide high-quality, family-centered, community-linked preventive care, lifestyle management and medical interventions for children and youth at risk for Type II diabetes and other lifestyle-related conditions”
Pediatric Healthy Lifestyle Center (PHLC)

• Children referred to Pediatric Healthy Lifestyle Center
  • BMIs > 85%
  • Associated co-morbidities

• PHLC works with referred families to implement the “10 Steps to a Healthier You” evidence-based recommendations for the prevention and treatment of childhood obesity.
Pediatric Healthy Lifestyle Center (PHLC)

PHLC staff are trained in

- Positive Discipline
  - Parenting techniques to promote an authoritative (kind but firm) parenting style
- The Division of Responsibility
  - Parenting approach designed to promote positive feeding dynamics

Guide families through healthy lifestyle behavior change using both of these parenting skill sets

Positive Discipline (http://www.positivediscipline.com/)
Division of Responsibility (http://ellynsatterinstitute.org/dor/divisionofresponsibilityinfeeding.php)
10 Steps to a Healthier You

Lifestyle Training

• Rather than wait until a child has a BMI >85% or lifestyle related co-morbidities

• Take ‘10 Steps to a Healthier You’ recommended behaviors and parenting skill sets into the community:

  Primary prevention

  Community capacity building
10 Steps to a Healthier You
Lifestyle Training

Interactive three-class series

- **Class 1:** 10 Steps to a Healthier You: Pearls from the Pediatric Healthy Lifestyle Center
  - Evidence-based recommendations for healthy lifestyle and some practical tips (or ‘pearls’)

- **Class 2:** Structure and Routines
  - Positive parenting skills needed to implement a healthy lifestyle in the home

- **Class 3:** Five Keys to Raising a Happy Healthy Eater
  - The ‘Division of Responsibility’ addressing feeding dynamics
10 STEPS
To a Healthier You

1. Eat fruits/vegetables every day*
2. Drink water instead of soda or other sweet drinks*
3. Choose water instead of juice
4. Choose natural healthy snacks
5. For children older than 2 years, serve low fat or nonfat milk*
6. Eat family meals at regular times and limit eating out*
7. Eat breakfast every day and do not skip meals*
8. Be active/play outside 1 hour every day*
9. Less than 2 hours of non-homework screen time per day*
10. Get enough sleep

*Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity(Pediatrics Vol 120. Supplement, December 2007. p s164-192
10 STEPS To a Healthier You

- The 10 STEPS habits can be easy to say but hard to do

- The next slides will offer strategies (ideas) to help your family practice the 10 STEPS

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10 STEPS To a Healthier You: Pearls

• Focus on Habits NOT Weight
• Go Back to Basics
• Practice what you preach
• Fill your home only with foods you want your family to eat
• Make “MyPlate” your plate
• Patience and Practice, Practice, Practice
• Choose to eat fruit instead of drinking juice
• Do not keep soda, juice drinks, or other sweet drinks in the home
• Watch out for processed / packaged foods (Trick Foods)
• Play! Play! Play! Move your muscles every day!
• Establish a bedtime routine

Family Strategy
(for STEP 1)

Make “MyPlate” your plate
Make “MyPlate” your plate

Take out the “MyPlate” handout

What do you notice?

½ the plate is vegetables and fruits
Make “MyPlate” your plate

The **First Step** to help your family learn to **eat** the recommended servings of **fruits** and **vegetables** daily is to **serve them daily on the plate**

*Younger children will use smaller plates so this might turn out to be a smaller amount of fruits and vegetables: the key is that fruit and vegetables are there and are balanced with the other foods*
# Vegetables

## Serve vs. Not Serve

### Vegetables 3-4x/Week

<table>
<thead>
<tr>
<th></th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
<th>SAT</th>
<th>SUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Child</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

### Vegetables DAILY

<table>
<thead>
<tr>
<th></th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THUR</th>
<th>FRI</th>
<th>SAT</th>
<th>SUN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Child</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

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Family Strategy
(for STEP 1)

Patience
and
Practice, Practice, Practice
Patience and Practice, Practice, Practice

To learn to eat vegetables and fruits:

*Parents* need *Patience*

*Children* need *Practice*
Learning to Eat Vegetables

See, fear, and don’t touch

Touch, play, separate – still discovering

Put in the mouth and spit out – still deciding

Eat 1-2 bites - learning to eat and enjoy them

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10 Steps to a Healthier You

Evaluation

Baseline questionnaire
- Knowledge, attitudes, beliefs and behaviors
- Administered prior class

Follow-up questionnaire
- Knowledge, attitudes, beliefs
- Administered immediately after taking class

Phone survey
- Behaviors
- Administered 5 weeks after taking the class (es)
10 Steps to a Healthier You
Evaluation

Numbers of surveys by class

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of Pre/Post Matches</th>
<th>Number with Pre only</th>
<th>Number with Post only</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Steps</td>
<td>158</td>
<td>4</td>
<td>16</td>
<td>178</td>
</tr>
<tr>
<td>Structures &amp; Routines</td>
<td>154</td>
<td>3</td>
<td>15</td>
<td>172</td>
</tr>
<tr>
<td>5 Keys</td>
<td>228</td>
<td>12</td>
<td>15</td>
<td>255</td>
</tr>
</tbody>
</table>
10 Steps to a Healthier You

Demographics

Parent Ethnicity

- Hispanic/Latino: 60%
- Asian: 19%
- Black/African American: 2%
- White: 8%
- Missing/Declined to state: 8%
- Multiracial: 2%
- Other: 1%
10 Steps to a Healthier You Evaluation: Knowledge

Percent who recognize healthy behaviors (pre-test vs post-test surveys)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>PRE</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eats 5-9 servings of fruits/vegetables per day</td>
<td>82%</td>
<td>93%*</td>
</tr>
<tr>
<td>Limit children to less than 1-2 hrs. of screen time outside of homework</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Limit or eliminate sugar-sweetened drinks</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>Remove TV/screens from child’s bedroom</td>
<td>89%</td>
<td>99%*</td>
</tr>
<tr>
<td>Eat breakfast every day</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Be physically active 1+ hr. every day</td>
<td>94%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Source: 10 Steps Pre/Post Class Surveys 2015 (Question 1). N=137-154. Note: *Denotes statistically significant change observed between pre- and post-test at the p<0.05 level.
10 Steps to a Healthier You Evaluation: Knowledge

Please mark the box next to the plate that best shows how much of a child’s dinner plate should be filled with fruits and/or vegetables.

Pre-test: 50% correct

Post-test: 90% correct*

* Significant at P<0.05
10 Steps to a Healthier You Evaluation: Knowledge of healthy and unhealthy foods

<table>
<thead>
<tr>
<th>How healthy do you think these foods are?</th>
<th>Pre-test percent correct</th>
<th>Post-test percent correct</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Crackers (not healthy)</td>
<td>67</td>
<td>93</td>
<td>↑ 26*</td>
</tr>
<tr>
<td>a. Gelatin (not healthy)</td>
<td>53</td>
<td>84</td>
<td>↑ 31*</td>
</tr>
<tr>
<td>a. Chips/cheese puffs (not healthy)</td>
<td>88</td>
<td>98</td>
<td>↑ 10*</td>
</tr>
<tr>
<td>a. Snack bars (not healthy)</td>
<td>45</td>
<td>91</td>
<td>↑ 46*</td>
</tr>
<tr>
<td>a. Yogurt drinks (not healthy)</td>
<td>22</td>
<td>86</td>
<td>↑ 64*</td>
</tr>
<tr>
<td>a. Fresh fruit (healthy)</td>
<td>89</td>
<td>92</td>
<td>↑ 3*</td>
</tr>
</tbody>
</table>

Source: 10 Steps Pre/Post Class Surveys 2015 (Question 3). N=141-151. Response options: Definitely not healthy, Probably not healthy, Probably healthy, Definitely healthy, Not sure. Note: *Denotes statistically significant change observed between pre- and post-test at the p<0.05 level.
10 Steps to a Healthier You Evaluation: Behaviors

Mean days per week serving fruits, vegetables, snacks, and sodas (pre-test vs follow-up interview)

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Follow-up interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>5.85</td>
<td>6.69*</td>
</tr>
<tr>
<td>Vegetables</td>
<td>5.04</td>
<td>6.21*</td>
</tr>
<tr>
<td>Packaged snacks</td>
<td>2.16</td>
<td></td>
</tr>
<tr>
<td>Soda or sweet drinks</td>
<td>1.53</td>
<td></td>
</tr>
</tbody>
</table>

Source: 10 Steps Survey pre-test 2015, Question 5 and follow-up interview. N=48-49. *Denotes statistically significant change at the p<0.05 level.
10 Steps to a Healthier You Evaluation: Behaviors

Improvement in serving soda and snacks among those with room to change

Source: 10 Steps Survey pre-test 2015, Question 5 and follow-up interview. Soda N=22, Snacks N=16. *Denotes statistically significant change at the p<0.05 level.
10 Steps to a Healthier You Evaluation: Self-Efficacy

Percent confident in setting routines (pre-test vs post-test surveys)

<table>
<thead>
<tr>
<th>Pre-test</th>
<th>Post-test*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all confident</td>
<td>6%</td>
</tr>
<tr>
<td>Not very confident</td>
<td>21%</td>
</tr>
<tr>
<td>A little bit confident</td>
<td>34%</td>
</tr>
<tr>
<td>Mostly confident</td>
<td>39%</td>
</tr>
<tr>
<td>Very confident</td>
<td></td>
</tr>
</tbody>
</table>
10 Steps to a Healthier You Evaluation: Behaviors

Frequency of involving children in routines (pre-test vs follow-up interview)

Source: Structures & Routines Pre Class Survey 2015 (Question 6) and follow-up interview. N=39. *Denotes statistically significant change from pre- to interview at the p<0.05 level. Response options: Never/Almost never (1), Some of the time (2), Usually (3), Always/Almost always (4). Setting routines pre mean: 2.59, post mean: 3.38. Helping pre mean: 2.54, post mean: 3.00.
10 Steps to a Healthier You Evaluation: 
**Attitudes**

### Importance of meal time routines 
*(pre-test vs post-test surveys)*

| Routine                              | PRE | 24% | 71% | 21% | 78% | 19% | 80% | 19% | 80% | 22% | 74% | 19% | 80% | 6% | 49% | 44% | 4% | 36% | 60% |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Eat same foods as kids               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| *Eat same foods as kids*             |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Turning off screens                  | 5%  | 19% | 73% | 19% | 80% |     |     |     |     |     |     |     |     |     |     |     |     |     |
| *Turning off screens*                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Eating together                      | 22% | 74% | 19% | 80% |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| *Eating together*                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Eating at same time every...         | 6%  | 49% | 44% | 4%  | 36% | 60% |     |     |     |     |     |     |     |     |     |     |     |     |
| *Eating at same time every...*       |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

Source: 5 Keys Pre/Post Class Surveys 2015 (Question 2). N=210-213. Scale: Not important (1), Extremely Important (5). *All mean differences statistically significant at p=<.01.
10 Steps to a Healthier You Evaluation: Behaviors

Frequency of helpful meal time practices (pre-test vs follow-up interview)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Pre-Test</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turning off screens PRE</td>
<td>6% 15% 21% 58%</td>
<td>10% 10% 8% 73%</td>
</tr>
<tr>
<td>Turning off screens Follow-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serve meals at same time every day PRE</td>
<td>6% 22% 47% 26%</td>
<td>10% 16% 22% 53%</td>
</tr>
<tr>
<td>Serve meals at same time every day Follow-up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10 Steps to a Healthier You

Evaluation

No significant change in
- TV/screen time
- Physical activity
  - ?Winter
- Pressuring or restricting feeding behavior
- Sleep time
  - High baseline
  - Trend toward increase sleep
  - Increase in non-screen time before bed

Continuous quality improvement activities ongoing
# 10 Steps to a Healthier You Evaluation: Satisfaction

## Class Satisfaction by Class

<table>
<thead>
<tr>
<th>Class/Program</th>
<th>They learned new things that will help</th>
<th>They would try things at home</th>
<th>They would recommend class to friends</th>
<th>Instruction was clear</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10 Steps</strong></td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>(N=172-173)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Structure &amp; Routines</strong></td>
<td>97%</td>
<td>97%</td>
<td>97%</td>
<td>98%</td>
</tr>
<tr>
<td>(N=169)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5 Keys</strong></td>
<td>98%</td>
<td>97%</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>(N=240-241)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10 Steps to a Healthier You Next Steps

- **Spread** and Scale
- **Modify** adapt curricula to different audiences (language/literacy)
- **Explore** using Promotoras to deliver messages/parts of the curricula
- **Partner** with Veggilution to offer cooking classes
- **Explore** video/film presentations/formats
10 Steps to a Healthier You

Thank You

- Healthier Kids Foundation of Santa Clara County
- Pediatric Healthy Lifestyle Center (PHLC)
- Facilitators
- Positive Discipline Community Resources
- Childhood Feeding Collaborative, Santa Clara County Department of Public Health
- Applied Survey Research
Family Strategy
(for STEPS 1-5)

Fill your home only with foods you want your family to eat
Fill your home only with foods you want your family to eat

If you **BUY** it, someone will **EAT** it!
10 Steps to a Healthier You: Initial Evaluation Findings

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Beverages and Processed/Packaged Foods

Most processed foods are often marketed to look like they are “healthy,”

when in fact they are low in nutritional value (not really “healthy” at all!**)

** These are statements of opinion from PHLC
Processed/Packaged Foods

Many processed/packaged foods are made with formulas that include combinations of

SUGAR!!

SALT!!

FAT!!

“Designed to be irresistible”

Trick your brain into craving them and wanting more*

Family Strategy (for STEPS 1 and 2)

Don’t keep soda, juice drinks, or other sweet drinks in the home
What happens when there is:

Soda **in** the home  
**vs**  
Soda **out** of home?
Sweetened Beverages Compete with Water!

Only keep Water and Milk in the home
Family Strategy
(for STEPS 1 and 4)

Choose a healthy, natural snack
(like fruit)
instead of processed/packaged snacks
PROCESSED FOODS* examples

*These are statements of opinion from PHLC
Processed Foods Compete with fruits and vegetables

VS