The Childhood Obesity Prevention Toolkit for Howard County Maryland Healthcare Providers
Dear Colleagues:

In Maryland, one out of every three children is overweight. Childhood and adult obesity rates in the U.S. have risen dramatically in the past three decades. The 2010 “F as in Fat” report by the Trust for America’s Health and RWJF found that Maryland ranked 26th in the nation for adult obesity and 31st in the nation for childhood obesity. The rising prevalence of obesity among children and youth brings with it serious health risks in childhood and, for the majority of obese children, into adulthood, including Type 2 diabetes, heart disease, and high cholesterol. In Howard County, we are working to address rising childhood obesity rates through a Childhood Obesity Prevention Project (COPP).

The COPP aims to work at the local level to close the gap between rising childhood obesity rates and the current delivery of obesity prevention and treatment by healthcare providers and systems. Specifically, our focus is to give Howard County pediatricians and family practitioners the support, knowledge, and resources they need to follow best practices related to the delivery of childhood obesity prevention and treatment.

The COPP Toolkit was developed through collaborative efforts to help equip healthcare providers with strategies and tools to assess, prevent and effectively manage pediatric patients who are overweight and obese; and to offer pertinent information for providers to consider when discussing healthy lifestyles and weight management with their patients, including those from diverse and underserved communities.

Please join with the Howard County Health Department in our efforts to reverse the childhood obesity trend by utilizing this resource developed by healthcare providers for healthcare providers. This provider toolkit is also available in an electronic format. If you would like to download a free copy, please visit the Howard County Health Department website www.hchealth.org

Sincerely,

Maura J. Rossman, MD
Health Officer, Howard County Health Department
ACKNOWLEDGEMENTS

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Valerie Berry, MPH  
Project Coordinator  
Healthy Howard Inc.

Sarah Connors-Fellers, MD  
Family Practice Physician  
Chase Brexton

Christine Hall, MPH  
Executive Director  
Healthy Howard Inc.

Eric Masten  
Director of Health Policy & Advocacy  
Healthy Howard Inc.

Rosimar Meléndez  
Senior Program Officer  
Horizon Foundation

Cindi Miller, RN  
Director of Community Healthy Education  
Howard County General Hospital

Paula Minsk, M.Ed., CFRE  
Executive Director  
Maryland Chapter, Academy of Pediatrics

Amanda Nugent, MPH  
Acting Director of Health Policy & Communications  
Howard County Health Department

Becky Ramsing, MPH, RD, LDN  
Nutrition Consultant  
Tambua Consulting, LLC

Maura J. Rossman, MD  
Health Officer  
Howard County Health Department

Glenn E. Schneider  
Chief Program Officer  
Horizon Foundation

Marlene Schwartz, Ph.D.  
Director  
The RUDD Center for Food Policy & Obesity

Jill Weaverling  
Communications Coordinator  
Chase Brexton
Promoting healthy weight in pediatric patients and their families

Physician’s Resource Manual for prevention and treatment of childhood obesity

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Introduction

What is the purpose of this manual?
The objective of this manual is to assist physicians and medical providers with practical application of screening, tracking and providing patient and parent education materials to improve obesity prevention and management for children and youth in Howard County.

Who is this manual designed for?
This manual is designed for physicians and clinicians who work with children, adolescents and their parents or guardians.

What does this manual contain?
This manual is organized into sections that address information relevant to implementing preventative measures and treatment of overweight and obesity. It contains practical steps, tools and a collection of resources that you and your staff can effectively use to help children and families make choices and changes now that will ensure healthy futures. Rather than “recreating the wheel,” the tools and handouts have been selected from existing resources, and links are provided for more details when available.

The Unique and Important Role of the Healthcare Provider

The healthcare provider plays a key role in preventing and treating childhood obesity. Though time is limited, the interaction between patient and family and the provider and his/her staff can lay the foundation that will equip and empower families to make healthy choices that will promote healthy weights for a lifetime.

The 2007 Expert Committee Recommendations on the assessment, prevention and treatment of child and adolescent overweight and obesity defines 4 steps to implement. This manual will address each one.

- **Assess** at well care visits
- **Prevent** at well care visits
- **Treat** through follow ups and Prevention Plus visits
- **Advocate** beyond your practice

Primary care providers should universally assess children for obesity risk to improve early identification of elevated BMI, medical risks, and unhealthy eating and physical activity habits. Providers can provide obesity prevention messages for most children and suggest weight control interventions for those with excess weight. The writing group also recommend changing office systems so that they support efforts to address the problem. For prevention, the recommendations include both specific eating and physical activity behaviors, which are likely to promote maintenance of healthy weight, but also the use of patient-centered counseling techniques such as motivational interviewing, which helps families identify their own motivation for making change. For assessment, the recommendations include methods to screen for current medical conditions and for future risks, and methods to assess diet and physical activity behaviors. For treatment, the recommendations propose 4 stages of obesity care; the first is brief counseling that can be delivered in a health care office, and subsequent stages require more time and resources. The appropriateness of higher stages is influenced by a patient’s age and degree of excess weight. These recommendations recognize the importance of social and environmental change to reduce the obesity epidemic but also identify ways healthcare providers and health care systems can be part of broader efforts. [Expert committee recommendations regarding the prevention, assessment, and treatment of child and adolescent overweight and obesity: summary report. (Pediatrics. 2007 Dec; 120 Suppl 4:S164-92.)]
The Child Obesity Problem

Childhood obesity is one of the most important issues facing the United States today. In 2010 one-third (31.3%) of children ages 10-17 were either overweight or obese,\(^1\) and it has more than doubled in children and tripled in adolescents in the past 30 years.\(^2\) Overweight adolescents have a 70% chance of becoming overweight adults, increasing to 80% if one or more parents are obese.\(^3\) Unless contributing behaviors and lifestyle choices are identified and healthier patterns of eating and exercise are adopted, many of these children will eventually develop chronic illnesses, such as diabetes, high blood pressure, cardiac disease, osteoarthritis and some cancers. The annual cost to society for obesity is estimated at nearly $100 billion. According to the Robert Wood Johnson Foundation, “we are raising the first generation of youth who will live sicker and shorter lives than their parents.”

Although Howard County is considered the healthiest county in Maryland, the overweight and obesity rates still play a major role in the health and wellness of its residents. The Howard County Health Assessment Survey (HCHAS) queried over 2,000 adult residents concerning their health status. More than half of respondents had overweight and obese calculated BMI’s. Additionally, the survey revealed adults in Howard County demonstrate higher obesity rates in the southeastern part of the county compared to the western county. Overweight is disproportionately high among African Americans and Native Americans with 15% more overweight African Americans in Howard County than Whites.

Childhood Obesity Nationwide vs. Maryland\(^4\), 2007

<table>
<thead>
<tr>
<th></th>
<th>Underweight (less than 5th percentile)</th>
<th>Healthy weight (5th to 84th percentile)</th>
<th>Overweight (85th to 94th percentile)</th>
<th>Obese (95th percentile or above)</th>
<th>Total %</th>
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</thead>
<tbody>
<tr>
<td>Nationwide</td>
<td>5.2%</td>
<td>63.2%</td>
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</tr>
<tr>
<td>C.I.</td>
<td>(4.6 - 5.7)</td>
<td>(62.0 - 64.4)</td>
<td>(14.4 - 15.1)</td>
<td>(15.4 - 17.3)</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>2,186</td>
<td>29,121</td>
<td>5,754</td>
<td>5,040</td>
<td></td>
</tr>
<tr>
<td>Pop. Est.</td>
<td>1,631,791</td>
<td>19,977,432</td>
<td>4,825,739</td>
<td>5,175,940</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
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<td>(61.9 - 70.0)</td>
<td>(11.9 - 18.5)</td>
<td>(10.3 - 15.9)</td>
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<td>93,659</td>
<td>83,535</td>
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</tr>
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</table>

2007 National Survey of Children’s Health, Nationwide vs. Maryland

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Howard County Health Assessment Survey (See Appendix 1 for more detailed survey results)

Overweight Adults by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Overweight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>70%</td>
</tr>
<tr>
<td>Native American/Other</td>
<td>62%</td>
</tr>
<tr>
<td>White</td>
<td>55%</td>
</tr>
<tr>
<td>Asian</td>
<td>45%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>39%</td>
</tr>
</tbody>
</table>

Definition of Overweight and Obesity

The clinical definition of childhood overweight and obesity is based on the ratio of weight to height using age and gender specific references. The Body Mass Index (BMI) is a widely accepted measure for adiposity. The CDC and the American Academy of Pediatrics (AAP) recommend the use of the BMI to screen for overweight in children annually beginning at two years of age up to eighteen years. Based on the BMI, a child or adolescent is considered obese when the BMI is at or above the 95th percentile, with respect to gender-specific BMI for age growth charts provided by the CDC. When the BMI is at or above the 85th percentile but less than the 95th percentile, a child or adolescent is defined as overweight.

The BMI is only a screening tool. BMI is not a diagnostic tool. A child may have a high BMI for age and gender, but to determine if overweight is a problem, other assessments need to be performed. These may include diet and physical activity evaluation, medical and family history, BMI trajectory, assessment of body fat distribution, laboratory testing, and other appropriate health screenings.
The health consequences of being overweight

Childhood obesity has both immediate and long-term health impacts:

- Obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure.
- Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem.
- Obese youth are more likely than youth of normal weight to become overweight or obese adults, and therefore more at risk for associated adult health problems, including heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis.

Healthy lifestyle habits, including healthy eating and physical activity, can lower the risk of becoming obese and developing related diseases.
How to Implement Pediatric Weight Management in your Practice:

The Academy of Pediatrics strongly encourages the following practices. This toolkit provides guidelines and resources for the recommended steps below.

Assess:
1. Conduct thorough history including family history, eating and physical activity with all patients’ behaviors (including screen time, sweetened beverages, eating out and fruits and vegetables)
2. For each patient, consider patient’s risk by virtue of family history, height and weight gain pattern, socioeconomic, ethnic, cultural, presence of comorbidities and/ or environmental factors.
3. Beginning at age 2, calculate and plot BMI for all patients on a yearly basis.

Prevent and Treat:
1. **Prevention** is for all patients and should include promotion and support for breastfeeding, family meals, limited screen time, regular physical activity and yearly BMI monitoring.
2. **Prevention Plus** is for children between the 85th - 94th percentiles BMI.

<table>
<thead>
<tr>
<th>For Both Prevention and Prevention Plus:</th>
<th>Specifically encourage 5 servings of fruits and vegetables/day, 2 hours or less of screen time, 1 hour or more of physical activity and 0 sugared drinks. Also discuss the importance of family meal time, limiting eating out, consuming a healthy breakfast, preparing your own foods, and promotion of breastfeeding.</th>
</tr>
</thead>
</table>

3. **Structured Weight Management** is used if Prevention Plus has not been effective and BMI is between 95th - 98th percentiles. This approach combines more frequent follow-up with written diet and exercise plans.
4. **Comprehensive Multidisciplinary Intervention** is used when 3 - 6 months of structured weight management has failed to achieve targets. This approach combines more frequent visits with an MD and a dietitian and could include exercise and behavioral specialists.
5. **Tertiary Care Intervention** is for patients with BMI 99th percentile or greater and with associated comorbidities or for those who structured weight management and comprehensive multidisciplinary intervention were not effective. This approach consists of all that is contained in the previous delivered interventions plus consideration of more aggressive therapies including meal replacements, pharmacotherapy, and even bariatric surgery in selected adolescents.

Advocate: Pediatricians play a vital role when advocating for policy, environmental, and systems level changes at the community, state, and federal levels. (See Note)
Note: This information is from the recommendations in the AAP Policy Statement: Prevention of Pediatric Overweight and Obesity and the AAP endorsed Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity.

ASSESS

Assessment and Education starts in the Waiting Room!

The waiting area provides an opportunity to collect information from the family about diet and lifestyle choices and influences, as well as to begin educating patients through posters, videos, reading material and more. See Resource section for ideas on setting the office environment.

- Each family/patient should complete a brief questionnaire addressing nutrition and physical activity choices. The physician will refer to it when assessing weight and overweight risk with family.
- Height and weight can be taken by office staff. Ensure staff members are adequately trained and method is consistent, i.e., shoes on/off?
- Use Howard County’s Physical Activity and Nutrition Survey (Appendix 1)

Optional surveys

- Are You a Healthy Kid – extended longer version with worksheet and scoring for diet assessment
- Youth Physical Activity and Nutrition Assessment – from Nebraska’s Foster Healthy Weight in Youth Toolkit - “The Youth Physical Activity and Nutrition or PA-N Assessment Form is a clinical tool used to assess health behaviors and attitudes. The PA-N form is an objective assessment tool that facilitates the conversation between healthcare providers and patients around weight, nutrition and activity habits. The PA-N form also is infused with consistent prevention messages therefore it is a tool that integrates the expert committee recommendations in the clinic setting.”

Assessment of Weight and Related Factors in the office visit

STEP 1 Chart BMI Percentile for Age in all patients ages 2 to 18 - Should be done annually at minimum.

1. Accurately measure height and weight
2. Calculate Body Mass Index
See NCCD Online BMI calculator

3. Plot BMI on age/gender specific growth charts and determine BMI Percentile and weight category using CDC BMI for Age Growth Charts in Appendix 1.

<table>
<thead>
<tr>
<th>BMI Percentile</th>
<th>Nutritional Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5th Percentile</td>
<td>Underweight</td>
</tr>
<tr>
<td>5th - 84th Percentile</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>85th - 95th Percentile</td>
<td>Overweight*</td>
</tr>
<tr>
<td>&gt; 95th Percentile</td>
<td>Obese**</td>
</tr>
<tr>
<td>&gt; 99th Percentile</td>
<td>Severely Obese</td>
</tr>
</tbody>
</table>

*From the June 2007 the AMA/CDC Expert Committee on Childhood Obesity
**Formerly classified as “at-risk for overweight;”

**Formerly classified as “overweight”

STEP 2 Clinical Evaluation
1. Measure Blood Pressure and assess using Blood Pressure Levels for the 90th and 95th Percentiles of Blood Pressure for Boys Ages 1 to 17 Years (Appendix 1)
2. Review of Symptoms and physical exam for comorbidities
3. Screen family history - A child with obese parents has a 3-fold increased risk of becoming obese
4. Document use of medications associated with weight gain (steroids, antipsychotics, antiepileptics)
5. Order appropriate laboratory tests

The examination should also include questions that provide information about weight, lifestyle and other influences on weight and ability/readiness to make needed changes.

Recommended Forms
- The Approach for Prevention & Management of Overweight in Children 2-12 years is a Decision Matrix assisting the pediatrician in assessment and treatment decisions.
- The Encounter Documentation Tool can be used as a checklist of elements to address during the initial office visit. (Appendix 1)
- The Pediatric Weight Management Medical Summary is a 3-page form that can be inserted in the medical file addressing clinical assessment and factors influencing the child’s weight. The third page can be used for patients at higher risk entering the Prevention Plus management plan. (Appendix 1)

STEP 3 Health Behaviors and Attitudes
Review and discuss with patient and family factors affecting food and activity choices in family setting and assess readiness to change. Refer to forms that have been completed in the waiting room or have them complete them with you.
PREVENT AND TREAT

Developing a plan

STEP 4: Plan for follow up - Prevention and Treatment

1. Refer to the *Approach for Prevention & Management of Overweight in Children 2-12 years* (*Appendix 1*) to develop customized prevention or treatment plan. Take into account the BMI, medical and behavioral risk factors and the attitudes and situation of the child and his/her family.

2. Decide what follow up path to use and follow up accordingly:
   - **Prevention**
     1. Set goals with patient using **5-2-1-0 Plan** (see below)
     2. Refer to specialist for comorbidities
     3. Consider referral to dietitian and behavioral specialist
     4. Provide written resources as available
   - **Prevention Plus**
     1. Focus on lifestyle changes using 5-2-1-0 and more frequent follow-up
     2. Set weight goal (maintenance or loss)
     3. Follow up every 1-3 months
   - **Structured Weight Management**
   - **Comprehensive Multidisciplinary Intervention**
   - **Tertiary Care Intervention**

A more detailed description of Prevention and Treatment Steps are outlined in the *Expert Committee Recommendations* (*Appendix 1*).

3. **Points to Consider:**
   - Does your treatment plan address comorbidities?
   - What is the history and shape of the growth chart over time? Rather than a single BMI measurement, consider other issues besides weight, such as food insecurity or behavior changes. (See article by Ellyn Satter RD, MS in *Appendix 1*)
   - Is a referral needed? Refer to *Suggested Pediatric Weight Management Protocols* (A one year plan – includes RD visits) by AAP/Healthy Active Living (*Appendix 1*)

4. **Additional Resources**
   - The *Pocket Reference Clinical Algorithm* is an easy to use clinical tool to help in the assessment, prevention and treatment of obesity.
   - Additional Resource: Purchase a *5-2-1-0 Pediatric Obesity Clinical Decision Chart* from the AAP bookstore. This convenient flip chart provides child health care
professionals practical support and guidance to help improve care and outcomes for overweight youth. It is consistent with the December 2007 Expert Panel Recommendations for Treatment of Child and Adolescent Overweight and Obesity (AAP Endorsed).

5. Develop and record plan in patient chart using selected tool. (Appendix 1)
   - The Pediatric Weight Management Medical Summary by AAP/Healthy Active Living OR
   - Healthy Care for Healthy Kids Management Plan by NICHQ

Ending the visit – where to go from here?

- Agree on goals or targets with patient and family. Have patient and family decide on action steps that they are willing and able to complete. Strive for small but successful steps. For weight management, in most children, the goal is weight maintenance as they grow, rather than weight loss. Action plans recommended by the AAP and other pediatricians include:
  - The 5-2-1-0 plan is simple to use and has been adopted in many pediatric weight management and family wellness settings. Patients can work with their physician to identify ways they can reach these numbers each day.
    - 5 fruits & Vegetables
    - No more than 2 Hours of Screen Time
    - 1 hour of physical activity
    - 0 sweetened beverages
  - 3-point plan – 3 goals agreed upon with patient/family to:
    1. Increase healthy food choices
    2. Decrease total screen and phone time
    3. Increase physical activity
  - See below for Suggested Messages to emphasize with patients and families
  - Additional Tools and Resources
    - Rx for Healthy Living – as shown above (Appendix 2)
    - USDA’s Choose-My-Plate Website provides a tool to develop a Food Plan based on specific calorie needs.
    - NICHQ’s Weekly log for tracking food and activity: (Appendix 2)
    - NICHQ’s Information Booklets for pediatric patients and their parents

- Provide handout from file or have office staff provide specified handout.
- Review follow up plan with family
- Provide referral if needed:
RD; weight management program, multidisciplinary
- To locate a Registered Dietitian in your area, select “Find An RD” on the Academy of Nutrition and Dietetics Website www.eatright.org.

**Educating Parents and Families**

*It is important to give consistent, evidence based messages to families. Help them identify steps they can take to adopt healthier eating and activity habits that will last a lifetime.*

**8 Messages to help families maintain healthy weights**

1. **Reduce or eliminate sugar-sweetened beverages**, such as soda, sports drinks, fruit drinks and punches. Ideally, these beverages will be eliminated from a child's diet, although children who consume large amounts will benefit from reduction to 1 serving per day.
   - Sugar Sweetened beverages include sodas, fruit drinks (such as Capri Sun or Sunny Delight), sports drinks, punch, and energy drinks.
   - 100% juice is acceptable only in 4-6 oz. portions, once a day.
   - It is not necessary to forbid or make sugar-sweetened beverages off-limits completely. Research show that if they are NOT in the home, children will drink less.
   - Emphasize consumption of 1% or nonfat milk and water.

2. **Consume more fruits and vegetables** The USDA Website (www.choosemyplate.gov) recommends the number of cups of fruits and vegetables per day according to age, ranging from 2 cups per day for 2-year-old children to 4.5 cups per day for 17- and 18-year-old youths.
   - Have them available and serve at every meal
   - Fresh, frozen, and canned are acceptable

3. **Be physically active** ≥1 hour each day. Activity should be moderate to vigorous. Activity can be structured, such as a dance class, or unstructured, such as dancing to music at home, and children can perform several shorter periods of activity over the day.
   - Unstructured play is most appropriate for young children
   - Older children should find physical activities that they enjoy, which may include sports, dance, martial arts, bike riding, and walking
   - Making it a family activity benefits everyone
   - It does not have to be all at one time, can be in 20 minute segments

4. **Decrease television viewing** and other forms of screen time to ≤2 hours per day. If the child is <2 years of age, then no television viewing should be the goal.
   - This includes television, electronic games, mobile devices and computers
   - Remove television from children’s bedrooms

5. **Eat a healthy breakfast every day**
Children who do this have healthier weights, better school attendance, concentration and test performance

6. **Prepare more meals at home** rather than purchasing restaurant food. Even quick meals at home are healthier than most restaurant meals.
   - This includes fast food
   - Portions at restaurants are larger than at home and higher in fats, sugars, and salt
   - Keep junk food out of the house - It’s easier not to fight if it’s not there

7. **Eat at the table** as a family at least 5 or 6 times per week. Have regular family meals.
   - Benefits extend to healthy weights, less depression and more family communication
   - Turn off the TV and eat at the table

8. **Limit portion sizes**
   - Keep snacks, snack size – don’t eat out of the box or in front of the TV!
   - Use smaller plates and serving dishes
   - Keep single serving desserts in the house, or make only enough dessert for each person to have one serving.

**Further discussion point for parents**

- Good nutrition is a family issue. The thin child needs healthy food as much as the overweight child. Just because a child is thin does not mean he/she should have empty calories.
- Parents are role models. Children adopt the eating and lifestyle habits of their parents.
- Involve the whole family in lifestyle changes.
- Allow the child to self-regulate his or her meals and avoid overly restrictive feeding behaviors.
- Help families tailor behavior recommendations to their cultural values.

---

**Creating the Office Environment**

*The office environment can effectively contribute to a healthy environment and provide simple, compelling education. Use posters, displays and videos to make your office Healthy Lifestyle friendly!*

Horizon Foundation’s [Howard County Unsweetened](http://www.hocounsweetened.org/materials) has developed physician outreach materials to use in the office and provide for patients and families. They include posters, rack cards and prescription cards and can be requested on the Website.

[http://www.hocounsweetened.org/materials](http://www.hocounsweetened.org/materials)
For additional posters in the office:
- ChooseMyPlate.gov
- LearningZoneExpress.com
  - Sugar Shockers
  - Energy In Energy Out
  - Handy Portions
  - 1 Great Plate
  - Water: the Clear Winner
  - Jump Up and Be Active!

Health-related videos/DVD’s
- LearningZoneExpress.com
  - What’s on My Plate?
  - 54321+8 Countdown to Health
  - Breakfast Because
  - Healthy Mealtimes, Happy Kids
  - Fast food Nutrition
  - Adventures in the Grocery Store

AAP’s **Pediatric Practice, Optimizing your Obesity Care** Website provides ideas and resources for office set up and processes that make obesity prevention simple and seamless.

Suggested Handouts for Parents

(*= included in Appendix 2)

1. **Limit sugar-sweetened beverages**
   - **Howard County Unsweetened** Physician Resources Order Form*
     www.hocounsweetened.org/materials
   - **Reach for a Healthy Beverage*** by Dairy Council of California -
     www.healthyeating.org
   - **ChooseMyPlate** - 10 Tips to Make Better Beverage Choices
     www.choosemyplate.gov/healthy-eating-tips/ten-tips.html

2. **Eat at least 5 servings of fruits and vegetables daily**
   - **ChooseMyPlate** – 10 Tips to **Add More Vegetables to You Day*** and **Focus on Fruits***
     http://www.choosemyplate.gov/healthy-eating-tips/ten-tips.html

3. **Be physically active at least 60 minutes each Day**
   - Jump up and Go Activity Tips* -

4. **Limit Screen Time**
   - **10 Steps to Screen Proof Our Homes*** -
     http://www.screenfree.org/tensteps.pdf

5. **Eat Breakfast Every Day**
   - Boost Brain Power with Breakfast*
6. Limit eating out, especially at fast food
   - Healthy Snacks for home and school*
   - Lunchbox ideas and tips

7. Have regular family meals
   - ChooseMyPlate - Be a healthy role model* www.choosemyplate.gov/food-groups/downloads/TenTips/DGTipsheet12BeAHealthyRoleModel.pdf
   - Benefits of Family Meals
     www.healthyeating.org/Portals/0/Documents/Tip%20Sheets/Be_a_Healthy_Eating_Role_Model.pdf
   - Tips for Raising Healthy Eaters (Preschool)*

8. Limit portion sizes
   - Portion size matters*
   - Serving Size Comparison Chart*
     http://www.healthyeating.org/Portals/0/Documents/Schools/Parent%20Ed/Portion_Sizes_Serving_Chart.pdf
   - NICHQ Portions by Age

General Nutrition
   - Jump Up & GO! Nutrition Tips*
   - We Can! Parent Tips Making Healthier Food Choices at Home and Out
   - We Can! GO, SLOW and WHOA Foods*
Obesity Specific
  o Helping your overweight child
  o The Overweight Child - http://www.ellynsatter.com/the-overweight-child-i-47.html

Age Stages
  o Behavior milestones handout - http://www.choosemyplate.gov/preschoolers.html
  o Developmental Feeding Guide

Helping the Choosey Child
  o Healthy tips for picky eaters* http://www.choosemyplate.gov/preschoolers/picky-eaters/HealthyTipsforPickyEaters.pdf
  o Phrases that help or hurt http://www.choosemyplate.gov/preschoolers/healthy-habits/HelpAndHinderPhrases.pdf

Helpful Websites for Families

- Howard County Unsweetened - Resources for cutting down sugar and calories through changing what you drink! Includes a Better Beverage Finder for parents. From Horizon Foundation of Howard County - http://www.hocounsweetened.org
- USDA Choose My Plate - Start here for family nutrition resources and Supertracker: www.Choosemyplate.gov
- Ellyn Satter – www.ellynsatter.com – feeding resources for age stages 0-17 years old. Focus is on positive feeding and eating relationships between parent and child, family meals, and healthy attitudes around eating.
  o Family meal planning - http://www.healthyeating.org/Healthy-Eating/Meals-Recipes/Family-Meal-Planning.aspx
Provider Focused Websites

- **Care Coordination Resources (AAP)** - These materials were designed by a team of experts from the American Academy of Pediatrics, the American Dietetic Association, and the American Heart Association, to help support primary care providers (PCPs) and registered dietitians (RDs) provide comprehensive and coordinated weight management care for patients and families. Although these materials were developed as part of the [Alliance for a Healthier Generation's Healthcare Initiative](http://www2.aap.org/obesity/AHI.html), these resources can be helpful to any primary care practitioners and registered dietitians who wish to provide comprehensive multidisciplinary care to patients who are overweight or obese.


- **Kaiser Healthy Kids Healthy Future** - Childcare Providers Guide provides handouts and resources for specific age groups. [http://www.healthykidshealthyfuture.org/content/dam/hkhf/filebox/khchildcareguide.pdf](http://www.healthykidshealthyfuture.org/content/dam/hkhf/filebox/khchildcareguide.pdf)

- **Nebraska’s Foster Healthy Weight in Youth Toolkit** - In partnership with Teach a Kid to Fish non-profit, Creighton University School of Medicine, and the Nebraska Medical Association, the Foster Healthy Weight in Youth Model describes and equips primary care providers with tools to effectively assess, prevent and treat childhood overweight and obesity. [http://dhhs.ne.gov/publichealth/Pages/hew_hpe_nafh_fosterhealthyweightinyouth.aspx](http://dhhs.ne.gov/publichealth/Pages/hew_hpe_nafh_fosterhealthyweightinyouth.aspx)
Additional Resources and Background Materials

Talking about weight with families

_Talking about weight is often difficult for both the practitioner and the family. However, learning and practicing effective communication skills will ease the conversation and promote positive response and action from your patient and family._

**Effective Communication with Families** contains helpful guidelines for assessing a family’s readiness to change and communicating in ways that lead to positive attitudes and results. *(Appendix 1)*

Working with Patients of all Ages

_Review the following and use when giving recommendations to parents and children. (Note: the items with asterisks are specific to infancy):_

**Target Behaviors ages 0-5**

**Food and Feeding:**
- Understand hunger and satiety cues
- Offer vegetables and/or fruits with every meal/snack
- Foster self-feeding as much as possible (use of cups and utensils)
- Establish a feeding routine with regular meal and snack times and eat these seated at a table
- Offer water and non-flavored milk for beverages (whole milk or 2% milk for 12 months -2 years, low-fat milk after age 2)
- Consider delaying juice introduction until 12 months and limit any 100% juice to 4-6 ounces in a cup
- Breastfeed exclusively for at least 6 months of age, ideally 12 months*
- Use appropriate bottle feeding techniques if bottle feeding (no bottle propping, only breastmilk or formula in bottle unless otherwise instructed by doctor)*
- Wait to introduce complimentary foods until around 6 months of age*
- Offer new foods multiple times and in multiple ways (10-15 times for infants)*

**Physical Activity and Sedentary Behavior:**
- Incorporate age-appropriate active play and physical activity into daily routine
- Encourage free play and motor development
- Limit screen time to 2 hours or less per day
- Limit exposure to commercials
- Discourage eating in front of screens
- Avoid placing TV in children’s bedrooms
- Limit amount of time spent in devices that restrain movement (car seat, stroller, bouncy seat, and swing)*
**General Parenting:**
- Establish household routines including consistent meal and snack times, regular daily physical activity and sleep.
- Practice authoritative parenting and responsive feeding (avoid restrictive and/or permissive practices around food).
- Role model healthy active living.
- Engage extended family and care takers as part of their healthy active living team.


**Tips for Health Care Providers Communicating with Teens**

Teenagers experiencing problems with body image bring special concerns to the provider/patient communication experience as health care providers seek to communicate effectively beyond “teen walls” or barriers. These barriers may be apparent in a variety of verbal and nonverbal behaviors exhibited during clinic visits, and include:
- Sullenness or moodiness
- Unwillingness to communicate
- A lack of desire to express deep-seated feelings
- Feelings that adults do not understand the pressures of “fitting in”
- The sense that long-term health remedies will not fix immediate self-worth/esteem concerns

The additional peer and societal pressures to be “thin and beautiful” weigh heavily on the minds of young teens who desperately seek approval and inclusion. These teens are not only dealing with their own feelings of how they see themselves (self-esteem) but also the issues of comparative worth (self-worth) that consistently drive them to live in the world of social comparisons. This can be especially detrimental to teens dealing with being overweight or obese.

**Communication Tips for teens**
Teens relate best to adults who can engage on a more empathetic level than those who provide only a list of “do’s and don’ts.” Here are a few Communication Tips to help health care providers in their efforts to engage teenagers and encourage their road to improved health:
• Ask teen if he/she has any specific issues he/she would like to discuss that would help you understand his/her relationship to eating and physical activity.
• Make sure that you use nonverbal communication such as direct eye contact, a caring tone of voice and facial expressions that express recognition and concern.
• Ask teens if they feel there is a connection between how they feel about themselves and their eating habits.
• Ask if there are any concerns at home or school that may be creating stress in their lives and inadvertently causing them to seek comfort in eating or unhealthy eating patterns.
• Ask teens if they feel any pressures around approval or inclusion due to weight (especially if they are interested in dating).
• Ask teens if they are experiencing any problems at school or in their social surroundings with bullying due to weight concerns.

Frequently Asked Questions about Eating Disorders in the Context of Obesity Prevention

_I have heard that parents – and especially mothers – are the cause of eating disorders in their children. Is this true?_  
This was a commonly held belief among treatment providers several decades ago. However, recent research has demonstrated that there is a strong genetic component to risk for eating disorders and, also, that the broader cultural focus on appearance, especially for women, contributes to this risk. Mothers do not “cause” eating disorders.

_I’m afraid to limit my children’s intake of treats for fear of making them self-conscious about their bodies and possibly causing an eating disorder._  
Teaching healthy habits, which includes limits on some foods, can actually help to lay the foundation for a positive body image. Always keep the focus on health and supporting all the great things your child wants to do with her body and mind (e.g., playing a favorite sport, dancing, theater, academic achievement) rather than on appearance. Healthy habits won’t cause an eating disorder.

_I’m afraid to limit my children’s intake of treats for fear of it backfiring and making them want the treats even more, then causing them to go crazy eating those foods outside of our home. Couldn’t this cause them to gain weight?_  
Research has shown that when certain treat foods or beverages are removed from a setting (e.g., school or home), children do not compensate by consuming more of those treats outside the setting. The best way to limit is to not bring the food into the environment. It’s much harder for children (and adults) when they have to look at and resist a food continuously; it’s easier not to have it around on a regular basis.
If I limit my child’s intake of treats, might that lead to sneaking food? Isn’t this unhealthy?  
The teaching of healthy habits should not lead to sneaking food. Healthy limits should always be 
communicated as about health and feeling good, not framed as a punishment. If the focus is positive, 
and no one in the family is singled out (i.e., same rules for everyone), healthy limits just become part of 
the family routine.

I’ve heard that “everything in moderation” is the healthiest attitude to have toward food and 
will help prevent eating disorders and overweight. What is your opinion about this?  
The problem with this advice is that there is no common understanding of what “moderation” means. 
For some this may mean one treat per week, for others several treats per day. For some, “moderation” 
may add up to a lot of unhealthy extra calories which won’t be helpful in weight regulation or 
preventing eating disorders (for which overweight is a risk factor). In addition, there are some foods or 
beverages that are just not great choices most of the time. Sugar-sweetened beverages (e.g., soda, juice 
drinks with added sugar, sports drinks, etc.), for example, would be fine to avoid altogether – they add 
nothing nutritionally and contribute to weight gain.

I’ve heard that as long as it’s healthy food (for example, our regular dinner and not a treat), it’s fine for my child to eat as much as he/she likes. Is this true?  
Children’s ability to regulate their intake varies. Some children will stop eating a meal when they are full, 
while others will continue beyond that point and need some help tuning into their hunger and satiety 
cues. If you have a child who seems to have difficulty recognizing being full, she may need you to help 
her pay attention to cues and to slow down. Taking a break to assess or directing your child to 
vegetables if she is still hungry can be useful strategies.

Aren’t children able to know how much and what kinds of food their bodies need? If I interfere, don’t I risk disrupting this natural regulation and setting him or her up for weight or eating problems?  
This may be true in an environment where a wide range of healthy foods is available to a child, and few unhealthy options are available. Unfortunately, our current environment is not set up to support healthy habits. Children’s (and adults’) ability to self-regulate has been disrupted by the constant presence and relentless marketing of unhealthy choices. Parents stepping in to teach healthy habits are necessary to counteract this disruptive influence.

I have one overweight child but my other children are thin. It doesn’t seem fair to restrict my thin children’s access to treats when they are not the ones with the problem. Might this cause them to have eating struggles?  
Healthy habits are important for all children (and adults) regardless of weight status. Junk food shouldn’t be a regular snack for any family, even if all members are thin. The best approach is to frame healthy habits as part of your family’s routine, and not as a punishment for being overweight or for being the sibling of an overweight child. Allowing the thin children to eat poorly is not doing them any favors – poor diet impacts health outcomes even in the absence of a weight problem. Healthy habits won’t cause an eating disorder.
Determinants of Child Obesity

Obesity is the result of an imbalance of energy intake and expenditure. Many factors contribute to the risk of obesity, including genetic, environment and behavior/lifestyle choices. However, widespread changes in nutrition and physical activity behaviors as well as changes in the environments in which children grow and learn have contributed to the rapid shift in childhood obesity to what is now being called an epidemic.

A number of factors are determinants of child health including lifestyle factors, family influences, child care and school settings, community influences, and culture. The environment in which children form lifestyle preferences and habits that will carry them into adulthood has seen rapid shifts recently in food practices, opportunities for sedentary activity, and a food industry which spends billions of dollars each year advertising to children. In many communities, lack of access to full-service grocery stores and high costs of fresh, healthy foods as well as lack of access to safe places to play and exercise also contributes to higher obesity rates. Several factors are discussed in the following paragraphs:

Childhood Lifestyle Factors – Diet and physical activity

Diet

Even before our children are able to make their own food choices, what they eat can influence their development of overweight. One significant factor contributing to overweight in youth appears to be consumption of added sugars, which has increased substantially in recent decades. Studies show that the consumption of added sugars is positively associated with multiple measures known to increase cardiovascular disease risk, such as overweight. Most added sugar in the diet comes from sweetened beverages including fruit juices and sodas. In fact, sugars used to sweeten soft drinks have become the largest single source of calories in the U.S. diet. In contrast, fruit and vegetable consumption along with consumption of food of low caloric density have a healthy effect on body weight.

Average Daily Consumption of Added Sugars Among Adolescents


**Physical Activity**

There is a dramatic link between sedentary behavior and overweight. When children watch television or play video games, they experience a decrease in energy output. Children with televisions in their bedrooms have also been shown to have lower levels of physical activity compared to children without televisions in their bedrooms and are at a higher risk for becoming overweight. The American Academy of Pediatrics (AAP) recommends that (1) all children meet the goal of 60 minutes of moderate activity per day; (2) schools be provided with the necessary resources to incorporate 30 minutes of moderate to intense activity into each student’s daily schedule; (3) clinicians instruct parents on techniques for increasing activity in the home environment, including reducing time spent in sedentary activities; and (4) health care providers become involved in the community to address access and safety issues. The AAP also recommends that activities that can be performed indoors, such as exercising to videotapes, using hula hoops, and dancing to popular music, should be encouraged. A complementary strategy for promoting physical activity among children and adolescents is to decrease their inactivity by decreasing the time spent in sedentary activities such as television viewing, leisure time use of the computer, and video game playing. Staying active while watching television by stretching, performing calisthenics, or using exercise equipment can also reduce the time spent in sedentary pursuits.  

**Family Influences & Parental Modeling**

Most early childhood experiences are shaped by parent and cultural beliefs, practices and routines. Parents are the primary influence in a young child’s development. Children with two obese parents are 10 times more likely to become overweight compared to children with non-obese parents. The prenatal environment influences the development of child overweight as well. Children born to mothers with gestational diabetes have an increased risk of overweight, as do children with higher birth weights. Less than 5 percent of childhood obesity can be attributed to endocrine and genetic disorders.

Parents are important role models for their children. When parents eat right and are physically active, they demonstrate the importance of these behaviors to their families, helping their children make the same healthy choices. In addition to modeling healthy behaviors, parents can create family habits that establish a support system in which everyone helps everyone to make healthy food and physical activity choices. Parents can also exert influence over how much

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television their children watch on a daily basis, limit the number of televisions in the house and limit the number of hours the television is on.

**Child Care**

A large percentage of young children are in some form of child care, and the amount of time children spend in child care each week has increased in recent years. The 2005 National Household Education Survey reports that 74% of all U.S. children ages 3 to 6 years not yet in kindergarten were in some form of non-parental care, and 57% were in center-based child care. Furthermore, it has been reported that many children from low-income backgrounds consume 50% to 100% of their Recommended Dietary Allowances in a child care setting and many children spend the majority of their waking hours out-of-home.

Child care facilities may serve as home-away-from-home settings, where children adopt early nutrition, physical activity and television viewing behaviors. These behaviors are often a result of interactions with parents and other caregivers. Young children in particular are more likely to be influenced by adults in an eating environment. Child care settings are an important environment for forming good health habits for dietary intake, physical activity, and energy balance and thus combating the childhood obesity epidemic.

**Community Influences**

Even though the cause of the obesity epidemic is consumption of excess calories through unhealthy eating habits and insufficient physical activity, these individual eating and activity behaviors and choices are shaped by factors in the communities’ social and physical environments. Obesity results from this complex interaction between diet, physical activity, and the environment. The built environment encompasses a range of physical and social elements that make up the structure of a community and may influence obesity. Community influence can contribute to a child’s risk for becoming overweight through factors including:

- Limited access to healthy food, especially fresh fruits and vegetables. Many low-income neighborhoods are without full-service grocery stores or farmers’ markets, a situation often referred to as a “food desert.”
- Schools in lower-income neighborhoods are more likely to have fewer resources for physical activity, both during and after the school day.
- Neighborhoods may not have parks to play in or sidewalks for safe walking or bike riding.
- The neighborhood may not be safe and may limit opportunities for physical activity.

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Culture
Culture represents the knowledge, beliefs, customs and habits a group of people share that guide behavior. Culture influences how we look at weight, body size and body shape. While the rising trend in obesity rates cuts across all social classes, the prevalence of childhood and adolescent overweight in the United States has grown most rapidly among black and Hispanic youths, and health disparities have widened in the past decade. Within equivalent levels of socioeconomic status, race still serves as a determinant of health. Children, as a subgroup, are more racially and ethnically diverse than the nation’s population as a whole, and overweight and obesity prevalence rates are highest among children and adolescents of color. Reducing overweight and obesity in these communities will require a comprehensive approach that takes into account factors related to culture, language, and the social and physical environment of the community.

Body Image and Self-Esteem
An important factor to consider in addressing overweight and obesity is the link between body image, self-esteem, healthy weight and overall health. Body image dissatisfaction occurs before the onset of puberty. Children, particularly girls as young as six or seven, already exhibit a preference for body figures thinner than their own. For teenagers today, there is a greater emphasis on their body image and physical appearance than on what is happening inside their body that can lead to ill health. There are a number of family and cultural threads that run through the development of teens’ self-esteem linked to body image. It is critical to consider how to effectively frame the message of body image and health, both for teens and their families. Through words and actions, families can convey their focus on body image and health, and how this affects their children’s self-perception.

18 Olvera, Norma, Power, Thomas; Intergenerational Perceptions of Body Image in Hispanics; Role of BMI, Gender and Acculturation; Obesity Research. Vol. 13 No. 11. November 2005
List of Websites Addressed in Toolkit

1. Howard County Health Assessment Survey – Healthy Weight Exercise & Nutrition - www.howardcountyhealthsurvey.com
2. AAP endorsed Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity  
   http://aappolicy.aappublications.org/cgi/content/full/pediatrics;112/2/424
3. Jump up & Go! Are you a Healthy Kid?  
4. Are You a Healthy Kid –extended  
   http://www.nichq.org/childhood_obesity/tools/AreyouaHealthyKid.pdf
5. Youth Physical Activity and Nutrition Assessment  
   http://www.teachakidtofish.org/copp/toolkit/youth_pan_assessment.html
7. BMI for Age Percentile Charts - http://www.cdc.gov/growthcharts/clinical_charts.htm
9. Approach for Prevention & Management of Overweight in Children 2-12 Decision Matrix  
   www.nichq.org/childhood_obesity/tools/REVISEDHealthyCareforHealthyKidsAlgorithm03_2006.pdf
10. Encounter Documentation Tool  
11. Pediatric Weight Management Medical Summary  
    https://www2.aap.org/obesity/pdf/PediatricWeightManagement_MedicalSummary_20091015.pdf
    http://www2.aap.org/obesity/pdf/COANImplementationGuide62607FINAL.pdf
13. Helping Children be Good Eaters, Provider Guidelines by Ellyn Satter  
    http://www.ellynsatterinstitute.org/index.php
15. Healthy Care for Healthy Kids Management Plan  
16. Pocket Reference Clinical Algorithm (Nebraska)  
    http://www.teachakidtofish.org/copp/toolkit/pocket_reference_clinical.html
17. 5-2-1-0 Pediatric Obesity Clinical Decision Chart by AAP  
18. Rx for Healthy Families  
    https://www2.aap.org/obesity/whitehouse/Rx%20COLOR%201%20up%20v2.pdf
19. USDA’s Choose My Plate www.choosemyplate.gov
23. Academy of Nutrition and Dietetics www.eatright.org
24. Effective Communication with Families  