

Editorials

Breaking Down the AAP Guideline on Childhood Obesity

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Obesity in children is defined as a body mass index (BMI) at or above the 95th percentile by the Centers for Disease and Prevention's sex-specific BMI-for-age growth charts.¹ More than 14 million U.S. children, including 22% of adolescents, meet criteria for obesity.² The American Academy of Pediatrics (AAP) recently published a clinical practice guideline for the evaluation and treatment of children and adolescents with obesity.³ The guideline emphasizes treating obesity within the dynamics of the family unit, addressing environmental and social risk factors, and expanding treatment options. It highlights the effect of neighborhood, community, and population-level factors and also the role of structural racism and health inequities in creating disparities and presenting barriers to treatment.³ Although much of the guideline is evidence based, some of it is not, and the potential harms of its recommendations deserve attention.⁴

The guideline recommends intensive behavior and lifestyle modifications as the foundation of obesity treatment, similar to the U.S. Preventive Services Task Force's current recommendations.^{3,5} The AAP guideline states that the most effective intervention includes a minimum of 26 hours of face-to-face, family-based, multicomponent treatment over at least three to 12 months, with nutrition, physical activity, and behavior change support.³ Although the guideline acknowledges challenges to reaching this high standard, including scarcity and distribution of comprehensive treatment programs, transportation barriers, and missed school and work time, the gap between need and accessibility of this intervention is significant.³ Family physicians can help fill this gap by pursuing additional education (see <https://www.aafp.org/family-physician/patient-care/clinical-recommendations/clinical-guidance-obesity.html> for a list of resources), collaborating with community resources, and advocating for policies to improve access to intensive treatment programs. One-fourth of

face-to-face interventions that lasted less than five hours, that mostly occurred in primary care offices, and that used motivational interviewing, family-based treatment, and after-visit resources led to statistically significant improvements in BMI.³ This demonstrates that family physician-led interventions can benefit the health of these children and their families.

If behavior interventions alone are not sufficient in adolescents 12 years and older, the AAP guideline recommends that physicians consider pharmacotherapy. However, there is little evidence on long-term outcomes in this population; only 5 out of 27 randomized controlled trials included results beyond six months.³ Other systematic reviews found low-certainty evidence that medications reduce BMI but increase risk of adverse effects.⁶ In a recent randomized controlled trial in adolescents, semaglutide (Wegovy) reduced BMI by 16.1% compared with 0.6% in the placebo group after 68 weeks of treatment. However, semaglutide was associated with more adverse gastrointestinal events.⁷ The U.S. Preventive Services Task Force is reevaluating the benefits and harms of pharmacotherapy for weight management in children and adolescents.⁸

The AAP suggests that children 13 years and older with severe obesity (BMI greater than or equal to 120% of the 95th percentile for age and sex) be referred for bariatric surgery evaluation.³ A 2022 Cochrane review identified only one randomized controlled trial (50 participants) that evaluated laparoscopic adjustable gastric banding, a procedure no longer advised for adolescents because of a high frequency of subsequent reoperations.⁹ Nonetheless, 7 out of the 11 observational studies cited in the guideline involved this procedure.³ Given the frequency of short- and medium-term complications, the need for lifetime nutritional supplementation, and unknown long-term outcomes, this sweeping recommendation seems premature.

Based on the higher prevalence of diabetes mellitus, dyslipidemia, and nonalcoholic fatty liver

disease, screening for these conditions is recommended in children 10 years and older with obesity and should be considered in children with a BMI above the 85th percentile, according to the AAP.³ Following this recommendation could lead to more appropriate testing; a 2018-2019 study found that only 27% of children with obesity received recommended screenings.¹⁰ On the other hand, screening for diabetes in asymptomatic children identifies few cases, and most diagnoses are made based on symptoms.¹¹ For hyperlipidemia and nonalcoholic fatty liver disease, first-line treatment is behavior interventions already recommended for those with obesity, raising the question of what is gained by laboratory screening and making these additional diagnoses.¹²

Finally, it is plausible that more intensive management of obesity could inadvertently increase weight stigma.¹³ Children older than 11 years and those with higher BMIs have an increased prevalence of disordered eating, as assessed by the SCOFF (sick, control, one, fat, food) tool (<https://www.psychtools.info/scoff/>).¹⁴ Although one study found that weight counseling did not increase extreme weight loss behaviors in adolescents, even a small increase in eating disorders could nullify health gains from pharmacotherapy and surgery.^{15,16} Experts suggest using patient-centered, nonstigmatizing language (e.g., child with obesity vs. obese child, neutral terms such as weight and body mass index vs. obese or weight problem), correcting misconceptions and eliminating blame, and focusing on a child's health status rather than numerical weight or BMI.^{3,17,18} However, no evidence supports these approaches as mitigating the risk of eating disorders.

In summary, the AAP clinical practice guideline provides useful information for family physicians on treatment options for obesity in children, particularly intensive behavior therapies. Pharmacotherapy and bariatric surgery may be options for selected adolescents, although more evidence on long-term outcomes is needed. It is not known whether screening for common comorbid conditions improves patient-oriented outcomes. Physicians should follow best practices to avoid increasing obesity-related stigma and monitor patients closely for disordered eating patterns during treatment.

Editor's note: Dr. Lin is deputy editor of *AFP*.

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References

- Centers for Disease Control and Prevention. Defining child BMI categories: BMI and BMI categories for children and teens. Accessed March 13, 2023. <https://www.cdc.gov/obesity/basics/childhood-defining.html>
- Centers for Disease Control and Prevention. Childhood obesity facts: prevalence of childhood obesity in the United States. Accessed March 13, 2023. <https://www.cdc.gov/obesity/data/childhood.html>
- Hampel SE, Hassink SG, Skinner AC, et al. Clinical practice guideline for the evaluation and treatment of children and adolescents with obesity. *Pediatrics*. 2023;151(2):e2022060640.
- Skolnik N. The American Academy of Pediatrics Obesity guidelines—a critical appraisal. *JAMA Pediatr*. 2023;177(8):747-748.
- Grossman DC, Bibbins-Domingo K, Curry SJ, et al. Screening for obesity in children and adolescents: US Preventive Services Task Force recommendation statement. *JAMA*. 2017;317(23):2417-2426.
- Gates A, Elliott SA, Shulhan-Kilroy J, et al. Effectiveness and safety of interventions to manage childhood overweight and obesity: an overview of Cochrane systematic reviews. *Paediatr Child Health*. 2020;26(5):310-316.
- Weghuber D, Barrett T, Barrientos-Pérez M, et al.; Step Teens Investigators. Once-weekly semaglutide in adolescents with obesity. *N Engl J Med*. 2022;387(24):2245-2257.
- U.S. Preventive Services Task Force. Final research plan: weight management in children and adolescents: interventions. June 30, 2022. Accessed March 23, 2023. <https://www.uspreventiveservicestaskforce.org/uspstf/document/final-research-plan/weight-management-children-adolescents-interventions>
- Torbahn G, Brauchmann J, Axon E, et al. Surgery for the treatment of obesity in children and adolescents. *Cochrane Database Syst Rev*. 2022;(9):CD011740.
- Sharifi M, Goodman AB, Chua K-P. Assessment of underuse and overuse of screening tests for co-occurring conditions among children with obesity [published correction appears in *JAMA Netw Open*. 2022;5(8):e2228489]. *JAMA Netw Open*. 2022;5(7):e2222101.
- Wallace AS, Wang D, Shin J-I, et al. Screening and diagnosis of prediabetes and diabetes in US children and adolescents. *Pediatrics*. 2020;146(3):e20200265.
- Vos MB, Abrams SH, Barlow SE, et al. NASPGHAN clinical practice guideline for the diagnosis and treatment of nonalcoholic fatty liver disease in children: recommendations from the Expert Committee on NAFLD (ECON) and the North American Society of Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN). *J Pediatr Gastroenterol Nutr*. 2017;64(2):319-334.
- Hagan S, Nelson K. Are current guidelines perpetuating weight stigma? A weight-skeptical approach to the care of patients with obesity [editorial]. *J Gen Intern Med*. 2023;38(3):793-798.
- López-Gil JF, García-Hermoso A, Smith L, et al. Global proportion of disordered eating in children and adolescents: a systematic review and meta-analysis. *JAMA Pediatr*. 2023;177(4):363-372.
- Bravender T, Lyna P, Coffman CJ, et al. Physician weight-related counseling is unrelated to extreme weight loss behaviors among overweight and obese adolescents. *Clin Pediatr (Phila)*. 2018;57(8):954-957.
- Collaborative of Eating Disorders Organizations. Response to American Academy of Pediatrics' guidelines. January 13, 2023. Accessed March 23, 2023. <https://collabedorgs.my.canva.site/>
- Pont SJ, Puhl R, Cook SR, et al.; Section on Obesity; Obesity Society. Stigma experienced by children and adolescents with obesity. *Pediatrics*. 2017;140(6):e20173034.
- Rubino F, Puhl RM, Cummings DE, et al. Joint international consensus statement for ending stigma of obesity. *Nat Med*. 2020;26(4):485-497. ■