

## **Bright Future in Practice: Physical Activity Adolescent Case Study**

Ella Springer is the school-based clinic nurse assigned to Riverview High School. She is concerned that an increasing number of adolescents appear to be overweight. She wonders if this is a trend or whether she is sensitive to this issue because of increased coverage of obesity in the media.

Ms. Springer decides to review the health records of 100 9<sup>th</sup> grade students. Based on their age, weight, and stature, she calculates body mass index (BMI) for these 14-year old adolescents. She finds that 32 students have BMI values between the 85<sup>th</sup> and 95<sup>th</sup> percentiles and are “at risk for becoming overweight.” She also meets with the principal to assess the school’s programs, services, and policies (for example, physical education requirement, recreational clubs, school lunch program, vending machines, open campus policy at lunchtime) that might prevent or contribute to the problem.

1. What initial information have you gathered?
  
  
  
  
  
  
  
  
  
  
2. For adolescents who were identified as “at risk for becoming overweight,” what additional screening and assessment would you conduct?
  
  
  
  
  
  
  
  
  
  
3. What recommendations would you provide to the family for weight maintenance or weight loss?
  
  
  
  
  
  
  
  
  
  
4. Identify three areas of counseling that you would provide to the family for changing both eating and physical activity behaviors.
  
  
  
  
  
  
  
  
  
  
5. Identify community policies and opportunities that could impact the adolescent’s nutritional and physical activity status. Identify potential partnerships.
  
  
  
  
  
  
  
  
  
  
6. Identify three resources that might be helpful for the family.

1. What initial information have you gathered?

Reviewed health records of 100 9<sup>th</sup> grade students (14 years old)

32 students have BMIs between the 85<sup>th</sup> and 95<sup>th</sup> percentiles and are “at risk for becoming overweight

2. For adolescents who were identified as “at risk of becoming overweight,” what additional screening and assessment would you conduct?

Adolescents with BMIs between the 85<sup>th</sup> and 95<sup>th</sup> percentiles should be screened and evaluated carefully, with particular attention to family history and secondary complications of obesity, including hypertension and dyslipidemias.

Adolescents with an annual increase of 3 to 4 BMI units should be evaluated.

3. What recommendations would you provide to the family for weight maintenance or weight loss?

For adolescents, weight maintenance is an appropriate goal if their BMI is between the 85<sup>th</sup> and 95<sup>th</sup> percentiles and if they have no secondary complications of obesity.

For adolescents, weight loss is an appropriate goal if their BMI is between the 85<sup>th</sup> and 95<sup>th</sup> percentiles and if they have secondary complications of obesity and for adolescents with a BMI at the 95<sup>th</sup> percentile or above. The first step for these adolescents is weight maintenance, then additional changes in eating and physical activity behaviors to achieve weight loss of ~ 1 pound per month.

An appropriate weight goal for all adolescents is a BMI below the 85<sup>th</sup> percentile, although secondary to healthy eating and physical activity.

4. Identify three areas of counseling that you would provide to the family for changing both eating and physical activity behaviors.

Eating Behaviors

Establish daily times for family meals and snacks.

Keep a variety of easy-to-prepare and healthy foods on hand.

Put a bowl of fruit on the kitchen table or counter.

Wash and cut up vegetables and keep them in a clear container (so they can be seen easily) in the refrigerator, along with low-fat dip or salsa.

Reduce the amount of high-fat and high-sugar foods in the family’s meals and snacks.

Physical Activity Behaviors

Encourage regular physical activity, and make it fun.

Encourage adolescents to participate in physical activity with friends and peers.

Plan family activities that everyone enjoys (e.g., hiking, biking, or swimming)

Encourage adolescents to participate in a variety of noncompetitive physical activity they enjoy (e.g., biking, in-line skating, jogging, swimming).

Limit the amount of time spent watching television and videotapes and playing computer games to 1 to 2 hours per day.

Encourage the parents to be a positive role model—practice healthy eating behaviors and regular physical activity.

Focus on gradually changing the entire family's eating and physical active behaviors instead of singling out the overweight adolescent.

Emphasize that achieving and maintaining a healthy weight is best accomplished through healthy eating behaviors and regular physical activity.

5. Identify community policies and opportunities that could impact the adolescent's nutritional and physical activity status.

Provides opportunities (e.g., afterschool recreational programs) for adolescents to participate in physical activity.

Develop policies (e.g., preservation of green space) and provide environmental support (e.g., well-maintained sidewalks, bicycle racks outside public facilities) that promote physical activity.

Provide safe environments for indoor and outdoor physical activity (e.g., walking and biking paths, playgrounds, parks, recreation centers).

6. Identify three resources that might be helpful for the family.

Community Recreation Centers

National Association for Sport and Physical Education

National Safety Council

Rails to Trails Conservancy

YMCA and YWCA