

# Putting Prevention Into Practice

## *An Evidence-Based Approach*

### Behavioral Counseling Interventions to Promote a Healthy Diet and Physical Activity for CVD Prevention in Adults Without CVD Risk Factors

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#### Case Study

A 49-year-old patient, S.B., presents for a wellness visit. S.B.'s blood pressure is 128/72 mm Hg, and their body mass index is 29 kg per m<sup>2</sup>. S.B. works in an office setting and exercises about one hour a week at a gym. S.B. usually eats fast food for lunch and red meat or chicken for dinner, rarely eats vegetables, and typically drinks two to three cans of soda each day. S.B. has no significant medical history, and their social history, physical examination, and laboratory values are unremarkable. S.B. does not drink alcohol and has never smoked. S.B. recently read that cardiovascular disease (CVD) is the leading cause of death in the United States and would like to know how they could prevent a heart attack or stroke.

See related USPSTF Clinical Summary in the online version of this issue.

This PPIP quiz is based on the recommendations of the USPSTF. More information is available in the USPSTF Recommendation Statement and supporting documents on the USPSTF website (<https://www.uspreventiveservicestaskforce.org>). The practice recommendations in this activity are available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/healthy-lifestyle-and-physical-activity-for-cvd-prevention-adults-without-known-risk-factors-behavioral-counseling>.

This series is coordinated by Joanna Drowos, DO, contributing editor.

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

**CME** This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 373.

**Author disclosure:** No relevant financial relationships.

#### Case Study Questions

1. For which one of the following risk factors does the U.S. Preventive Services Task Force (USPSTF) recommend that physicians selectively, but not routinely, offer behavioral counseling intervention to promote healthy diet and physical activity for CVD prevention in adults without CVD risk factors?

- ☐ A. Hypertension.
- ☐ B. Low levels of physical activity.
- ☐ C. Obesity.
- ☐ D. 10-year CVD risk greater than 7.5%.
- ☐ E. Dyslipidemia.

2. According to the USPSTF recommendation statement, which of the following behavioral counseling interventions should S.B.'s physician recommend to promote a healthy diet and physical activity to prevent CVD?

- ☐ A. A 30-minute office session with a clinician trained in healthy diet and physical activity counseling to teach behavior change techniques such as goal setting, problem-solving, and self-monitoring.
- ☐ B. Referral to a trained community health worker or nutritionist for several 20-minute sessions teaching patients how to read food labels, prepare healthy meals, and recognize appropriate caloric intake.
- ☐ C. Giving a patient a handout to encourage 60 minutes of physical activity per week.
- ☐ D. Weekly in-person or remote one-hour group sessions led by a nutritionist to provide common dietary counseling advice.

3. According to the USPSTF recommendation statement, which one of the following statements about the benefits of behavioral counseling to promote a healthy diet and physical activity is correct?

- ☐ A. There is inadequate evidence that counseling interventions improve blood pressure.
- ☐ B. There is adequate evidence that counseling interventions improve healthy eating habits.
- ☐ C. There is inadequate evidence that counseling interventions reduce the risk of cardiovascular-related mortality and all-cause mortality.
- ☐ D. There is inadequate evidence that counseling interventions improve low-density lipoprotein cholesterol levels.
- ☐ E. There is inadequate evidence that counseling interventions improve physical activity level.

## Answers

1. **The correct answer is B.** The USPSTF recommends selectively offering or providing behavioral counseling interventions to promote physical activity, encourage a healthy diet, reduce sedentary time, or some combination of these to patients based on physician professional judgment and patient preferences.<sup>1</sup> Physical activity counseling encourages patients to increase aerobic activity to achieve at least 150 minutes per week of equivalent moderate-intensity activity. Common dietary advice promotes increased consumption of fruits, vegetables, and fiber and reduced consumption of saturated fats, sodium, and sugar-sweetened beverages. In determining whether behavioral counseling interventions are appropriate, patients and physicians should consider factors such as patients' interest and readiness to make behavioral changes and availability and feasibility of interventions.<sup>2</sup> This recommendation applies to adults 18 years or older without known CVD risk factors, which include hypertension or elevated blood pressure, dyslipidemia, impaired fasting glucose or glucose tolerance, or mixed or multiple risk factors such as metabolic syndrome or an estimated 10-year CVD risk of 7.5% or greater.<sup>2</sup> This recommendation does not apply to adults with known CVD risk factors. Recommendations on reducing CVD risk in patients with CVD risk factors or obesity are addressed in separate USPSTF recommendations.<sup>3,4</sup>

2. **The correct answers are A, B, and D.** Behavioral counseling interventions may promote physical activity, healthy diet, reduced sedentary time, or some combination thereof.<sup>2</sup> These interventions include patient-tailored approaches to enhance skills for making changes and behavioral change techniques.<sup>2</sup> A range of specially trained professionals can

deliver these interventions. Interaction time with a clinician may range from 30 minutes to six hours over six months or longer. Interventions can be delivered individually, in a group, or both, with or without follow-up (telephone calls or emails), or delivered remotely.<sup>2</sup> The U.S. Department of Health and Human Services recommends that adults 18 years or older engage in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic physical activity per week in addition to engaging in strengthening activities at least twice per week.<sup>5</sup> Giving a handout to a patient about physical activity would not be of sufficient intensity to be included as an effective behavioral counseling intervention.

3. **The correct answer is B.** The USPSTF found sufficient evidence that behavioral counseling interventions for a healthy diet, physical activity, or both were associated with modest increases in physical activity levels and some improvements in dietary health behaviors.<sup>2</sup> It also found that behavioral counseling interventions for a healthy diet, physical activity, or both were associated with lower blood pressure, low-density lipoprotein cholesterol, and adiposity measures (i.e., body mass index, weight, and waist circumference) after six to 12 months.<sup>2</sup> Changes in intermediate outcomes (i.e., lower blood pressure) were found to be associated with reductions in risk of cardiovascular-related mortality and all-cause mortality.<sup>2</sup>

The views expressed in this work are those of the authors and do not reflect the official policy or position of the U.S. government or Stony Brook Medicine.

## References

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