

Evidence-based obesity management for primary care



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At a fundamental level, treatment of pediatric obesity amounts to helping the family adjust physical activity and dietary choices to achieve a “negative energy balance” (i.e., calories expended > calories consumed) until the child’s BMI is within the “healthy” range — either as a result of the child using stored energy for growth or as a result of weight loss. *Energy balance* is a key concept to teach patients. During these discussions it is essential to communicate that the most effective strategy for creating an energy deficit is calorie control. Although increased energy expenditure (e.g., via increased physical activity) is very important, many families erroneously believe that they can begin an exercise program that will yield changes in adiposity on its own — when, in fact, caloric overconsumption is usually the key factor that leads to obesity. As discussed below, the focus of treatment at the primary care level is education on self-management and brief interventions targeting motivation and behavior modification, as needed.

Dietary Changes

Recommendations for dietary consumption should be presented in plain language that is easy for families to understand. The Stoplight Diet, developed by Leonard Epstein (Epstein & Squires, 1988), teaches families to categorize foods as Green, Yellow, or Red. Green (or “Go”) foods (most fruits and vegetables) are appropriate for relatively unrestricted consumption (including snacks). Yellow (or “Caution”) foods (e.g., grains, lean meats, low-fat dairy) are reserved for meal times (not snacks). It is important to teach families to carefully monitor portion sizes of “yellow” foods to maintain negative energy balance. Red (or “Stop”) foods (those with high fat and sugar content) should be used very sparingly. Families are encouraged to eat at least 35 servings of “green” foods and 5 or fewer servings of “red” foods each week. The remaining calories are recommended to come from a balanced diet that adheres to the *Choose My Plate* (www.choosemyplate.gov) guidelines of the United States Department of Agriculture.

Physical Activity

As noted above, physical activity is valuable for increasing caloric output and helping achieve a negative energy balance. Primary care providers also should be aware that regular moderate/vigorous physical activity improves cognitive functioning (Hillman, Kamijo & Scudder, 2011), which may lead to better decision-making regarding dietary choices.

Behavior modification

PCPPs may be uniquely suited to work with families on strategies of behavior modification in the home. Stimulus control, modeling, and positive reinforcement are techniques within the PCPP's bailiwick and can be extremely effective in helping establish and maintain positive health behaviors that lead to negative energy balance (Kitzmann et al., 2010). In the context of weight counseling, PCPPs should: 1) encourage families to remove all “red” foods (see above) from the home and make green foods easily available and visible (i.e., stimulus control); 2) encourage parents to perform the behaviors they desire to see in their children (i.e., modeling or the “do as I do” principle); 3) remind parents that healthy habits must be learned (i.e., they are not innate) and must be positively reinforced. Once healthy behaviors are routine, positive reinforcement can be faded gradually.

Motivational strategies

A consistent finding in the literature, and a recommendation of the Expert Panel, relates to the importance of a whole-family approach (Kitzman et al., 2010; Xanthopoulos et al., 2013). Within the primary care clinic, the PCPP may be well-positioned to help motivate the whole family to improve health behavior. Motivational interviewing strategies have been shown to be effective in improving diet and physical activity, both alone and in combination with other strategies (Erickson, Gerstle, & Feldstein, 2005; Gayes & Steele, under review; Suarez & Mullins, 2008). A key principle of motivational interviewing approaches is the use of techniques to help an individual make a decision to change, rather than having change prescribed by the provider. This process typically involves exploring the advantages and disadvantages of a decision to change (generated by the patient), directing the conversation toward “change talk,” and requesting the patient's permission to provide feedback.

Problem solving

After families have achieved adequate motivation for a healthier lifestyle and understand the actions necessary to achieve a negative energy balance, the PCPP can be instrumental in helping the family identify and overcome barriers to behavior change. As noted above, economic, environmental, cultural and behavioral factors may not be conducive to increased physical activity or improved dietary decision-making. Beyond economics, many families struggle with making time to prepare foods at home (generally healthier than eating out) or to be more physically active. There are sometimes cultural factors that present challenges to achieving improved diets (e.g., specific foods that are hard to avoid within a cultural niche). The PCPP can use general problem-solving strategies (D'Zurilla & Nezu, 2007) to help motivated families find ways to overcome barriers to increased physical activity and improved diets (Epstein, Paluch, Gordy, Saelens & Ernst, 2000).
