

Screening for and Management of Obesity in Adults: Recommendation Statement

► See related Putting Prevention into Practice on page 947.

This summary is one in a series excerpted from the Recommendation Statements released by the U.S. Preventive Services Task Force (USPSTF). These statements address preventive health services for use in primary care clinical settings, including screening tests, counseling, and preventive medications.

The complete version of this statement, including supporting scientific evidence, evidence tables, grading system, members of the USPSTF at the time this recommendation was finalized, and references, is available on the USPSTF Web site at <http://www.uspreventiveservicestaskforce.org/>.

A collection of USPSTF recommendation statements reprinted in *AFP* is available at <http://www.aafp.org/afp/uspstf>.

Summary of Recommendation and Evidence

The U.S. Preventive Services Task Force (USPSTF) recommends screening all adults for obesity. Clinicians should offer or refer patients with a body mass index (BMI) of 30 kg per m² or higher to intensive, multicomponent behavioral interventions (*Table 1*).

B recommendation.

Rationale

Importance. The prevalence of obesity in the United States is high, exceeding 30 percent in adult men and women. Obesity is associated with such health problems as an increased risk of coronary heart disease, type 2 diabetes mellitus, various types of cancer, gallstones, and disability. These comorbid medical conditions are associated with higher use of health care services and costs among obese patients.

Obesity is also associated with an increased risk of death, particularly in adults younger than 65 years. The leading causes of death in obese adults include ischemic heart disease, diabetes, respiratory diseases, and cancer (e.g., liver, kidney, breast, endometrial, prostate, colon). Weight loss in obese individuals is associated with a lower incidence of health problems and death.

Detection. BMI is calculated from the measured weight and height of an individual. Recent evidence suggests that waist circumference may be an acceptable alternative to BMI measurement in some patient subpopulations. Screening tests were not a specific focus of this review.

Benefits of detection and early intervention. The USPSTF found adequate evidence that intensive, multicomponent behavioral interventions for obese adults can lead to an average weight loss of 4 to 7 kg (8.8 to 15.4 lb). These interventions also improve

glucose tolerance and other physiologic risk factors for cardiovascular disease.

The USPSTF found inadequate direct evidence about the effectiveness of these interventions on long-term health outcomes (e.g., death, cardiovascular disease, hospitalizations).

Harms of detection and early intervention. Adequate evidence indicates that the harms of screening and providing behavioral interventions for obesity are no greater than small.

USPSTF assessment. The USPSTF concludes with moderate certainty that screening for obesity in adults has a moderate net benefit. There is also benefit to offering or referring obese adults to intensive behavioral interventions to improve weight status and other risk factors for important health outcomes.

Clinical Considerations

Patient population. This recommendation applies to adults 18 years or older. The USPSTF uses the following terms to define categories of increased BMI: overweight is defined as a BMI of 25 to 29.9 kg per m², and obesity is defined as a BMI of 30 kg per m² or greater.

Interventions. The USPSTF found that the most effective interventions were comprehensive and were of high intensity (12 to 26 sessions in a year). Although the USPSTF could not determine the effectiveness of other specific intervention components, most of the higher-intensity behavioral interventions included multiple behavioral management activities, such as group sessions, individual sessions, setting weight-loss goals, improving diet or nutrition, physical activity sessions, addressing barriers to change, active use of self-monitoring, and strategizing how to maintain lifestyle changes.

Table 1. Screening for and Management of Obesity in Adults: Clinical Summary of the USPSTF Recommendation

Population	Adults 18 years or older
Recommendation	Screen all adults for obesity. Patients with a BMI of 30 kg per m ² or greater should be offered or referred to intensive, multicomponent behavioral interventions. Grade: B
Screening tests	BMI is calculated from the measured weight and height of an individual. Recent evidence suggests that waist circumference may be an acceptable alternative to BMI measurement in some patient subpopulations.
Timing of screening	No evidence was found about appropriate intervals for screening.
Interventions	Intensive, multicomponent behavioral interventions for obese adults include the following components: Behavioral management activities, such as setting weight-loss goals Improving diet or nutrition and increasing physical activity Addressing barriers to change Self-monitoring Strategizing how to maintain lifestyle changes
Balance of harms and benefits	Adequate evidence indicates that intensive, multicomponent behavioral interventions for obese adults can lead to weight loss, as well as improved glucose tolerance and other physiologic risk factors for cardiovascular disease. Inadequate evidence was found about the effectiveness of these interventions on long-term health outcomes (e.g., mortality, cardiovascular disease, hospitalizations). Adequate evidence indicates that the harms of screening and behavioral interventions for obesity are small. Possible harms of behavioral weight-loss interventions include decreased bone mineral density and increased fracture risk, serious injuries resulting from increased physical activity, and increased risk of eating disorders.
Relevant recommendations from the USPSTF	Recommendations on screening for obesity in children and adolescents can be found at http://www.uspreventiveservicestaskforce.org/ .

NOTE: For the full recommendation statement and supporting documents, go to <http://www.uspreventiveservicestaskforce.org/>.

BMI = body mass index; USPSTF = U.S. Preventive Services Task Force.

Weight-loss outcomes improved when interventions involved more sessions (12 to 26 sessions in the first year). Behavioral intervention participants lost an average of 6 percent of their baseline weight (4 to 7 kg) in the first year with 12 to 26 treatment sessions compared with little or no weight loss in the control group participants. A weight loss of 5 percent is considered clinically important by the U.S. Food and Drug Administration (FDA).

For obese patients with elevated plasma glucose levels, behavioral interventions

decreased the incidence of diabetes diagnosis by about 50 percent over two to three years (number needed to treat = 7). Behavioral interventions also demonstrated some improvement in intermediate health outcomes, such as blood pressure, waist circumference, and glucose tolerance.

Interventions that combine pharmacologic agents (orlistat or metformin) 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. However, 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.¹ Metformin led to a 1.5-cm greater decrease in waist circumference; however, its use for obesity is not approved by the FDA and is thus considered an off-label use. In addition, sufficient data were lacking about the maintenance of improvement after discontinuation of medications. As a result, the USPSTF is unable to recommend medication use.

Results of trials were not stratified by BMI category, making it difficult to ascertain the certainty of benefit in overweight groups (BMI of 25 to 29.9 kg per m²). Although some studies included overweight participants, the mean BMI across trials was in the obese range (30 kg per m² or greater). Therefore, the USPSTF was unable to examine differential effects of interventions on both overweight and obese patients. However, the recommended interventions may also lead to weight loss in some overweight patients. Compared with that of obesity, less is known about the association of overweight and long-term health outcomes.

Screening intervals. No evidence was found about appropriate intervals for screening.

This recommendation statement was first published in *Ann Intern Med.* 2012;157(5):373-378.

The "Other Considerations," "Discussion," "Update of Previous USPSTF Recommendation," and "Recommendations of Others" sections of this recommendation statement are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspsobes.htm>.

The U.S. Preventive Services Task Force recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

REFERENCE

1. U.S. Food and Drug Administration. FDA drug safety communication: completed safety review of Xenical/Alli (orlistat) and severe liver injury. Rockville, Md.: U.S. Food and Drug Administration; 2010. <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm213038.htm>. Accessed May 23, 2012. ■