

Childhood Obesity

<http://www.obesity.org/subs/childhood/causes.shtml>

CAUSES

There are many factors that contribute to causing child and adolescent obesity – some are modifiable and others are not.

Modifiable causes include:

- * Physical Activity – Lack of regular exercise.
- * Sedentary behavior – High frequency of television viewing, computer usage, and similar behavior that takes up time that can be used for physical activity.
- * Socioeconomic Status – Low family incomes and non-working parents.
- * Eating Habits – Over-consumption of high-calorie foods. Some eating patterns that have been associated with this behavior are eating when not hungry, eating while watching TV or doing homework.
- * Environment – Some factors are over-exposure to advertising of foods that promote high-calorie foods and lack of recreational facilities.

Non-changeable causes include:

- Genetics – Greater risk of obesity has been found in children of obese and overweight parents.

Prevention

Teaching healthy behaviors at a young age is important since change becomes more difficult with age. Behaviors involving physical activity and nutrition are the cornerstone of preventing obesity in children and adolescents. Families and schools are the two most critical links in providing the foundation for those behaviors.

Families

Parents are the most important role models for children. Results from an American Obesity Association survey show that:

* The majority of parents in the U.S. (78 percent) believe that physical education or recess should not be reduced or replaced with academic classes.

* Almost 30 percent of parents said that they are "somewhat" or "very" concerned about their children's weight.

* 12 percent of parents considered their child overweight.

* Comparing their own childhood health habits to their children's, 27 percent of parents said their children eat less nutritiously, and 24 percent said their children are less physically active.

* 35 percent of parents rated their children's school programs for teaching good patterns of eating and physical activity to prevent obesity as "poor," "non-existent," or "don't know."

* Among six choices of what they believed to be the greatest risk to their children's long-term health and quality of life, 5.6 percent of parents chose "being overweight or obese." More parents selected other choices as the greatest risk: alcohol (6.1 percent), sexually transmitted disease (10 percent), smoking (13.3 percent), violence (20.3 percent), and illegal drugs (24 percent).

* In terms of their own behavior, 61 percent of parents said that it would be either "not very difficult" or "not at all difficult" to change their eating and/or physical activity patterns if it would help prevent obesity in any of their children.

The AOA's survey results indicate that parents understand the importance of regular physical education for their children. Their unfamiliarity or inadequate rating of their children's school obesity prevention program is likely due to the lack of programs across the nation.

Parents appear to underestimate the health risk of excess weight to their children, and the difficulty in achieving and maintaining behavioral changes associated with obesity prevention. Additional studies are needed to develop appropriate public health programs to better educate parents in identifying and understanding changes in their children's weight, to incorporate the family in prevention efforts, and to improve school-based obesity prevention programs that include increasing physical education classes.

For more details on AOA's survey, read the Executive Summary.

Here are some ways that parents can establish a lifetime of healthy habits for their family:

Create an Active Environment:

- * Make time for the entire family to participate in regular physical activities that everyone enjoys. Try walking, bicycling or rollerblading.

- * Plan special active family-outings such as a hiking or ski trip.

- * Start an active neighborhood program. Join together with other families for group activities like touch-football, basketball, tag or hide-and-seek.

- * Assign active chores to every family member such as vacuuming, washing the car or mowing the lawn. Rotate the schedule of chores to avoid boredom from routine.

- * Enroll your child in a structured activity that he or she enjoys, such as tennis, gymnastics, martial arts, etc.

- * Instill an interest in your child to try a new sport by joining a team at school or in your community.

- * Limit the amount of TV watching.

Create a Healthy Eating Environment:

- * Implement the same healthy diet (rich in fruits, vegetables and grains) for your entire family, not just for select individuals.

- * Plan times when you prepare foods together. Children enjoy participating and can learn about healthy cooking and food preparation.

- * Eat meals together at the dinner table at regular times.

- * Avoid rushing to finish meals. Eating too quickly does not allow enough time to digest and to feel a sense of fullness.

- * Avoid other activities during mealtimes such as watching TV.

- * Avoid foods that are high in calories, fat or sugar.

- * Have snack foods available that are low-calorie and nutritious. Fruit, vegetables and yogurt are some examples.

- * Avoid serving portions that are too large.

- * Avoid forcing your child to eat if he/she is not hungry. If your child shows atypical signs of not eating, consult a healthcare professional.

- * Limit the frequency of fast-food eating to no more than once per week.

* Avoid using food as a reward or the lack of food as punishment.

Schools

Outside of the home, children and adolescents spend the majority of their time in school. So, it makes sense that schools provide an environment that promotes healthy nutrition and physical activity habits. Only a few creative programs are being tested in schools across the country.

Overweight and Obesity

Results of a 1999 national survey showed that 16 percent of high school students were overweight (Body Mass Index (BMI) greater than the 85th percentile and below the 95th percentile) and nearly 10 percent were obese (BMI more than or equal to the 95th percentile). Self-reported height and weight was used. The survey, called the Youth Risk Behavioral Surveillance System (YRBSS), is conducted by the Centers for Disease Control and Prevention (CDC), and uses a nationally representative sample of students in grades 9 to 12.

Here are more results from the 1999 YRBSS:

* More male students (17 percent) were overweight than female students (14 percent), and obese (12 percent of males and 8 percent of females).

* More black students (22 percent) were overweight than white students (14 percent).

* More black and Hispanic female students (23 and 18 percent, respectively) were overweight than white female students (12 percent).

Self-Perception of Weight

- When asked to describe their weight, 30 percent of students thought of themselves as overweight.
- More female students (36 percent) than male students (24 percent) considered themselves overweight.
- More Hispanic students (37 percent) than white and black students (29 and 25 percent, respectively) considered themselves overweight.

Weight Loss Attempts

- 43 percent of students reported that they were trying to lose weight.
 - More female students (59 percent) than male students (26 percent) reported that they were trying to lose weight.
 - More Hispanic students (51 percent) reported that they were trying to lose weight than white students (43 percent) and black students (36 percent).
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Methods of Weight Loss:

Exercise

- More than half (58 percent) of students reported the use of exercise (during the 30 days before the survey) to lose weight or to avoid gaining weight.
- More female students (67 percent) reported the use of exercise for weight loss or maintenance than male students (49 percent). More white female students (70 percent) reported the use of exercise for weight loss or maintenance than black female students (59 percent).

Change of Eating Behaviors

- 40 percent of students reported that they ate less food, fewer calories, or foods low in fat (during the 30 days before the survey) to lose weight or to avoid gaining weight.
- More female students (56 percent) reported that they ate less food, fewer calories, or foods low in fat than male students (25 percent) to lose weight or to avoid gaining weight.
- More white students (42 percent) reported that they ate less food, fewer calories, or foods low in fat than black students (34 percent) to lose weight or to avoid gaining weight.
- More white female students (60 percent) reported that they ate less food, fewer calories, or foods low in fat than Hispanic female students (51 percent) and black female students (43 percent) to lose weight or to avoid gaining weight.

Fasting

- 13 percent of students reported fasting ("without eating for 24 hours or more") to lose weight or to avoid gaining weight.
- More female students (19 percent) reported fasting than male students (6 percent) to lose weight or to avoid gaining weight

Use of Dietary Supplements

- 8 percent of students reported taking diet pills, powders, or liquids without a doctor's advice to lose weight or to avoid gaining weight.
- More female students (11 percent) reported taking diet pills, powders, or liquids without a doctor's advice than male students (4 percent) to lose weight or to avoid gaining weight.
- More white female students (12 percent) reported taking diet pills, powders, or liquids without a doctor's advice than black female students (6.9 percent) to lose weight or to avoid gaining weight.

Purging / Laxative Use

- 5 percent of students reported vomiting or taking laxatives to lose weight or to avoid gaining weight.
- More female students (7 percent) reported vomiting or taking laxatives than male students (2 percent) to lose weight or to avoid gaining weight.

* Find more 1999 YRBSS results from the CDC's Morbidity and Mortality Weekly Report and from the CDC's Youth '99 Online Analysis.

Creating a Healthy Eating Environment in Schools

Recommended daily servings of fruits and vegetables are not being met by today's youth. According to the Centers for Disease Control and Prevention, "51 percent of children and adolescents eat less than one serving a day of fruit, and 29 percent eat less than one serving a day of vegetables that are not fried."

According to the U.S. Department of Agriculture (USDA), children drink 16 percent less milk now than in the late 1970's, and 16 percent more of carbonated soft drinks. The consumption of non-citrus juices such as grape and apple mixtures increased by 280 percent.

A coalition of five medical associations and the USDA proposed a "Prescription for Change: Ten Keys to Promote Healthy Eating in

Schools" to be used for guidance in school nutrition programs. Their prescription is:

1. Students, parents, food service staff, educators and community leaders will be involved in assessing the school's eating environment, developing a shared vision and an action plan to achieve it.

2. Adequate funds will be provided by local, state and federal sources to ensure that the total school environment supports the development of healthy eating patterns.

3. Behavior-focused nutrition education will be integrated into the curriculum from pre-K through grade 12. Staff who provide nutrition education will have appropriate training.

4. School meals will meet the USDA nutrition standards as well as provide sufficient choices, including new foods and foods prepared in new ways, to meet the taste preferences of diverse student populations.

5. All students will have designated lunch periods of sufficient length to enjoy eating healthy foods with friends. These lunch periods will be scheduled as near the middle of the school day as possible.

6. Schools will provide enough serving areas to ensure student access to school meals with a minimum of wait time.

7. Space that is adequate to accommodate all students and pleasant surroundings that reflect the value of the social aspects of eating will be provided.

8. Students, teachers and community volunteers who practice healthy eating will be encouraged to serve as role models in the school dining areas.

9. If foods are sold in addition to National School Lunch Program meals, they will be from the five major food groups of the Food Guide Pyramid. This practice will foster healthy eating patterns.

10. Decisions regarding the sale of foods in addition to the National School Lunch Program meals will be based on nutrition goals, not on profit making.

Read more recommendations from this coalition of medical associations and the USDA in, *Healthy School Nutrition Environments: Promoting Healthy Eating Behaviors*.

Creating an Active Environment in Schools

Nationwide in 1999, approximately 56 percent of high school students were enrolled in a physical education (PE) class and only 29 percent attended PE class daily, according to the Center for Disease Control and Prevention's (CDC) Youth Behavioral Risk Factor Surveillance System (YRBSS). Participation in high school sports was 55 percent, with a higher participation rate from male students (62 percent) than females (48 percent).

The CDC partnered with experts from other federal agencies, state agencies, universities, voluntary organizations, and professional associations to develop Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People. The 10 recommendations in the guidelines are:

1. Policy

Establish policies that promote enjoyable, lifelong physical activity.

- * Schools should require daily physical education and comprehensive health education (including lessons on physical activity) in grades K–12.

- * Schools and community organizations should provide adequate funding, equipment, and supervision for programs that meet the needs and interests of all students.

2. Environment

Provide physical and social environments that encourage and enable young people to engage in safe and enjoyable physical activity.

- * Provide access to safe spaces and facilities and implement measures to prevent activity-related injuries and illnesses.

- * Provide school time, such as recess, for unstructured physical activity, such as jumping rope.

- * Discourage the use or withholding of physical activity as punishment.

- * Provide health promotion programs for school faculty and staff.

3. Physical Education Curricula and Instruction

Implement sequential physical education curricula and instruction in grades K–12 that

- * Emphasize enjoyable participation in lifetime physical activities such as walking and dancing, not just competitive sports.
- * Help students develop the knowledge, attitudes, and skills they need to adopt and maintain a physically active lifestyle.
- * Follow the National Standards for Physical Education.
- * Keep students active for most of class time.

4. Health Education Curricula and Instruction

Implement health education curricula and instruction that

- * Feature active learning strategies and follow the National Health Education Standards.
- * Help students develop the knowledge, attitudes, and skills they need to adopt and maintain a healthy lifestyle.

5. Extracurricular Activities

Provide extracurricular physical activity programs that offer diverse, developmentally appropriate activities both noncompetitive and competitive for all students.

6. Family Involvement

Encourage parents and guardians to support their children's participation in physical activity, to be physically active role models, and to include physical activity in family events.

7. Training

Provide training to enable teachers, coaches, recreation and health care staff, and other school and community personnel to promote enjoyable, lifelong physical activity among young people.

8. Health Services

Assess the physical activity patterns of young people, refer them to appropriate physical activity programs, and advocate for physical activity instruction and programs for young people.

9. Community Programs

Provide a range of developmentally appropriate community sports and recreation programs that are attractive to all young people.

10. Evaluation

- Regularly evaluate physical activity instruction, programs, and facilities.