Project Healthy Schools

“Past, Present, and Future”

Program with Dr. Kim Eagle

May 31, 2011
Nine million children are overweight; the number has tripled since 1980

- 70% of obese adolescents become obese adults.
- **Minorities are at higher risk** (e.g. 23% African American girls 6-11 vs. 13% non-Hispanic Whites; 7% Mexican-American boys vs. 14% non-Hispanic Whites).
- **Obesity elevated** among lower income children although there are differences by race/ethnicity.
Obesity Health Risks

- **Heart Disease**: 86% increases a lot, 9% increases a little.
- **High Blood Pressure**: 86% increases a lot, 8% increases a little.
- **Diabetes**: 78% increases a lot, 10% increases a little.
- **Certain Types of Cancer**: 30% increases a lot, 22% increases a little.

Harvard Forums on Health, Lake Snell Perry Associates 2003
What is PHS?

- A unique community-University collaborative project started in 2004 at Clague Middle School in Ann Arbor.
- Targets 6th grade students.
- Designed to increase physical activity and healthier food choices to reduce childhood obesity and long term CVD risk.
A transitional age:

- Increased awareness.
- More independence in food choices, both in and out of school.
- Allows for follow-up through middle school.
- Time to practice!
Project Healthy Schools Overview

**Program Activities**
- Learning activities
- Assemblies
- Physical education (PE) activities
- Other school-based activities to promote physical activity
- Field days

**Environmental Changes**
- School wellness policy
- Coordinated School Health Team (CSHT)
- School Health Index (SHI)
- School environment changes
- Information campaign
- Breakfast program
- Seed to Plate program
- Farm to School program

**Research Component**
- Medical screenings
- Behavioral questionnaires
1. Eat more fruits and vegetables.
2. Make better beverage choices.
3. Perform at least 150 minutes per week of physical activity.
4. Eat less fast and fatty food.
5. Spend less mindless time in front of the TV and computer.
• PHS Overview
• MyPyramid! My Lunch!
• Better Beverages
• Get the Beat
• Rainbow of Color
• Assessing Advertising
• Supersized!
• Facts on Fat
• Move!
• PHS Party
Height/Weight
Blood Pressure
3 min. Step Test

Lipid Profile
Glucose
Before/After
Questionnaire
• 16 schools
• 10,223 6th grade students
• Over 2100 students have participated in research
Southeastern Michigan

Shiawassee Region

Corunna (1)
Ovid-Elsie (1)
Owosso (1)
Perry (1)
Royal Oak (1)

Southeastern Michigan

Ann Arbor (6)
Detroit (3)
Ypsilanti (1)
• Be flexible about scheduling and program delivery.
• Embrace change.
• Parents are essential to program success. Use many modes of communication. Invite parents to work with your program.
• Link activities to outcomes schools care about.
• Connect with community partners.
Healthy Habits

The top three changes the sixth graders said that they made in their lives due to PHS were:

- Eating more fruits and veggies (42.8%)
- Eating less fast food (40.6%) and
- Getting more physical activity minutes (39.4%)
Baseline (lighter shade) and follow-up (darker shade) results from Year 6 survey data.
## Baseline and Follow-up Data
(5 Middle Schools)

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Baseline</th>
<th>Follow up</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>852</td>
<td>19.96±4.09</td>
<td>20.28±4.09</td>
<td>0.001</td>
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<tr>
<td>Mean Systolic BP</td>
<td>849</td>
<td>107.89±11.38</td>
<td>106.65±10.65</td>
<td>&lt;0.001</td>
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<tr>
<td>Mean Diastolic BP</td>
<td>849</td>
<td>64.34±8.07</td>
<td>62.47±7.18</td>
<td>&lt;0.001</td>
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<tr>
<td>Cholesterol</td>
<td>655</td>
<td>167.84±28.94</td>
<td>157.97±28.47</td>
<td>&lt;0.001</td>
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<tr>
<td>HDL</td>
<td>656</td>
<td>53.81±12.42</td>
<td>50.19±13.93</td>
<td>&lt;0.001</td>
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<tr>
<td>LDL</td>
<td>554</td>
<td>90.24±26.48</td>
<td>87.86±25.24</td>
<td>0.003</td>
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<tr>
<td>Triglycerides</td>
<td>618</td>
<td>130.51±79.30</td>
<td>112.10±65.70</td>
<td>0.008</td>
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<tr>
<td>Random Glucose</td>
<td>654</td>
<td>95.71±14.37</td>
<td>94.44±19.93</td>
<td>0.167</td>
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<tr>
<td>Resting Heart Rate</td>
<td>850</td>
<td>80.75±11.58</td>
<td>79.71±10.39</td>
<td>0.014</td>
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<tr>
<td>Recovery Heart Rate</td>
<td>779</td>
<td>102.05±17.29</td>
<td>104.16±17.00</td>
<td>0.001</td>
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<tr>
<td>Test Length</td>
<td>778</td>
<td>2.99±0.14</td>
<td>3.12±3.33</td>
<td>0.292</td>
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</tbody>
</table>
• Fat, sugar and calorie rich options have been minimized and high-fiber items have been increased.

• Collaboration with district food service vendors.

• More whole grain bread products are being used.

• AAPS’ food service increased fruit and vegetable purchases by 49% in the past year.

• High fat milk has been replaced by 1% in a variety of flavors.
<table>
<thead>
<tr>
<th>School</th>
<th>Example 1</th>
<th>Example 2</th>
<th>Example 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tappan</td>
<td>Sponsored healthy Fun Nite</td>
<td>“No Junk in Your Trunk” healthy snack contest</td>
<td>ACES day- Conga line, Cha Cha Slide</td>
</tr>
<tr>
<td>Scarlett</td>
<td>Turkey Trot</td>
<td>Breakfast dance</td>
<td>Open Gym Night</td>
</tr>
<tr>
<td>Clague</td>
<td>Annual 5K field day</td>
<td>Volleyball advisory competition</td>
<td>Turkey Trot</td>
</tr>
<tr>
<td>Forsythe</td>
<td>Active advisory days</td>
<td>Staff exercise classes</td>
<td>Field days</td>
</tr>
<tr>
<td>Slauson</td>
<td>Walking advisories</td>
<td>Cafeteria line video</td>
<td>Additional PE advisory day</td>
</tr>
</tbody>
</table>
Other Programs

- **Fitness Add-ons:** yoga, “bootcamp” activities, indoor “beach” volleyball, 5K run/fundraisers, field days, weekly class walks.

- **All Children Exercising Simultaneously:** ACES Day.

- **Seed to Plate Program:** Students work in the school gardens, learn how to make new, healthy snacks.

- **Free the Children/Life in Action Clubs.**

- **Healthy Habits Challenge:** Competition to see which class can adopt the most healthy habits.
Detroit Partnership

The Project Healthy Schools Detroit Collaborative

- D-Town Farms (Detroit Black Farmers)
- Eastern Market
- Food & Fitness Collaborative
- Earthworks Organic Farm
- Garden Resource Program
- YMCA of Detroit
- Edibles Rex Catering Company
- Doug Ross/New Urban Learning
- College for Creative Studies (CCS)
- Detroit Service Learning Academy*
- Greening of Detroit
- Wayne State University
- Thompson Schools (UPSM, UPA & HFA)

* Letter of Interest
Margaret Trimer-Hartley
Superintendent,
University Prep Science & Math
Farm to School

- Farm Fresh Feature - a local farm item for “tasting” in the school cafeteria.

- Farm Fresh Food in the Classroom” brings to elementary classrooms a farmer and vegetables for them to touch, taste and learn about.
• Local produce days.

• PHS samples and Cooking Classes.

• Ethnic education/Fun food Fridays.
Developed a unique after school program that includes:

- Transportation
- Aquatics
- Land based activities
- Sliding scale/reduced pay
Project Healthy Schools

Next Chapter: Sustainable Future
PHS Next Steps

- PHS is growing quickly, adding 4 schools this school year alone.
- Our goal is steady 3 year sustainable expansion into schools and communities who are committed to our goals.
- We are targeting the Metro Detroit area and surrounding municipalities.
- PHS will make a life-long difference in the lives of thousands of young Detroiters by empowering them to make healthy decisions and creating a school environment that supports and promotes well-being.
A transition plan to create a sustainable PHS program in schools after 3 years has been developed

Year One:
- PHS staff takes the lead on implementing PHS programming in the school

Year Two:
- A school wellness champion is identified and trained in the PHS program
- The school wellness champion starts absorbing some aspects of PHS programming

Year Three:
- The school wellness champion takes on all major aspects of PHS programming in the school
- PHS staff will provide on-going consultation, training and communication to school wellness champions as needed

A network of school wellness champions will be formed to share successes and best practices
Sustained Benefits

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>6th grade FU</th>
<th>7th grade FU</th>
<th>8th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol</td>
<td>167</td>
<td>160</td>
<td>150</td>
<td>139</td>
</tr>
<tr>
<td>HDL</td>
<td>53</td>
<td>50</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>LDL</td>
<td>92</td>
<td>90</td>
<td>83</td>
<td>74</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>124</td>
<td>115</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* Denotes a difference from baseline value significant at P < 0.05
Wellness Policy Success

- Offering healthier options in vending, after school stores, & fund raisers.
- Banning soda sales.
- Adding salad bar.
- Implementing recess before lunch.
“Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has.” - Mead