It’s a Family Affair: A Team Approach to Childhood Obesity

Healthy Hampton Roads Obesity Summit
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Norfolk, Virginia
I do not have any financial disclosures; neither do I intend to discuss off-label use of medications.
Learning Objectives

* Identify barriers to evaluation and treatment of childhood obesity
* Describe culturally-sensitive family-centered approaches to treatment
* Describe CHKD Healthy You for Life
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Barbara “Babs” Benson, RN, Program Manager
Jessica Rodriguez, Community Outreach Coordinator

Patricia Belford-Cohen, LCSW
Kira Davies, DPT, SCS
Joseph Gill
Lynn Kistler, MS, RD
Jill Layne, LCSW

Regina Burkard
Krystal Roberts
Mary Jo Haney, RD, CSP
Kim Kranz, PT, DScPT, OCS, SCS
Ellen Pelton, MS

Health Center at Oakbrooke - Chesapeake
Health and Surgery Center at Oyster Point – Newport News
Health Center at Neurodevelopmental Center (NDC) - Norfolk

CHKD Healthy You for Life
CHKD Healthy You for Life

**Clinic**
- Open to children *3-16 years old*
- BMI >85th percentile
- Consultation with
  - Physician
  - Physical Therapist and Exercise Specialist
  - Registered Dietitian
  - Licensed Clinical Social Worker

**Health Classes**
- Available once clinic assessment completed
- Open to children *8-16 years old*
  - 8 week academic class
  - 6-week membership to YMCA, contingent upon class attendance
Multidisciplinary Approach

Social Workers

- Individual and/or family counseling
- Coordinate care with other providers

Physical Therapists Exercise Specialists

- Functional movement assessment
- Fitness plan based on needs, interests

Registered Dietitians

- Assess risk for food insecurity
- Advice based on labs, medical conditions
- Monitor nutrition goals
deBono et al. (2012); Eisenmann et al. (2011); Faith et al. (2002); Schmalz DL (2010); Hartline-Grafton (2011); Gooze et al. (2012).
Know Thyself
Motivational Interviewing

Principles

* Patient-centered
* Resist arguing, persuasion, confrontation
* Understand motivation
* Listen to the family
* Empower the patient and affirm attempts to change

Tools

* Establish rapport
* Set an agenda
* Ask open ended questions, provide menu of solutions
* Use reflective listening
* Develop discrepancies, elicit change talk

Communication Styles

**Following**
- Listening; gathering information; obtaining a history
- Includes asking permission, open-ended questions

**Directing**
- *Patients are told what to do and how to do it*
- Includes menu building, action reflections

**Guiding**
- Patient led and tutored to find their way to solutions
- Best suited for health behavior change discussions

Schwartz (2010)
Approaching the Family

Ask permission to discuss weight, lifestyle
Advise about risks, benefits, improvements
Assess readiness for change, barriers
Assist with and Agree on plan, goals
Arrange follow up

Ask Permission
### Definitions

#### Body Mass Index (BMI)

<table>
<thead>
<tr>
<th></th>
<th>Children &amp; Adolescents</th>
<th>Adults (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underweight</strong></td>
<td>&lt; 5th percentile</td>
<td>&lt;18.5</td>
</tr>
<tr>
<td><strong>Healthy Weight</strong></td>
<td>5th - 84th percentile</td>
<td>18.5 - 24.9</td>
</tr>
<tr>
<td><strong>Overweight</strong></td>
<td>85th - 94th percentile</td>
<td>25 - 29.9</td>
</tr>
<tr>
<td><strong>Obese</strong></td>
<td>≥95th percentile</td>
<td>≥30</td>
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The proportion of weight to height

Source: Center for Disease Control and Prevention, [http://www.cdc.gov/obesity](http://www.cdc.gov/obesity)
Body Mass Index-for-Age Percentiles

Girls

Boys

>99th

Underweight

Healthy Weight

Overweight

Obese

BMI 99 Percentile Cut-Points (kg/m²)

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Girls</th>
<th>Boys</th>
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<tbody>
<tr>
<td>5</td>
<td>21.5</td>
<td>20.1</td>
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<tr>
<td>6</td>
<td>23.0</td>
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<td>10</td>
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<td>16</td>
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<tr>
<td>17</td>
<td>40.8</td>
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Combined Overweight/Obese (%)

10-17 yo

US: 31.6
VA: 31
ORF: 44.7

2011 Virginia YRBSS Data

In School
* 11% of HS students obese
* 82% of schools sold less nutritious foods/beverages outside the SFSP
* 58% of schools offered opportunities for all students to participate in PA

At Home
* 16% did not engage in >60 min/d of physical activity
* 31% watched TV >3hrs/d
* 29% used computers >3hrs/d
* 6% did not eat fruits or vegetables
* 10% consumed soda >3x/day

Source: www.cdc.gov/yrbss
Breastfeeding for 9 months, decreases the risk of becoming overweight by more than 30%.

The risk for overweight and obesity decreases with each month of breastfeeding.

MyPlate
Applies to the Entire Family

What Does Your Plate Look Like?
www.fruitsandveggies.challenge.gov
Healthy You’s Countdown to Family Fitness

5 servings of fruits & vegetables
Eat fruits and vegetables every day. A serving is one-half cup of cut fruit or veggies, one cup of salad greens or one-quarter cup dried fruit.

4 servings of water
Drink water every day to stay hydrated and provide fluid for growing bodies. No soft drinks, sodas, or sweetened drinks!

3 servings of low-fat dairy
A serving is one eight-ounce cup of low-fat or skim milk or yogurt or 1 1/2 ounces of low-fat cheese.

2 hours or less of screen time
Limit daily time spent watching television, using the computer, or playing video games.

1 hour or more of physical activity
Encourage your children to actively play for 1 hour every day. Try running, skipping, jumping or dancing each day.

GO!
Physical activity combined with good nutrition will help the whole family stay healthy.

5-4-3-2-1 GO!
Body Mass Index-for-Age Percentiles

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*Note: The charts and data above are for illustrative purposes and should not be used for medical decisions.*
Joint Pains  Sleep Disturbances
Low Self-Esteem  Poor Body Image
Difficulty Establishing Peer Groups

Short Term Effects
School Absences

Inattentiveness and Hyperactivity

Fatigue and Daytime Somnolence

Teasing and Bullying

Mood or Adjustment Disorders

School Related Effects
Insulin Resistance or Diabetes
Obstructive Sleep Apnea
Menstrual Irregularities
High Blood Pressure
Lipid Abnormalities
Fatty Liver Disease

Long Term Effects
**Weight Related Chronic Diseases**

**Type 2 Diabetes**
- Up to 1 out of 3 new cases diagnosed in children less than 18 years old, most common in 10-19 yr. olds
- Disproportionately affects minorities

**Dyslipidemia**
- In 10-18 yr. olds, approximately 23% suffered from dyslipidemias
- In post mortems, 3 yr. olds have fatty streaks in the AA; 10 yr. olds have streaks in their CA

Assess for Readiness for Change & Presence of Barriers
The goal is to move from one stage to the next. Patients and their families may move back and forth. There may be differences in readiness – food, fitness, feelings.

<table>
<thead>
<tr>
<th>Transtheoretical Model and Stages of Change</th>
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<tbody>
<tr>
<td><strong>Pre-Contemplation</strong></td>
</tr>
<tr>
<td><strong>Contemplation</strong></td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
</tr>
<tr>
<td><strong>Action</strong></td>
</tr>
<tr>
<td><strong>Maintenance/Relapse</strong></td>
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</table>
1. In the past month, have you been actively trying to change your child’s weight or BMI?  Yes/No
2. In the past month, have you been actively trying to keep your child from gaining weight?  Yes/No
3. Are you considering trying to change what your child eats or increase his/her physical activity to help them achieve a healthier BMI in the next 6 months?  Yes/No
4. Has your child’s BMI (or weight) decreased or remain unchanged for more than 6 months?  Yes/No

<table>
<thead>
<tr>
<th>Stage</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Contemplation</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Contemplation</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>Y on Q1 or Q2</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>Y on Q1 or Q2</td>
<td>Y</td>
<td></td>
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<p>| |</p>
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<tr>
<td>These patients are not considering losing weight in the next six months. Reassess readiness to change at future appointments.</td>
</tr>
<tr>
<td>This group includes those patients who are seriously considering losing weight. Refer to treatment algorithm.</td>
</tr>
<tr>
<td>Patients who are actively trying to lose weight or have been successful but for less than six months. Reinforce all changes and encourage. Give additional support as required.</td>
</tr>
<tr>
<td>Patients who have successfully maintained their weight loss for at least six months. Reinforce all changes and encourage.</td>
</tr>
</tbody>
</table>

*If the patient is at contemplation, action or maintenance position on the cycle of change he or she is appropriate for a weight management intervention.*

Parental Readiness for Change

Preparation or Action Stage

- Child’s weight is a health problem
- Their weight is above average
- Being overweight is a health problem
- BMI > 95th
- Child > 8yo

MONEY
Food Stamp Cycle

Population Risk Factors

Source: www.nichq.org/advocacy/obesity_resources/factsheets/virginia
MIND
Marketing Corpulence

Source: Center for Science in the Public Interest (2003); Foley Freisleben LLC (2012); Kalb (2010)
Social & Cultural Norms

She’s a brick house... 36-24-36
MECHANICAL
METABOLIC
Assist with Making a Plan & Agree on Goals
Specific
Measurable
Achievable
Rewarding
Timely

SMART Goals
Small Changes Theory

Lutes and Steinbaugh (2010)
Age & Developmentally Appropriate

- Non-food rewards
- Hunger and satisfaction cues
- Screen time
- Active play and outdoor fun
- 5-4-3-2-1 Go!
- Family centered
Arrange Follow Up
Multidisciplinary Community Partnerships

Healthy City Initiatives: Portsmouth, Norfolk, Eastern Shore

Specialty Services: Nutrition, Social Work, Physical Therapy, Personal Training, Exercise Specialist

Insurance Programs: VA Premier, Optima, Anthem

Community Programs: YMCA, GOTR, Mentors
Continue to Engage
You Become the Student

Follow Up
Emphasize the Medical Home


Electronic Communication & Therapeutic Contact

Electronic Communication

* Short message services (SMS)
* Email
* Apps for smartphones, tablets

Therapeutic Contact

* Telephone call
* Handwritten note
* Office visits
* Electronic communication

Emerging evidence base with randomized trials
May affect attrition, adherence more than BMI, weight
Have a plan for protected health information and HIPAA
Clearly define usefulness, timeliness, and “rules”
In Conclusion

- Persevere
- Encourage
- Advocate
- Resist
- Learn
- Set Goals
Healthy You for Life

CHKD's Healthy You for Life program was developed in 2001 to help overweight children avoid the medical complications associated with childhood obesity.

Children who weigh more than they should risk serious health problems such as high blood pressure, diabetes and high cholesterol. Self-esteem and body image can also suffer. If your child struggles to maintain a healthy weight, CHKD’s Healthy You for Life program can help.

The program involves both medical clinic visits with year-long follow-up and health classes.

With a physician’s referral, your child can participate in our program, which involves consultations with a physician, registered dietitian, physical therapist, licensed clinical therapist and a registered nurse. Click here for more information on the clinic.

Parents and children will work together focusing on all aspects of weight management, including diet and food planning, physical activity and emotional support.

For Physicians
Do you have a patient that you would like to refer to our program? View our referral information and forms.
Healthy You for Life

Referral, Admissions and Fees

All weight management clients must have the approval of their pediatrician or family physician.

For Physicians

- Physician Referral Form (Typeable PDF)
- Physician Referral Checklist
- Childhood Obesity - Indications for Specialty Care
- Childhood Obesity referral guideline update

For Parents

- Healthy You for Life Intake Form
- Charity Application (Typeable PDF)

Children ages 3 - 16 can participate in clinic, children ages 8 - 16 for health class.
<table>
<thead>
<tr>
<th><strong>Medical Director</strong></th>
<th><strong>Program Manager</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominique R. Williams, MD</td>
<td>Babs Benson, RN</td>
</tr>
<tr>
<td>(757) 668-9177</td>
<td>(757) 668-7035</td>
</tr>
<tr>
<td><a href="mailto:Dominique.Williams@chkd.org">Dominique.Williams@chkd.org</a></td>
<td><a href="mailto:Barbara.Benson@chkd.org">Barbara.Benson@chkd.org</a></td>
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<thead>
<tr>
<th><strong>Community Outreach Coordinator</strong></th>
<th><strong>FAX</strong>: (757) 668-7809</th>
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<tbody>
<tr>
<td>Jessica Rodriguez</td>
<td></td>
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<tr>
<td>(757) 668-7860</td>
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<tr>
<td><a href="mailto:Jessica.Rodriguez@chkd.org">Jessica.Rodriguez@chkd.org</a></td>
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www.chkd.org/HealthyYou

Healthy You for Life
Thank You