Welcome
Promoting Healthy Habits: Innovative Nutrition Education & Physical Activity Programs for Homeless Children and Families

Wednesday, May 15, 2013

We will begin promptly at 2 p.m. Eastern.

Event Host:
Bernadette Creaven, RN, MN
Program Manager, Outreach Nurse
Carolyn Downs Family Medical Clinic
Seattle, WA

This publication was supported by Grant/Cooperative Agreement Number U30CS09746-04-00 from the Health Resources and Services Administration, Bureau of Primary Health Care (HRSA/BPHC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HRSA/BPHC.
Presenters

Jacqueline Rodriguez, MPH, AE-C
Health Educator
Community Pediatric Programs, Montefiore Medical Center
Bronx, NY

Cara Stephenson, MPsy
Administrative Coordinator
Community Pediatric Programs Montefiore Medical Center
Bronx, NY
Promoting Healthy Habits: Innovative Nutrition Education & Physical Activity Programs for Homeless Children and Families

May 15, 2013
Background

- Treating and preventing obesity determined to be clinical priority by Health Care for the Homeless Clinicians’ Network Steering Committee and the Children and Families Work Group in 2012

- Children and Families Work Group developed questionnaire and interviewed five programs in order to highlight best practices

- Resources gathered on topic will be available on National HCH Council's website – Children, Youth, & Families page
Significance

- Approximately 17% of children in the USA between 2-19 are obese\(^1\)

- Children experiencing homelessness at increased risk of obesity.
  - 2008 Minnesota study - 45% of boys and 50% of homeless girls were at risk for being overweight or were overweight\(^2\)

- Children with high BMI often become obese adults, and
  - Obese adults at risk for many chronic conditions such as diabetes, cardiovascular disease, and certain cancers\(^3\)

- High BMI in children may have immediate consequences, such as elevated lipid concentrations and blood pressure\(^3\)

- Medical costs associated with obesity was $147 billion in 2008\(^4\)
References


Promoting Healthy Habits: Innovative Nutrition Education and Physical Activity Programs for Homeless Children and Families

Cara Stephenson-Hunter, MPsy
Jacqueline Rodriguez, MPH
Community Pediatric Programs; a partnership of Montefiore Medical Center and Children’s Health Fund
Objectives

- Identify challenges in addressing nutrition and physical activity in homeless populations
- Describe innovative methods of teaching nutrition education and physical activity with limited resources
- Understand the value of using multiple methods to evaluate a pediatric nutrition education curriculum
Community Pediatric Programs
Organizational Overview

- Children’s Hospital at Montefiore
- Children’s Health Fund
- Community Pediatric Programs
- Starr Center for Preventive Health Initiatives
- South Bronx Health Center & Center for Child Health and Resiliency
- New York Community Dental Program
- New York Children’s Health Project
New York Children’s Health Project (NYCHP)

- Launched in 1987
- Provides comprehensive primary health care to homeless children and families
- 13 sites throughout NYC
- Mental health, case management, nutrition, emergency food pantry
- 2012: 4,253 patients, 23,158 visits
Obesity Trends in the United States

Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010
(*BMI ≥ 30, or about 30 lbs. overweight for 5'4” person)

Source: Behavioral Risk Factor Surveillance System, CDC.
Overweight/Obesity in NYC (2010)

- Adults: 58% overweight (35%) or obese (23%)\(^1\)
  - 30% consumed one or more sugary drinks per day\(^2\)
  - 12% consumed no fruits or vegetables in previous day\(^2\)
  - 27% did not engage in any physical activity in previous 30 days\(^2\)

- Children: 39% overweight or obese
  - 21% of 6-11 year olds were obese\(^{1,2}\)
Homelessness and the “Hunger-Obesity Paradox”

- In 2011 of our 2-19 year old patients: 34% were overweight (15%) or obese (19%)

- NYCHP provides nutrition services for children and families
Cooking Healthy Eating
Fitness and Fun

- Individual Pre-Post Survey
- Action Break incorporated into each lesson
- 2009 Pilot of CHEFF’S
- Co-facilitator’s qualitative monitoring tool
- Facilitator’s qualitative monitoring tool
CHEFF’s at a Glance: Program

- Program Methods
  - Nutrition education, physical activity, and media literacy program for children aged 6-14 (all are welcome)
  - Run after school at two homeless shelters in the Bronx
  - Bi-weekly classes
  - Two-question pre/post survey
  - Facilitated by health educator, program assistant and Americorp
A Tale of Two Sites...

Shelter “A”

- Tier II family shelter in the Bronx
- Students are placed in classes based on age
- Education Programs Coordinator onsite
- Homework help and enrichment activities offered
- Families have no cooking facilities; served meals
- Average attendance: 9

Shelter “B”

- Tier II family shelter in the Bronx
- Childcare facilities and recreation are available for children of all ages who have working parents.
- One recreation teacher for all children ages 3.5-18 yo
- Kitchens in units
- Average attendance: 17
Sample Knowledge Questions

Circle the food that is high in protein.

Circle the picture of physical activity.

Circle the ad that shows healthy eating as fun.
Who Showed up to Class?

50.6 % Male
49.4 % Female

Age

Percent of total (N = 147)

- 5-7
- 8-9
- 10-14
- 15-18

Age
How Many Times Did They Show Up?

<table>
<thead>
<tr>
<th>Total</th>
<th>Fall 09-Spring 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>186*</td>
</tr>
<tr>
<td>Encounters</td>
<td>655</td>
</tr>
<tr>
<td>Sessions</td>
<td>86</td>
</tr>
<tr>
<td>Participants/Session</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Sessions Attended

<table>
<thead>
<tr>
<th>Percentage (N=186)</th>
<th>1-2</th>
<th>3-4</th>
<th>5-7</th>
<th>8-13</th>
</tr>
</thead>
<tbody>
<tr>
<td># of sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What Did They Learn?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed at least 1 pre/post questionnaire</td>
<td>92.7%</td>
</tr>
<tr>
<td>Overall pre/post completion rate</td>
<td>83.6%</td>
</tr>
<tr>
<td>Improved pre/post score</td>
<td>65.7%</td>
</tr>
<tr>
<td>Improvement (nutrition)</td>
<td>53.5%</td>
</tr>
<tr>
<td>Improvement (PA)</td>
<td>41.3%</td>
</tr>
<tr>
<td>Improvement (media)</td>
<td>30.3%</td>
</tr>
</tbody>
</table>
What they REALLY Learned

“You have to taste something once to know you like it”
• “It’s hard to stop drinking sugar!”
• “You don’t know what parents can afford so you can’t judge what people wear”

“Fruits are different from veggies because fruits have seeds in them”
• “Aerobic Activity is like running”
• “Fiber is like a broom in our body”

“It’s not good without the label because...then you don’t know how many calories there is (sic)”
• “If it’s high intensity it needs a lot of energy for your body to do it”
• “I’m going to read the newspaper to get information”
What We REALLY Learned

- Interpretations Through Life Experience

- When asked what they could do with the “extra” sandwich from McDonald’s “2 for $3” deal, one student replied: “you could give your extra [sandwich] to a homeless person”

- “Downstairs, they keep giving us just chicken, can we survive on just chicken and rice?” “Half your plate should be fruits and vegetables” “Without fruits and vegetables only half of your body is complete.”

- When discussing the benefits of physical activity and weight management a few children mentioned that being overweight would help them survive a disaster that might leave them stranded without food for a long time.

- When asked about the benefits of exercise, one child responded that “exercise is good because you can protect your mom from being robbed.”

- Leader: “You need muscles, because no one wants to be a skeleton right? Student: “Yes we do, because if someone shoots us it will go right through”
Challenges, Successes and The Future of CHEFF’s

- Staffing, travel, budget
- Pediatric based intervention
- Students’ varied social, behavioral, and cognitive abilities
- Shelter management, turnover, communication
- Strong quantitative results
- Demand for the program
- “Training the Trainer”
New York Children’s Health Project’s Microwave Cooking Class for Women and Children: Cooking and Conversation in a Safe and Healthy Environment
Mommy and Me- Microwave Cooking

- Tier II Shelter
- Shelter Population: Women and children
- Residents have a recreation area
- Onsite Family Programs Director, Coordinator and Case workers
- Job readiness assistance and support programs
Microwave cooking class was developed to address the need for less processed, healthier food choices for shelter families with limited cooking facilities, as well as time and skill needed to cook nutritious, affordable meals.

Vegetable Lasagna and Garden Salad
Teaching Points

- Shopping on a budget
- Incorporating fruit and vegetables into our diets
- Cooking skills
- Microwave safety
Structure of the Class

- We create teams
- We follow a recipe
- Learning is informal
- Everyone can cook
- We eat together

Cooking Class Attendance

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88</td>
<td>61</td>
<td>80</td>
<td>106</td>
</tr>
</tbody>
</table>
Challenges

• Fears or Perceptions about Microwaves
• Client Resistance/Reluctance
• Transportation of Staff and Supplies
Who Benefits?

Benefits to Shelter
- Teaches Residents Safe cooking practices
- Satisfies client education requirements

Benefits for Residents
- Learning to safely cook nutritious meals on a budget
- Provides a positive social environment
- Provides access to additional nutrition services
Testimonials

• 27 y.o
“Today was my first day at microwave cooking class. I enjoyed sharing, and learning new ways to prepare meals. I’m grateful for the class and hope to come back to others like it. I’d like to thank the other people in class, teachers, and cook’s for their patience and creativity.”

• 25 y.o
“This cooking class is very creative! Personally, I didn’t know I was able to do a whole cooked meal in the microwave from scratch. I always thought the microwave was for heating up food.”

• 37 y.o
“I thought that microwave food would make me sick, but because of this class, I learned that microwaves won’t make me sick. With this class I learned how to cook different foods.”

• 26 y.o
“I started saving so much more money by learning that there is such a thing as making dinner in the microwave. So long story short, from my little tummy, thank you for your time.”

• 45 y.o
“I enjoyed the experience of cooking in a whole different way from what I know with the conventional oven. It’s different and convenient, tasty and delicious.”
How We Address the Many Needs of Our Shelter Families

- Wellness workshops
  - Relaxation techniques
  - Parenting
  - Physical Activity
- Menu guidance for the shelter’s afterschool program
- Referral to NYCHP’s Food Pantry
Coming soon

- CHEFF’s curriculum and evaluation tools
- NYCHP’s Microwave Cookbook
- Food Pantry Recipe Packet
Acknowledgements

- Montefiore Medical Center
- Children’s Health Fund
- Ariel Sarmiento, MPH, CPH
- Jo Applebaum, MPH, CPH
- Sandra Arevalo, MPH, RD, CDE
- The many staff and clients who coordinate and participate in the aforementioned programs
References


THANK YOU!!!
Jacqueline Rodriguez, MPH, AE-C
Health Educator
Community Pediatric Programs, Montefiore Medical Center
Bronx, NY

Cara Stephenson, MPsy
Administrative Coordinator
Community Pediatric Programs, Montefiore Medical Center
Bronx, NY
For more information about the National HCHC Council

- Contact us at council@nhchc.org.

- Other educational opportunities including technical assistance and regional trainings can be found online at www.nhchc.org.