The Complete Counseling Kit for Pediatric Weight Management

Jodie Shield, MEd, RDN and Mary Catherine Mullen, MS, RDN
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Jodie Shield, MEd, RDN
and
Mary Catherine Mullen, MS, RDN

Academy of Nutrition and Dietetics
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We dedicate this book to registered dietitians and all health professionals who are committed to the treatment and prevention of pediatric overweight and obesity, and to all of the children, teens, and parents who have shared their stories with us.

Thanks to Christina Sanders, Katie Jones, and Elizabeth Nishiura for their dedication and expert editorial guidance in making this toolkit a reality.

And special thanks to our husbands and family for their patience, loving support, and encouragement.
Reviewers

Jean Alves, MS, RDN, LDN
Chicago, IL

Sibyl Cox, MS, RDN, LD< CLC
Springfield, IL

Pamela Gerstman, RD, CDN
New York, NY

Mary Ann Hammerle, RD LD
Houston, TX

Beverly Henry, PhD, RD, LDN
DeKalb, IL

Emily Mashack, MPH, RDN, LD
Cedar Rapids, IA

Cynthia Palmerino MS, RD, IBCLC
Alexandria, VA
Introduction

Pediatric and Adolescent Overweight and Obesity: A National Health Priority

Registered dietitian nutritionists (RDNs) and allied health care providers who work with youths are often faced with the difficult challenge of counseling overweight and obese children, teens, and their parents, families, and caregivers. According to the Centers for Disease Control and Prevention, childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years. Pediatric and adolescent overweight and obesity have become a national health priority. As of 2012, an estimated 17.7% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds are obese. In 2012, more than one-third of children and adolescents were overweight or obese.

Objectives of This Counseling Kit

This counseling kit offers health professionals a variety of resources to educate and motivate overweight and obese children, teens, and their families to make positive lifestyle changes in their eating and physical activity choices. Readers should note that this counseling kit does not cover pediatric overweight and obesity assessment. Instead, it focuses primarily on behavior-change counseling. The behavior-change strategies, counseling plans, and client educational materials presented here are specifically designed for registered dietitian nutritionists and other health care providers working with the following clientele:

- Youths between the ages of 2 and 18 years who are overweight (body mass index [BMI]-for-age-and-gender between the 85th and 94th percentiles)
- Youths between the ages of 2 and 18 years who are obese (BMI-for-age-and-gender equal to or greater than the 95th percentile)
- The parents, families, and caregivers of these children and teens

The client educational materials can also be used for prevention purposes to counsel youths between the ages of 2 and 18 years who are at a healthy weight (BMI-for-age-and-gender between the 5th and 84th percentiles). However, the materials may not be suitable for counseling severely obese children or teens (BMI-for-age-and-gender greater than the 99th percentile), especially those with serious complications of obesity, including pseudotumor cerebri, sleep apnea, obesity hypoventilation syndrome, and orthopedic problems. These youths may need to lose substantial weight in a rapid fashion. For these individuals, a more intensive treatment program staffed by health care providers experienced in these disorders is recommended.
Components of This Counseling Kit

The Counselors’ Guide

The Counselors’ Guide is a professional reference that discusses counseling approaches and behavior-change strategies that can be used to address nutrition and physical activity concerns related to pediatric and adolescent overweight and obesity. The Counselors’ Guide primarily focuses on two counseling approaches: the Transtheoretical Model (TTM), also known as Stages of Change (SOC), and Motivational Interviewing.5,6 The discussion of behavior-change strategies includes goal setting, contracting, reinforcement, self-monitoring, stimulus control, cognitive restructuring, and relapse prevention.

The Counselors’ Guide is comprised of eight sections and one appendix. Sections 1 and 2 provide an overview of the prevalence and treatment of pediatric overweight and obesity along with counseling considerations unique to this client population. Topics discussed include: developmental, psychological, and behavioral characteristics of the pediatric population; cultural factors; and how to create a comfortable counseling environment.

Sections 3 through 5 are designed to enhance or refresh the reader’s nutrition counseling skills. Case studies are used to illustrate how these approaches and strategies may be applied in practice.

Sections 6 through 8 provide counseling objectives based on the individual client’s stage of change. These sections include suggestions for incorporating the client educational materials into counseling sessions, as well as ideas for additional counseling activities.

Appendix A lists additional resources, including a bibliography of relevant publications from the Academy of Nutrition and Dietetics and more tools available on the Internet for counseling overweight and obese youth.

The Client Education Materials

The client education materials include 17 fact sheets, 34 worksheets, 1 tracking tool, and 1 interactive quiz that can be printed on demand or downloaded to electronic devices and used when counseling overweight or obese youth and their families. These materials may be used in a variety of settings, such as outpatient clinics, private practice, and group weight-management programs.

The client education materials provide general information about and behavior-change tips for each pediatric and adolescent overweight and obesity topic covered in the book. The education materials can be reviewed in counseling sessions or used as stand-alone materials to send home with clients. Each resource lists Internet resources for clients who want additional information.

The fact sheets, worksheets, and the tracking tool were designed for use with one of two audiences: (a) parents and caregivers of children between the ages of 2 and 12 years, or (b) youths between the ages of 13 and 18 years. However, counselors may find that some worksheets written for parents may be appropriate for teen clients (or vice versa). The worksheets may be used interactively in a counseling session with the RDN; some also include take-home exercises, such as activity logs.

The client education materials are written at a sixth-grade reading level and can be read and understood by most teens and parents. These materials have been preliminarily pilot-tested with white, black, and Hispanic clients in outpatient and private practice settings.
For brief descriptions of the individual fact sheets, worksheets, tracking tool, and interactive quiz, refer to Sections 6 through 8 of this kit. Each of the client education materials begins with a cover sheet for the RDN and/or health care provider that presents information about the intended audience (parents and/or teens) for the specific material, any necessary instructions for using the material, and citations for the sources of statistical data. For worksheets, the cover sheet will also indicate whether the client will need tools or equipment (eg, crayons or a calculator) to complete the activity.

Counselors can produce the client education materials in unlimited quantities. Ample space is provided to allow counselors to personalize the pages with their own institution’s logo or business card.

NOTE: The information, counseling suggestions, and client education materials in this counseling kit have been written by RDNs with expertise in pediatric overweight and obesity and consumer communications. Seven RDNs peer-reviewed the content.

References


Section 1

Prevalence and Treatment of Pediatric Overweight and Obesity

Overview

Pediatric overweight and obesity is a public health concern that presents both challenges and opportunities for registered dietitian nutritionists (RDNs), nutrition educators, and counselors. To address this concern, RDNs and nutrition counselors must stay abreast of the ongoing research pertaining to pediatric overweight and obesity interventions and understand the components of successful weight-management programs. This section provides an overview of the prevalence and treatment of children and teens who are overweight or obese.

Pediatric Overweight and Obesity Defined

In 2007, an Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity, made up of representatives from 15 health professionals’ organizations, provided recommendations for the management of overweight and obesity in childhood and adolescence. Based on these recommendations, individuals with a body mass index (BMI) for age and gender from the 85th to the 94th percentile are considered overweight. Individuals with a BMI-for-age-and-gender at or above the 95th percentile are considered obese. For children and adolescents with more severe obesity, an additional category (BMI greater than the 99th percentile) was established to indicate a high likelihood of immediate medical problems and the urgency of intervening.

Prevalence

An estimated 17% (or 12.7 million) of children and adolescents ages 2 to 19 years are obese. From 2011 to 2012, 8.4% of 2- to 5-year olds were obese compared with 17.7% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds.

There are significant racial and age disparities in obesity prevalence among children and adolescents. From 2011 to 2012, obesity prevalence was higher among Hispanic (22.4%) and non-Hispanic black youth (20.2%) than non-Hispanic white youth (14.1%). The prevalence was lower
in non-Hispanic Asian youth (8.6%) than in youth who were non-Hispanic white, non-Hispanic black, or Hispanic.4,5

Children and teens who are overweight or obese face serious medical, emotional, and social consequences. Children and adolescents who are obese are likely to become obese adults and are therefore more at risk for health problems.6,7 Overweight and obese youth are at an increased risk for developing current health complications such as type 2 diabetes, hyperlipidemia, metabolic syndrome, hypertension, and orthopedic problems. In addition, many overweight and obese youth have low self-esteem and poor body image and face discrimination from their peers.8-11

Identification

The Institute of Medicine (IOM) report “Accelerating Progress in Obesity Prevention” recommended that health care providers expand their role in obesity prevention and treatment by including routine screening of BMI to identify families and children in need of counseling to change physical activity and dietary behaviors.12

Based on the recommendations of several expert committees, health care providers identify overweight and obese status in children and adolescents by calculating BMI-for-age.1,13,14 BMI-for-age is a clinically useful tool because it can be easily calculated from the child or teen’s height and weight using either of the following formulas:13:

\[
\text{BMI} = \frac{\text{Weight (kg)} \times 10,000}{\text{Height (cm)}^2}
\]

\[
\text{BMI} = \frac{\text{Weight (lb)} \times 703}{\text{Height (in)}^2}
\]

There is also a BMI calculator available at http://nccd.cdc.gov/dnpabmi/Calculator.aspx.

After a child’s BMI is calculated, the health care provider plots it on a gender-specific chart from the Centers for Disease Control and Prevention (CDC).15 In children and adolescents, the interpretation of BMI varies according to age and gender. The interpretation of BMI depends on a child’s age since body fats change as children grow. Additionally, girls and boys differ in their fats as they mature.12 For a more in-depth discussion on BMI-for-age, visit the Educational Materials section of the CDC’s Growth Charts website.15

BMI z score, an alternative to BMI percentile, is now widely used in research and clinical studies in youth. BMI z score is defined as the BMI of the child or adolescent transformed into the number of standard deviations (SDs) above or below the population mean BMI-for-age-and-gender. BMI z scores, like percentiles, allow comparison of weight change across different ages and sex but are more sensitive to quantifying changes in weight status.2

Treatment

Because children and adolescents are growing, treatment for pediatric overweight and obesity is not as straightforward as treatment for adult overweight and obesity. The Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity
developed recommendations for weight management for children and adolescents based on BMI percentiles. See Tables 1.1, 1.2, and 1.3 for these recommendations.

Table 1.1
Weight-Management Goals for Children 2 to 5 Years

<table>
<thead>
<tr>
<th>BMI Percentile</th>
<th>Weight-Management Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>85th–94th</td>
<td>Maintain weight until BMI &lt;85th percentile, or slow weight gain.</td>
</tr>
<tr>
<td>≥95th</td>
<td>Maintain weight until BMI &lt;85th percentile. If weight loss occurs, it should not exceed 1 lb/mo. If BMI &gt;21 or 22, gradual weight loss (≤1 lb/mo) is recommended.</td>
</tr>
</tbody>
</table>

Source: Data are from reference 1.

Table 1.2
Weight-Management Goals for Children 6 to 11 Years

<table>
<thead>
<tr>
<th>BMI Percentile</th>
<th>Weight-Management Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>85th–94th</td>
<td>Maintain weight until BMI &lt;85th percentile, or slow weight gain.</td>
</tr>
<tr>
<td>95th–98th</td>
<td>Maintain weight until BMI &lt;85th percentile, or lose weight (~1 lb/mo).</td>
</tr>
<tr>
<td>≥99th</td>
<td>Lose weight (≤2 lb/wk).</td>
</tr>
</tbody>
</table>

Source: Data are from reference 1.

Table 1.3
Weight-Management Goals for Children 12 to 18 Years

<table>
<thead>
<tr>
<th>BMI Percentile</th>
<th>Weight-Management Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>85th–94th</td>
<td>Maintain weight until BMI &lt;85th percentile, or slow weight gain.</td>
</tr>
<tr>
<td>95th–98th</td>
<td>Lose weight (≤2 lb/wk) until BMI &lt;85th percentile.</td>
</tr>
<tr>
<td>≥99th</td>
<td>Lose weight (≤2 lb/wk).</td>
</tr>
</tbody>
</table>

Source: Data are from reference 1.

Weight Maintenance

The Institute of Medicine has published gender-specific formulas for calculating Total Energy Expenditure (TEE) for overweight and obese youth ages 3 to 19 years. RDNs can use TEE as a starting point to determine energy intakes for overweight and obese children and adolescents that will result in weight maintenance. 

16
The following equation, which includes a physical activity coefficient (PA) determined by the individual’s physical activity level, is for use in overweight and obese males, ages 3 to 19 years\textsuperscript{14}:

\[
TEE = 114 - 50.9 \times \text{Age (y)} + PA \times (19.5 \times \text{Weight [kg]} + 1,161.4 \times \text{Height [m]})
\]

The PAs used to calculate TEE for males are as follows:
- Sedentary: 1.00
- Low active: 1.12
- Active: 1.24
- Very active: 1.45

**TEE Formula for Female Youths**

The following equation, which includes a PA determined by the individual’s physical activity level, is for use in overweight and obese females, ages 3 to 19 years\textsuperscript{14}:

\[
TEE + 389 - 41.2 \times \text{Age (y)} + PA \times (15.0 \times \text{Weight [kg]} + 701.6 \times \text{Height [m]})
\]

The PAs used to calculate TEE for females are as follows:
- Sedentary: 1.00
- Low active: 1.18
- Active: 1.35
- Very active: 1.60

**Weight Loss**

If weight loss is recommended, goals need to be realistic and should not attempt to fully normalize weight. Weight goals should be individualized for each child or adolescent. Approximately one pound of weight loss per month may be an appropriate initial goal, with an increase to a maximum weight loss of two pounds per week as indicated by BMI. The long-term weight goal should be a BMI that is below the 85th percentile for age and gender, although some children may be healthy with BMIs in higher percentile ranges.\textsuperscript{1,17} For overweight or obese youth with serious health complications, such as sleep apnea or pseudotumor cerebri, more aggressive forms of treatment may be necessary.\textsuperscript{1}

**Counseling Goals and Types of Intervention**

In counseling children and teens who are overweight or obese, the primary goal for RDNs and other health care providers is to promote more healthful lifestyle behaviors that will help youths achieve and maintain a desirable body weight.\textsuperscript{1,2} The Academy of Nutrition and Dietetics takes the position that prevention and treatment of pediatric overweight and obesity require systems-level approaches in which the skills of registered dietitian nutritionists as well as consistent and integrated messages and environmental support across all sectors of society are essential to achieving sustained dietary and physical activity behavior.\textsuperscript{2} The Academy’s position paper
includes the authors’ review of literature in addition to systemic review conducted using the Academy’s Evidence Analysis process and information from the Academy Evidence Analysis Library (EAL). The purpose of the Academy of Nutrition and Dietetics Evidence-Based Pediatric Weight Management (PWM) Nutrition Practice Guideline site is to provide evidence-based recommendations for nutrition management of overweight and obesity in children and adolescents. Evidence grades and conclusion statements from the Academy’s PWM guidelines are published online at the Academy of Nutrition and Dietetics EAL (www.andeal.org). The EAL’s evidence grades are defined as follows:

- **Grade I**: There is good evidence supporting the conclusion statement.
- **Grade II**: There is fair evidence supporting the conclusion statement.
- **Grade III**: There is limited/weak evidence supporting the conclusion statement.
- **Grade IV**: The conclusion statement is based on expert opinion.
- **Grade V**: There is no evidence that directly supports or refutes the conclusion statement.

The components of nutrition education, physical activity, parent training/modeling, and behavioral counseling—including applicable evidence grades and ratings for conclusion statements from the Academy’s EAL—are examined in further detail in the following sections. In addition, a nutrition intervention algorithm can be downloaded from the Academy’s EAL (www.andeal.org/topic.cfm?menu=5296&pcat=2723&cat=2995).

**Nutrition Education**

There is good evidence (Evidence Grade I, Strong) to support nutrition education as part of a multicomponent, family-based group intervention for reducing overweight and obesity in school-age children but less evidence (Evidence Grade II, Fair) to support the efficacy of nutrition education for treating overweight and obesity in teens. In addition, in a multicomponent program, if there is a nutrition diagnosis for food and nutrition–related knowledge deficit, nutrition education should be tailored to the nutrition prescription (Fair). More information on the Nutrition Care Process (NCP) including the four steps (nutrition assessment, nutrition diagnosis, nutrition intervention, and nutrition monitoring and evaluation) is available at www.eatright.org/ncp. This kit addresses Step 3: Nutrition Intervention and Step 4: Nutrition Monitoring and Evaluation of the NCP.

The overall dietary goals for overweight or obese youth and their parents, families, and caregivers are well-balanced, healthful meals, and a healthful approach to eating. These goals should be considered permanent changes rather than a temporary eating plan for rapid weight loss. The US Department of Agriculture’s MyPlate can serve as a guide to develop nutritionally balanced, portion-controlled eating plans that are age and gender appropriate. Moderation of energy intake is best accomplished by increasing consumption of fruits, vegetables, and whole grains while decreasing consumption of sugar (sweetened beverages, juice, and foods with added sugar), refined carbohydrates, and saturated fats. Nutrition education should help children, adolescents, and their parents, families, and caregivers meet these dietary goals (see Section 6).
Promotion of Physical Activity

Pediatric weight-management programs should include physical activity.¹,²,¹⁰,¹¹ There is good evidence (Evidence Grade I) to support the inclusion of physical activity as part of a multicomponent, family-based group intervention for reducing overweight and obesity in school age children but less evidence (Evidence Grade II) for the efficacy of physical activity interventions for treating overweight and obesity in teens.¹²

The US Surgeon General and the Dietary Guidelines for Americans recommend that children and adolescents engage in at least 60 minutes of physical activity of at least moderate intensity on most, preferably all, days.²³,²⁴ If a child or teen is unable to meet this goal, then an individualized program should be designed according to his or her fitness level, using the general guideline as an ultimate goal.²⁵ Because many overweight and obese children have minimal daily physical activity, initial exercise recommendations should be limited, and exercise levels should be increased slowly so children do not become discouraged.²⁵

Several approaches may be used to increase activity (see Section 7). The Surgeon General’s Call to Action to Prevent and Decrease Obesity and Overweight and the American Academy of Pediatrics recommends that children limit entertainment screen time to less than two hours per day.²³,²⁶,²⁷ Limitation of television, video games, and computer games will encourage children to choose other pastimes, most of which will generate more physical activity and may lead to improved weight.²⁵,²⁷ In addition, increased physical activity may lead to improved muscular strength and fewer injuries.²⁵ Internet/TV/video games can be used to promote increased physical activity in cold winter months when playing outside is not an option.

Parent Training/Modeling

Family involvement is an integral component of pediatric weight management (see Section 8). The family approach can improve weight management outcomes.²,⁷,¹²,¹⁵,¹⁶,¹⁸,¹¹ There is good evidence (Evidence Grade I) to support parent training as part of a multicomponent, family-based group intervention for reducing overweight and obesity in school age children but less evidence (Evidence Grade II) of the efficacy of these interventions for overweight or obesity in teens.²¹ Having caregivers and all other family members involved in making lifestyle changes creates a positive environment that will help the child or adolescent be more successful in meeting new eating and physical activity goals.²,²⁷,²⁸

Behavioral Counseling

To treat pediatric overweight and obesity, health care professionals must address not only diet and physical activity but also behavior change.¹,²,¹⁷-²⁰ There is good evidence (Evidence Grade I) to support behavioral counseling as part of a multicomponent, family-based group intervention for reducing overweight and obesity in school age children but less evidence (Evidence Grade II) showing the efficacy of behavioral counseling for treating overweight or obesity in teens.²¹

When the child or adolescent and family are ready to make lifestyle modifications, behavior-change strategies should be used to help them. Important components of behavioral counseling for overweight and obese children and teens include the following:¹,²,¹⁷-²⁰:

- Providing nutrition education on lifestyle behaviors and their relation to chronic disease
- Adapting the home/school environment to help the child or teen make wise food choices
• Self-monitoring
• Motivating change by modeling behaviors and contracting

Sections 3 and 4 discuss counseling approaches and behavior-change strategies used in working with overweight and obese children and teens.

**Staged Intervention Approaches**

According to the Academy’s position paper, prevention and treatment for pediatric overweight and obesity can be divided into different intervention approaches including primary prevention, secondary prevention, and tertiary prevention. (See Table 1.4.). Primary prevention includes interventions that emphasize healthful eating, physical activity, and other health-related activities targeted to the entire population. Secondary prevention refers to more structured interventions and strategies to help children who are already overweight or obese. Tertiary prevention interventions provide the most intensive, comprehensive treatments for overweight and obese youth. Secondary and tertiary prevention corresponds to the stages approach for treatment of pediatric obesity recommended by the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity.2

The Expert Committee recommends the use of a staged treatment approach for children between the ages of 2 and 18 years whose BMI is above the 85th percentile.1 This approach—which incorporates nutrition education, physical activity, parent training/modeling, and behavioral counseling—involve four treatment stages of increasing intensity. Health care providers should adapt the timing of the stages according to the individual families as well as the availability of programs.
### Table 1.4
**Definitions of Primary, Secondary, and Tertiary Pediatric Obesity Prevention as Compared with the Staged Approach for Treatment of Pediatric Obesity**

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Strategies</th>
<th>Correspondence to Staged Approach for Treatment of Pediatric Obesity&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary prevention</strong></td>
<td>Population-wide interventions that include youth of all body sizes or weight</td>
<td>Eating and physical activity messages or programs intended to prevent incidence of overweight/obesity and/or provide a supportive environment for weight maintenance</td>
<td>NA</td>
<td>School-based health promotion programs for healthy eating and physical activity</td>
</tr>
</tbody>
</table>
| **Secondary prevention** | Overweight or obese youth with no weight-related comorbidities              | More structured and involved eating and physical activity programs intended to help overweight and obese youth obtain a healthy weight; may require medical approval or limited supervision | Stage 1: Prevention Plus
Stage 2: Structured Weight Management
Stage 3: Comprehensive Multidisciplinary Intervention | Brief motivational interviewing on selected behaviors (e.g., decreased consumption of sugar-sweetened beverages), with progression to other stages if warranted |
| **Tertiary prevention**  | Overweight or obese youth with comorbidities or Severe obesity              | Intensive and comprehensive treatments for overweight and obese youth conducted under medical supervision with a focus on resolving weight-related comorbidities or at least decreasing their severity | Stage 1: Prevention Plus
Stage 2: Structured Weight Management
Stage 3: Comprehensive Multidisciplinary Intervention
Stage 4: Tertiary Care Intervention | Multidisciplinary program offered at a pediatric weight-management center, which may include pharmacologic treatment or bariatric surgery |


Stage 1: Prevention Plus

Stage 1 interventions focus on basic lifestyle and activity habits. Stage 1 recommendations include the following:

- Eat five or more servings of fruits and vegetables each day.
- Limit entertainment screen time to less than 1 to 2 hours per day. To help facilitate this change, no television should be allowed in the room where the child sleeps.
- Be physically active with at least moderate intensity physical activity for 1 hour or more daily.
- Eliminate sugar-sweetened beverages from the diet.
- Eat breakfast every day.
- Prepare more meals at home rather than buying restaurant food, and eat as a family at least five or six times each week.
- Allow the child to self-regulate meals, and avoid being overly restrictive.

Monthly follow-up is recommended; if there is no improvement in BMI/weight status after 3 to 6 months, advancement to Stage 2 or higher is recommended, based on the patient/family readiness for change.

Stage 2: Structured Weight Management

Stage 2 interventions include Stage 1 goals plus additional eating and activity goals. Stage 2 involves more support and structure to achieve specific behaviors and can be implemented by a primary care physician or allied health care provider highly trained in pediatric weight management. Stage 2 recommendations include the following:

- A planned diet or daily meal plan that de-emphasizes energy-dense foods
- Structured meals and snacks
- Limit entertainment screen time to less than two hours per day
- Planned, supervised active play for at least 60 minutes daily
- Increased monitoring of behaviors

Monthly follow-up is recommended; if there is no improvement in BMI/weight after 3 to 6 months, the child or adolescent may be advanced to Stage 3.

Stage 3: Comprehensive Multidisciplinary Intervention

This step increases the intensity of behavior changes, the frequency of visits, and the involvement of specialists. A multidisciplinary obesity care team is recommended at this stage. Other Stage 3 recommendations include the following:

- The same eating and activity goals as Stage 2
- A more structured behavior-modification program that includes food and activity monitoring and short-term diet and activity goals
Parent participation and training in home environment
More frequent office visits are recommended. Weekly follow-up for a minimum of 8 to 12 weeks seems to be most beneficial. Monthly follow-up will help maintain new behaviors. Systemic evaluation of body measurements and diet and physical activity at baseline and throughout the program should be completed to monitor progress.

Stage 4: Tertiary Care Intervention
The health care provider may consider Stage 4 for some severely obese youth who have not been successful in Stages 1 through 3. Stage 4 is a very intensive intervention that involves referral to a tertiary weight-management center with comprehensive services. These centers operate under a designed protocol, and interventions may involve medications, very-low-calorie diets, and weight-loss surgery. This level of intervention may be offered to some severely obese youth after careful evaluation from a team that specializes in pediatric obesity.

References


27. Faith M, Van Horn L, Appel LJ, et al; American Heart Association Nutrition and Obesity Committees of the Council on Nutrition, Physical Activity and Metabolism; Council on Clinical Cardiology; Council on Cardiovascular Disease in the Young; Council on

## Client Education Materials

### Counseling for Dietary Behavior Change

<table>
<thead>
<tr>
<th>Breakfast Handouts</th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast: The Wake-up Call for Weight Control (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Breakfast: The Wake-up Call for Weight Control (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3-Star Breakfast Guidelines (Parent)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3-Star Breakfast Guidelines (Teen)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Break the Breakfast Skipping Barriers</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Breakfast: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
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<tr>
<td>Breakfast Calendar</td>
<td>Tracking Tool</td>
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### Beverage Consumption Handouts

<table>
<thead>
<tr>
<th>Handouts</th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Sipping (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Smart Sipping (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>What’s in Your Glass (Parent)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>What’s in Your Glass (Teen)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Smart Sipping: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Fruits and Vegetables Handouts</strong></td>
<td>Parent</td>
<td>Teen</td>
<td>Both</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------</td>
<td>------</td>
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<tr>
<td>Fruits or Vegetables? It’s a Toss-up! (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fruits or Vegetables? It’s a Toss-up! (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Focus on Fruits and Vary Your Vegetables (Parent)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Focus on Fruits and Vary Your Vegetables (Teen)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Eat the Colors of the Rainbow</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fruits and Vegetables: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Portion Sizes Handouts</strong></th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portion Size Matters</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Handy Portion Size Tips</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>What Does a Serving Size Look Like?</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
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<tr>
<td>How Much Should I Eat?</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Portion Sizes Matter: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Snacking Handouts</strong></th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snacking—Just Do It Right! (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Snacking—Just Do It Right! (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
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<tr>
<td>What’s Your Snacking Style?</td>
<td>Interactive Quiz</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rate Your Snack (Parent)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Rate Your Snack (Teen)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Snacking: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Fast Food Handouts</strong></th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life in the Fast-Food Lane (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Life in the Fast-Food Lane (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fast Food: Where are the Calories?</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Your Order Please!</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fast Food: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
## Counseling for Physical Activity Behavior Change

<table>
<thead>
<tr>
<th>Physical Activities Handouts</th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being Active: A Moving Subject! (Parent)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Being Active: A Moving Subject! (Teen)</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Being Active is a Family Affair</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>It’s Time to Get Moving (Parent)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>It’s Time to Get Moving (Teen)</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Physical Activity: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Screen Time and Inactivity Handouts**

| Unplugged                                           | Fact Sheet | X    |
| Keeping Tabs on Screen Time (Parent)                | Worksheet | X    |
| Keeping Tabs on Screen Time (Teen)                  | Worksheet | X    |
| Keeping Tabs on Food Ads                            | Worksheet | X    |
| Screen Time: Setting SMART Goals                     | Worksheet | X    |

## Counseling for Family Behavior Change

<table>
<thead>
<tr>
<th>Family Influences and Self-Esteem Handouts</th>
<th>Parent</th>
<th>Teen</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting a Positive Body Image</td>
<td>Fact Sheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Feeling Good</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>All About Me</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Body Image: Setting SMART Goals</td>
<td>Worksheet</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Family Meals Handouts**

| Family Dinners in a Flash                            | Fact Sheet | X    |
| Rate Your Dinner                                     | Worksheet | X    |
| Dinner is Served!                                    | Worksheet | X    |
| Family Meals: Setting SMART Goals                    | Worksheet | X    |
3-Star Breakfast Guidelines (Parent)

Note to the Health Care Provider:
You can use this worksheet during counseling sessions with parents and older children. Topics in this worksheet are discussed in Section 6 of the Counselors’ Guide. It is most appropriate for use with clients in the Contemplation, Preparation, Action, and Maintenance stages of change.

Space has been provided at the top of this page to attach a business card or insert a logo.
3-Star Breakfast Guidelines

What Is a 3-Star Breakfast?

A 3-Star Breakfast can help your child get the nutrients they need to grow and be healthy.

★ A 3-Star Breakfast has foods from more than one food group. This will help kids get the many nutrients that their growing bodies need. The five main food groups are: Grains, Vegetables, Fruits, Dairy, and Protein.

★ A 3-Star Breakfast limits fat and added sugar. Fat and sugar add extra calories, which may cause weight gain.
   - Offer foods with the least amount of fat. For example, choose 1% milk instead of whole milk.
   - Choose foods without added sugar. For example, offer a whole wheat bagel instead of a doughnut.

★ A 3-Star Breakfast includes fruits, vegetables, and foods made with whole grains. Fruits, vegetables, and foods made with whole grains contain nutrients that are good for growing kids. They also have fiber, which will help kids feel full.

Whole Grain Breakfast Foods
- 100% whole wheat bread
- Whole grain dry cereals
- Oatmeal

continued
3-Star Breakfast Parfait

One 3-Star Breakfast that your kids may enjoy is a breakfast parfait: layer 1 cup of low-fat yogurt in a dish with fresh berries and reduced-fat, whole grain granola.

🌟 The breakfast parfait has foods from three food groups: the Dairy group (yogurt), the Fruits group (berries), and the Grains group (granola).
🌟 The yogurt and granola are both reduced fat.
🌟 The parfait includes fruit and whole grains.

Is Your Child’s Breakfast a 3-Star Breakfast?

What is your child’s favorite breakfast?
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________

How many stars does your child’s breakfast get? __________________________________________________

What can you do to make your child’s favorite breakfast healthier?
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________

continued
Rate the Menus

Compare the following menus. Which of the following are 3-Star Breakfasts?

<table>
<thead>
<tr>
<th>Breakfast 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrambled eggs</td>
<td>or</td>
<td>Scrambled eggs</td>
</tr>
<tr>
<td>100% whole wheat toast</td>
<td></td>
<td>Wheat toast</td>
</tr>
<tr>
<td>Low-fat milk</td>
<td></td>
<td>Low-fat milk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breakfast 2</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole wheat bagel</td>
<td>or</td>
<td>Whole wheat bagel</td>
</tr>
<tr>
<td>Peanut butter</td>
<td></td>
<td>Peanut butter</td>
</tr>
<tr>
<td>Orange drink</td>
<td></td>
<td>Orange juice</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breakfast 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-fat berry-flavored yogurt</td>
<td>or</td>
<td>Low-fat vanilla yogurt</td>
</tr>
<tr>
<td>Fresh berries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breakfast 4</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrambled eggs</td>
<td>or</td>
<td>Scrambled eggs</td>
</tr>
<tr>
<td>Plain tortilla</td>
<td></td>
<td>Corn tortilla</td>
</tr>
<tr>
<td>Cheddar cheese</td>
<td></td>
<td>Low-fat cheddar cheese</td>
</tr>
</tbody>
</table>

Goals

For the week of ____________________________, my child will try the following 3-Star Breakfasts:

____________________________________________________________________________________________
____________________________________________________________________________________________
____________________________________________________________________________________________
3-Star Breakfast Guidelines (Teen)

Note to the Health Care Provider:

You can use this worksheet during counseling sessions with teens. Topics in this worksheet are discussed in Section 6 of the Counselors’ Guide. It is most appropriate for use with clients in the Contemplation, Preparation, Action, and Maintenance stages of change.

Space has been provided at the top of this page to attach a business card or insert a logo.
3-Star Breakfast Guidelines

What Is a 3-Star Breakfast?

A 3-Star Breakfast will help you get the nutrients your body needs. Try to eat a 3-Star Breakfast every day.

Follow these easy steps for a 3-Star Breakfast:

🌟 **Have more than one food group.** This will help you get the many nutrients that your growing body needs. The five main food groups are: Grains, Vegetables, Fruits, Dairy and Protein.

🌟 **Look for ways to eat less fat and added sugar.** Fat and sugar add extra calories, which may cause you to gain weight.

- Choose foods with the least amount of fat. For example, have 1% milk instead of whole milk.
- Choose foods without added sugar. Try a whole wheat bagel instead of a doughnut.

🌟 **Include fruits, vegetables, and foods made with whole grains.** Fruits, vegetables and foods made with whole grains contain healthy nutrients. They also have fiber, which will help you feel full.

**Whole Grain Breakfast Foods**

- 100% whole wheat bread
- Whole grain dry cereals
- Oatmeal

continued
3-Star Breakfast Parfait

One 3-Star breakfast that you may enjoy is breakfast parfait: layer 1 cup of low-fat yogurt in a dish with fresh berries and reduced-fat, whole grain granola.

⭐ The breakfast parfait has foods from three food groups: the Dairy group (yogurt), the Fruits group (berries), and the Grains group (granola).
⭐ The yogurt and granola are both reduced fat.
⭐ The parfait includes fruit and whole grains.

Is Your Breakfast a 3-Star Breakfast?

What is your favorite breakfast?

______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________

How many stars does your breakfast get? ________________________________________________________

What can you do to make your favorite breakfast healthier?

______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________

continued
Rate the Menus

Compare the following menus. Which of the following are 3-Star Breakfasts?

**Breakfast 1**
Scrambled eggs  
100% whole wheat toast  
Low-fat milk

**Breakfast 2**
Whole wheat bagel  
Peanut butter  
Orange drink

**Breakfast 3**
Low-fat berry-flavored yogurt  
Fresh berries

**Breakfast 4**
Scrambled eggs  
Plain tortilla  
Cheddar cheese

Goals
For the week of ________________________________, I will try the following 3-Star Breakfasts:

______________________________________________________________________________________________
______________________________________________________________________________________________
______________________________________________________________________________________________

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