

Putting Prevention into Practice

An Evidence-Based Approach

Screening for and Management of Obesity in Adults

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► See related U.S. Preventive Services Task Force Recommendation Statement at <http://www.aafp.org/afp/2012/1115/od3.html>. Access to the statement is free and unrestricted.



This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 908.

The case study and answers to the following questions are based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), an independent panel of experts in primary care and prevention that systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. More information on this subject is available in the USPSTF Recommendation Statement and the evidence synthesis on the USPSTF Web site (<http://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspssobes.htm>.

A collection of Putting Prevention into Practice quizzes published in *AFP* is available at <http://www.aafp.org/afp/ppip>.

Case Study

A 40-year-old woman presents to your office for a routine well-woman examination. She has no significant medical history. She recently participated in a health fair at work and underwent free lipid and glucose screening; both levels were within normal limits. Her pulse is 68 beats per minute, her respiration rate is 16 breaths per minute, and her blood pressure is 120/76 mm Hg. She is 170 cm (5 ft, 7 in) tall and weighs 89.8 kg (198 lb). You calculate her body mass index (BMI) to be 31 kg per m².

Case Study Questions

1. Based on the recommendations of the U.S. Preventive Services Task Force (USPSTF), what is the most appropriate action to take with this patient?

- A. Measure her waist circumference to confirm a diagnosis of obesity.
- B. Do not initiate a discussion about her weight, because she does not have other cardiovascular risk factors.
- C. Explain the potential health risks associated with obesity, and offer referral to intensive, multicomponent behavioral interventions.
- D. Explain the potential health risks associated with obesity, and offer a behavioral counseling intervention, as well as a prescription for orlistat or metformin.

2. Which one of the following statements about behavioral interventions for obesity management is correct?

- A. Individuals who participate in multicomponent behavioral interventions lose an average of 11.25 to 13.5 kg (25 to 30 lb) over the course of one year.
- B. Clinical trials have demonstrated that multicomponent behavioral interventions decrease the incidence of cardiovascular disease.
- C. There is convincing evidence that multicomponent behavioral interventions lead to clinically important weight loss in individuals who are overweight, as opposed to obese.
- D. The most effective behavioral interventions (i.e., those resulting in the greatest amount of weight loss) include 12 to 26 sessions in a year.

3. You recommend that your patient consider joining a local, community-based weight-loss program. The patient agrees, but asks if she should also take a weight-loss medication (orlistat) that she heard about on the news. Which of the following statements about orlistat are correct?

- A. Orlistat in combination with behavioral interventions does not lead to weight loss.
- B. The use of orlistat has been associated with severe liver disease in rare cases.
- C. There is a lack of long-term safety data available for orlistat.
- D. The use of orlistat may increase fasting glucose levels.

Answers appear on the following page.

Answers

1. The correct answer is C. The USPSTF recommends that all adults be screened for obesity, and that clinicians offer or refer patients with a BMI of 30 kg per m² or greater to intensive, multicomponent behavioral interventions. Although recent evidence suggests that waist circumference may be an acceptable alternative (not addition) to BMI measurement in some patient subpopulations, the USPSTF recommendation is based on BMI calculation alone. Studies are needed to reassess the best methods for obesity screening in adults (for example, waist circumference or waist-to-hip ratio). The USPSTF recommendation on obesity applies to all adults, not just a subset of individuals with known cardiovascular risk factors. Interventions that combine pharmacologic agents (orlistat or metformin) with behavioral interventions have been shown to result in weight loss and improvement in physiologic outcomes. However, there are concerns about the potential harms of orlistat, metformin is not approved by the U.S. Food and Drug Administration (FDA) for the treatment of obesity, and sufficient data are lacking for both medications on the maintenance of improvement after discontinuation of therapy. As a result, the USPSTF is unable to recommend medication use.

2. The correct answer is D. The USPSTF found that the most effective behavioral counseling interventions for obesity management were comprehensive and of high intensity (12 to 26 sessions in a year), and involved multiple behavioral management activities, such as group and individual sessions, setting weight-loss goals, addressing barriers to change, and active use of self-monitoring. Weight-loss outcomes improved when interventions involved more sessions; behavioral intervention participants lost an average of 6 percent of their baseline weight in the first year with 12 to 26 treatment sessions compared with little or no weight loss in control participants. The average

6 percent weight loss for obese individuals participating in high-intensity, multicomponent behavioral counseling interventions translates to a loss of about 4 to 7 kg (8.8 to 15.4 lb) over one year. Although the USPSTF found adequate evidence that intensive, multicomponent behavioral interventions for obese adults can improve physiologic risk factors for cardiovascular disease, it found inadequate evidence about the effectiveness of these interventions on actual long-term cardiovascular health outcomes. Trial results were not stratified by BMI category, and the mean BMI across trials was in the obese range, making it difficult to ascertain the certainty of benefit in overweight (BMI of 25 to 29.9 kg per m²) groups. The USPSTF was unable to examine differential effects of interventions in overweight, as opposed to obese, individuals; therefore, less is known about the effect of screening and behavioral counseling interventions on outcomes for this population.

3. The correct answers are B and C. There are concerns about the potential harms of orlistat because of recent FDA reports of rare severe liver disease and a lack of long-term safety data. In clinical trials, interventions that combined orlistat with behavioral interventions resulted in weight loss and improvement in physiologic outcomes. Orlistat led to an average weight loss of about 2.6 kg (5.7 lb), a decrease in waist circumference of 1.9 cm, and a decrease in fasting glucose level.

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SOURCES

U.S. Preventive Services Task Force. Screening for and management of obesity in adults: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2012;157(5):373-378.

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