It's lunchtime and sixth-grader Oscar Villanova visits the vending machine. He pays for an orange juice and some cheese sticks, but he really wanted soda and chips. His school, Mildred Avenue, only sells school lunch and healthy snacks.

Seventh-grader Leticia Brown has been told by her doctor that she needs to lose weight. Her doctor says exercise will help her control her weight but at school she only gets physical education once a week.

Many children suffer from health conditions that are caused or made worse by their lifestyles. Childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years. Rates of childhood diabetes have also risen. These conditions can put children at risk for heart disease and other major killers later in life.

These health issues are multidimensional problems with many different causes. Eating meals out, watching lots of TV, and not being active after school can cause too much weight gain. But there are many things children can do to improve their health. Doctors say the primary focus for children should be eating healthy food and getting exercise every day.

Schools are getting involved in solving the problem. Some, like Mildred Avenue, restrict the snacks students can buy. Others are offering more gym classes to emphasize the importance of exercise. Some schools even send home health notices warning parents that their child may be overweight. These schools believe parents should be acting more responsibly by restricting children’s diets. Many parents get angry, arguing that schools should limit their focus to teaching. They believe that they have primary responsibility for their children’s health.

Who is responsible for children’s health? Should schools be involved? When do young people become responsible for their own health decisions?

Questions for Classroom Discussion:
- What are the two primary ways to control problems like obesity and diabetes?
- Obesity and diabetes are multidimensional problems. What might be some other causes?
- Are snack choices restricted at your school?
- Besides adding more fruits and vegetables, what healthy choices could the school lunch program provide?
USE THE FOCUS WORDS

**obesity (noun)** state of being extremely overweight

海岛：One way to help solve the obesity problem in the U.S. is to require all restaurants to list the calories on menu items.

話し合え：Should companies that sell junk food be required to give money to fight obesity?

**primary (adjective)** most important; most influential

海岛：Doctors say the primary focus for children should be eating healthy food and getting exercise every day.

話し合え：What is the primary quality you look for in a good friend?

**emphasize (verb)** to show the importance of

海岛：Other schools are offering more gym classes to emphasize the importance of exercise.

話し合え：What could your school do to emphasize the importance of a healthy diet? Explain.

**restrict (verb)** to keep within limits

海岛：Some schools, like Mildred Avenue, restrict the snacks students can buy.

話し合え：Do you think that schools should restrict the kind of food that is brought in for celebrations and activities?

**multidimensional (adjective)** having many different sides or characteristics

海岛：These health issues are multidimensional problems with many different causes.

話し合え：Is cheating in school a multidimensional problem? Explain.
In February 2010, Michelle Obama announced the Let’s Move campaign against childhood obesity. Fighting childhood obesity was her primary mission as First Lady. Her approach was multidimensional: She wanted to educate parents about nutrition, help families afford healthy food, and emphasize physical activity. She also wanted to bring healthy foods to America’s schools. In the past, many school lunch menus were restricted to foods that were cheap and easy to prepare.

Option 1: To help schools afford to feed students, the USDA pays schools for each lunch served. As of the 2014–15 school year, it paid $2.98 for each free lunch. Some estimates say that low-fat, high-fiber meals with fresh fruits and vegetables would cost $5 each. How much would the per-meal payment need to increase to cover the cost of a healthier meal?

A. about 28%
B. about 50%
C. about 100%
D. about 68%

Option 2: The USDA pays schools for each lunch served. As of the 2014–15 school year, it paid $2.98 for each free lunch, $2.58 for each reduced-price lunch, and $0.28 for each full-price lunch.

If \( f \) = the number of free lunches served, \( r \) = the number of reduced-price lunches served, and \( p \) = the number of full-price lunches served, write an algebraic expression that shows the total amount each school receives in per-meal reimbursements.

\[
2.98f + 2.58r + .28p
\]

Discussion Question: Childhood obesity is a big problem. Doctors emphasize that fighting obesity requires a multidimensional approach. Kids need access to healthy food. They need to restrict their junk food intake. They need to exercise. The U.S. spends $150 million each year fighting obesity-related illnesses, so fighting childhood obesity could save money in the long term. But in the short term, fighting obesity could be expensive. Schools today have tight budgets. Their primary concern is teaching kids. What are some inexpensive things schools could do to fight obesity?
The students in Mr. Seemy’s class are getting ready for Wellness Week at Franklin Middle School. During Wellness Week, all students will participate in special activities that emphasize good health and well-being. Recently, the school decided to restrict the types of snack foods offered on the school lunch menu, and some students have complained that their favorite (unhealthy) snack foods are no longer available. Patrice, Erick, and Jacky are preparing a multidimensional presentation about how to make healthier food choices and prevent childhood diabetes and obesity.

“We’ll start with a ‘Snack Bar’ showing them a bunch of foods that are really bad for them. You know, Spicy Cheese Crunchies and Twinkle Cakes and all that stuff,” says Patrice.

“Right! But remember we have to be careful to make our point clearly,” says Erick. “An unhealthy diet is the primary cause of obesity in children, but it’s not the only reason kids get too fat. Not being active plays a part too.”

“I found a calorie calculator online,” says Jacky. “Let’s find out what kinds of physical activity are best for burning all the calories we consume when we eat Cheese Crunchies. Then we can show everyone during our presentation.”

Jacky found this topic very interesting and decided to investigate what kind of exercise burned the most calories.

**Question:** Which types of physical activity are most effective at burning calories consumed in common snack foods?

**Hypothesis:** Jogging will be the most effective activity for burning calories for the average teenager.

**Procedure:**

1. Select a type of snack food. Record the amount of calories in one serving size.
2. Use a reliable calorie counter website to calculate the number of calories burned by different types of physical activity.
3. Enter your weight, the type of physical activity, and the amount of time you have to exercise.
4. Record the number of calories burned for each type of exercise.

<table>
<thead>
<tr>
<th>Type of physical activity</th>
<th>Basketball (full court)</th>
<th>Walking (4mph)</th>
<th>Cycling (leisure)</th>
<th>Jogging</th>
<th>Zumba dance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of calories burned after 30 minutes of activity</td>
<td>256</td>
<td>121</td>
<td>93</td>
<td>165</td>
<td>185</td>
</tr>
</tbody>
</table>

Which types of exercise would burn off the calories in the Spicy Cheese Crunchies? How do you know?

Thirty minutes of full-court basketball or zumba dance, because they each burn more than 182 calories.

If you ate one serving of Spicy Cheese Crunchies, about how long would you have to ride a bicycle to burn off the calories?

Nearly 1 hour. \((182/93)/2 = .98\)

The Center for Disease Control and prevention recommends that children and teens get at least 60 minutes a day of physical activity. What types of physical activity do you do daily? Weekly?
WHO IS RESPONSIBLE FOR CHILDHOOD OBESITY?

DEBATE THE ISSUE

Pick one of these positions (or create your own).

A
☐ Parents should take more responsibility for their children’s weight.

OR

B
☐ Schools should take more responsibility for their students’ weight.

OR

C
☐ Students should be responsible for their own bodies.

OR

CREATE YOUR OWN

Jot down a few notes on how to support your position during a discussion or debate.

Be a strong participant by using phrases like these:

“Can you show me evidence in the text that...”

“I believe that...”

“You make a good point, but have you considered...”

“I agree with you, but...”
TAKE A STAND

Support your position with clear reasons and specific examples. Try to use relevant words from the Word Generation list in your response.

obesity  |  primary  |  emphasize  |  restrict  |  multidimensional

Childhood Obesity: http://www.mayoclinic.org/diseases-conditions/childhood-obesity/basics/definition/con-20027428


“A Sweet Tooth is Tough to Pull”: http://www.boston.com/yourlife/health/fitness/articles/2006/02/15/a_sweet_tooth_is_tough_to_pull/

Overweight and Obesity: http://www.kidshealth.org/parent/general/body/overweight_obesity.html