School Health Guidelines to Promote Healthy Eating and Physical Activity: Executive Summary

Healthy eating and regular physical activity play a powerful role in preventing chronic diseases, including heart disease, cancer, and stroke—the three leading causes of death among adults aged 18 years or older.¹⁻⁴ Engaging students in healthy eating and regular physical activity can help lower their risk for obesity and related chronic diseases during adulthood.^{5,6}

Schools play a critical role in improving the dietary and physical activity behaviors of students. Schools can create an environment supportive of students' efforts to eat healthily and be active by implementing policies and practices that support healthy eating and regular physical activity and by providing opportunities for students to learn about and practice these behaviors. CDC synthesized research and best practices related to promoting healthy eating and physical activity in schools, culminating in nine guidelines. These guidelines were informed by the *Dietary Guidelines for Americans*,⁷ the *Physical Activity Guidelines for Americans*,⁸ and the *Healthy People 2020* objectives related to healthy eating and physical activity among children and adolescents, including associated school objectives.⁹

The guidelines serve as the foundation for developing, implementing, and evaluating school-based healthy eating and physical activity policies and practices for students. Each of the nine guidelines is accompanied by a set of implementation strategies developed to help schools work toward achieving each guideline. Although the ultimate goal is to implement all nine guidelines included in this document, not every strategy will be appropriate for every school, and some schools, due to resource limitations, might need to implement the guidelines incrementally.





GUIDELINE

Use a coordinated approach to develop, implement, and evaluate healthy eating and physical activity policies and practices.

Representatives from different segments of the school and community, including parents and students, should work together to maximize healthy eating and physical activity opportunities for students.

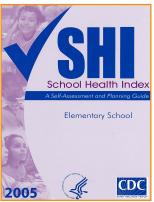
Strategies

- Coordinate healthy eating and physical activity policies and practices through a school health council and school health coordinator.
- Assess healthy eating and physical activity policies and practices.
- Use a systematic approach to develop, implement, and monitor healthy eating and physical activity policies.
- Evaluate healthy eating and physical activity policies and practices.

Resources

CDC's School Health Index: A Self-Assessment and Planning Guide www.cdc.gov/healthyyouth/SHI

Action for Healthy Kids^{*}: Wellness Policy Tool www.actionforhealthykids.org/school-programs/our-programs/ wellness-policy-tool/



GUIDELINE 🚬

Establish school environments that support healthy eating and physical activity.

The school environment should encourage all students to make healthy eating choices and be physically active throughout the school day.

Strategies

- Provide access to healthy foods and physical activity opportunities and to safe spaces, facilities, and equipment for healthy eating and physical activity.
- Establish a climate that encourages and does not stigmatize healthy eating and physical activity.
- Create a school environment that encourages a healthy body image, shape, and size among all students and staff members, is accepting of diverse abilities, and does not tolerate weight-based teasing.

The prevalence of obesity among children and adolescents more than tripled from 1980 to 2008. In 2008, more than one third of U.S. children and adolescents aged 6–19 were overweight or obese.¹⁰⁻¹³

Resources

The National Policy and Legal Analysis Network (NPLAN) www.nplanonline.org

Consumer Product Safety Commission Handbook for Public Playground Safety www.cpsc.gov/cpscpub/pubs/325.pdf



Provide a quality school meal program and ensure that students have only appealing, healthy food and beverage choices offered outside of the school meal program.

Schools should model and reinforce healthy dietary behaviors by ensuring that only nutritious and appealing foods and beverages are provided in all food venues in schools, including school meal

programs; à la carte service in the cafeteria; vending machines; school stores and snack bars/concession stands; fundraisers on school grounds; classroom-based activities; staff and parent meetings; and after-school programs.

Strategies

- Promote access to and participation in school meals.
- Provide nutritious and appealing school meals that comply with the *Dietary Guidelines for Americans*.
- Ensure that all foods and beverages sold or served outside of school meal programs are nutritious and appealing.

The Dietary Guidelines for Americans (DGA) recommend a diet rich in fruits and vegetables, whole grains, and fat-free and low-fat dairy products for persons aged 2 years or older. The DGA also recommend that children, adolescents, and adults limit their intake of solid fats (major sources of saturated and trans fatty acids), cholesterol, sodium, added sugars, and refined grains.⁷

Resources

Nutrition Standards for Foods In Schools: Leading the Way Toward Healthier Youth Institute of Medicine (IOM) recommendations about nutrition standards for foods offered in competition with federally reimbursable meals and snacks www.iom.edu/Reports/2007/Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth.aspx

Fact Sheets Based on IOM Recommendations:

- For Parents, Guardians, Teachers, and School Staff www.cdc.gov/healthyyouth/nutrition/pdf/nutrition_factsheet_parents.pdf
- For School Boards, School Districts, and Other School Administrators www.cdc.gov/healthyyouth/nutrition/pdf/nutrition_factsheet_schools.pdf
- For School Nutrition Service Personnel www.cdc.gov/healthyyouth/nutrition/pdf/nutrition_factsheet_service.pdf
- For Students www.cdc.gov/healthyyouth/nutrition/pdf/nutrition_factsheet_youth.pdf

Making It Happen! School Nutrition Success Stories www.cdc.gov/healthyyouth/mih

U.S. Department of Agriculture's Team Nutrition www.fns.usda.gov/TN

The U.S. Department of Health and Human Services (HHS) recommends that children and adolescents engage in 60 minutes or more of physical activity every day.⁸

GUIDELINE 4

Implement a comprehensive physical activity program with quality physical education as the cornerstone.

Children and adolescents should participate in 60 minutes or more of physical activity every day. A substantial percentage of students' physical activity can be provided through a comprehensive, school-based physical activity program that includes these components: physical education, recess, classroom-based physical activity, walking and bicycling to school, and out-of-school-time activities.

Strategies

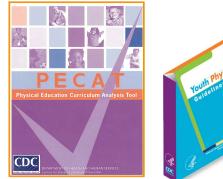
- Require students in grades K–12 to participate in daily physical education that uses a planned and sequential curriculum and instructional practices that are consistent with national or state standards for physical education.
- Provide a substantial percentage of each student's recommended daily amount of physical activity in physical education class.
- Use instructional strategies in physical education that enhance students' behavioral skills, confidence in their abilities, and desire to adopt and maintain a physically active lifestyle.
- Provide ample opportunities for all students to engage in physical activity outside of physical education class.
- Ensure that physical education and other physical activity programs meet the needs and interests of all students.

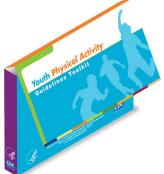
Resources

CDC's Physical Education Curriculum Analysis Tool www.cdc.gov/healthyyouth/PECAT

CDC's Youth Physical Activity Guidelines Toolkit www.cdc.gov/healthyyouth/physicalactivity/guidelines.htm

National Association for Sport and Physical Education www.aahperd.org/naspe







Implement health education that provides students with the knowledge, attitudes, skills, and experiences needed for healthy eating and physical activity.

Health education is integral to the primary mission of schools, providing students with the knowledge and skills they need to become successful learners and healthy adults.

Strategies

- Require health education from pre-kindergarten through grade 12.
- Implement a planned and sequential health education curriculum that is culturally and developmentally appropriate, addresses a clear set of behavioral outcomes that promote healthy eating and physical activity, and is based on national standards.
- Use curricula that are consistent with scientific evidence of effectiveness in helping students improve healthy eating and physical activity behaviors.
- Use classroom instructional methods and strategies that are interactive, engage all students, and are relevant to their daily lives and experiences.

Resources

CDC's Health Education Curriculum Analysis Tool www.cdc.gov/healthyyouth/HECAT

GUIDELINE 6

Provide students with health, mental health, and social services to address healthy eating, physical activity, and related chronic disease prevention.

Schools are responsible for students' physical health, mental health, and safety during the school day. Schools should ensure resources are available for identification, follow-up, and treatment of health and mental health conditions related to diet, physical activity, and weight status.

Strategies

- Assess student needs related to physical activity, nutrition, and obesity, and provide counseling and other services to meet those needs.
- Ensure students have access to needed health, mental health, and social services.
- Provide leadership in advocacy and coordination of effective school physical activity and nutrition policies and practices.

Resources

School Nurse Childhood Obesity Prevention Education (S.C.O.P.E.) www.nasn.org/Default.aspx?tabid=435

CDC's Body Mass Index Measurement in Schools www.cdc.gov/HealthyYouth/obesity/bmi/pdf/BMI_execsumm.pdf



GUIDELINE 7

Partner with families and community members in the development and implementation of healthy eating and physical activity policies, practices, and programs.

Partnerships among schools, families, and community members can enhance student learning, promote consistent messaging about health behaviors, increase resources, and engage, guide, and motivate students to eat healthily and be active.

Strategies

- Encourage communication among schools, families, and community members to promote adoption of healthy eating and physical activity behaviors among students.
- Involve families and community members on the school health council.
- Develop and implement strategies for motivating families to participate in school-based programs and activities that promote healthy eating and physical activity.
- Access community resources to help provide healthy eating and physical activity opportunities for students.
- Demonstrate cultural awareness in healthy eating and physical activity practices throughout the school.

Obese children and adolescents are more likely than normal weight children and adolescents to have at least one risk factor for cardiovascular disease, such as high cholesterol, triglycerides, blood pressure, or insulin.¹⁴

Resources

Center on School, Family, and Community Partnerships www.csos.jhu.edu/p2000/center.htm

GUIDELINE 🔒

Provide a school employee wellness program that includes healthy eating and physical activity services for all school staff members.

School employee wellness programs can improve staff productivity, decrease employee absenteeism, and decrease employee health care costs.

Strategies

- Gather data and information to determine the nutrition and physical activity needs of school staff members and assess the availability of existing school employee wellness activities and resources.
- Encourage administrative support for and staff involvement in school employee wellness.



• Develop, implement, and evaluate healthy eating and physical activity programs for all school employees.

Resources

The Directors of Health Promotion and Education's School Employee Wellness: A Guide for Protecting the Assets of Our Nation's Schools www.schoolempwell.org

Employ qualified persons, and provide professional development opportunities for physical education, health education, nutrition services, and health, mental health, and social services staff members, as well as staff members who supervise recess, cafeteria time, and out-of-school-time programs.

Providing certified and qualified staff with regular professional development opportunities enables them to improve current skills and acquire new ones.

Strategies

- Require the hiring of physical education teachers, health education teachers, and nutrition services staff members who are certified and appropriately prepared to deliver quality instruction, programs, and practices.
- Provide school staff with annual professional development opportunities to deliver quality physical education, health education, and nutrition services.
- Provide annual professional development opportunities for school health, mental health, and social services staff members, and staff members who lead or supervise out-of-school-time programs, recess, and cafeteria time.

Resources

National Staff Development Council www.learningforward.org

RMC Health www.rmc.org Education Development Center www.edc.org/themes/schools





Conclusion

Implementing and sustaining school-based healthy eating and physical activity policies and programs will make a powerful contribution toward a healthy future for students in the United States. By adopting these nine guidelines, schools can help ensure that all students have the opportunity to attain their maximum educational potential and pursue a lifetime of good health. (The full citation for the guidelines, from which the Executive Summary is derived, follows: CDC. School health guidelines to promote healthy eating and physical activity. *MMWR* 2011;60(RR-5):1–76. Available at www.cdc.gov/mmwr/pdf/rr/rr6005.pdf and www.cdc.gov/healthyyouth/npao/strategies.htm.)

Reference List

- 1. Dietary Guidelines Advisory Committee. *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010, to the Secretary of Agriculture and the Secretary of Health and Human Services*. Washington, DC: U.S. Department of Agriculture, Agricultural Research Service; 2010.
- 2. Physical Activity Guidelines Advisory Committee. *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services; 2008.
- 3. U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 4. Lichtenstein AH, Appel LJ, Brands M, Carnethon M, Daniels S, Franch, HA, et al. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. *Circulation* 2006;114(1):82–96.
- 5. Daniels SR, Arnett DK, Eckel RH, et al. Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment. *Circulation* 2005;111(15):1999–2012.
- 6. Office of the Surgeon General. *The Surgeon General's Vision for a Healthy and Fit Nation*. Rockville, MD: U.S. Department of Health and Human Services; 2010.
- 7. U.S. Department of Agriculture, U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* 7th edition. Washington, DC: U.S. Government Printing Office; 2010.
- 8. U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Washington, DC: U.S. Department of Health and Human Services; 2008.
- 9. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. *Healthy People 2020*. Rockville, MD: U.S. Department of Health and Human Services; 2010. Report No. B0132.
- 10. Hedley AA, Ogden CL, Johnson CL, Caroll MD, Curtin LR, Flegal KM. Prevalence of overweight and obesity among US children, adolescents, and adults, 1999–2002. *Journal of the American Medical Association* 2004;291(23):2847–2850.
- 11. Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999–2000. *Journal of the American Medical Association* 2002;288(4):1728–1732.
- 12. Ogden CL, Carroll MD, Curtin LR, McDowell MA, Tabak CJ, Flegal KM. Prevalence of overweight and obesity in the United States, 1999–2004. *Journal of the American Medical Association* 2006;295(13):1549–1555.
- 13. Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007–2008. *Journal of the American Medical Association* 2010;303(3):242–249.
- Freedman DS, Mei Z, Srinivasan SR, Berenson GS, Dietz WH. Cardiovascular risk factors and excess adiposity among overweight children and adolescents: the Bogalusa Heart Study. *Journal of Pediatrics* 2007;150(1): 12–17.
- 15. CDC. *The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance.* Atlanta, GA: U.S. Department of Health and Human Services; 2010.
- 16. Hoyland A, Dye L, Lawton CL. A systematic review of the effect of breakfast on the cognitive performance of children and adolescents. *Nutrition Research Reviews* 2009;22(2):220–243.
- 17. Rampersaud GC, Pereira MA, Girard BL, Adams J, Metzl JD. Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of the American Dietetic Association* 2005;105(5):743–760.
- 18. Taras H. Nutrition and student performance at school. *Journal of School Health* 2005;75(6):199–213.

The health of students is linked to their academic success. Both physical activity and healthy eating may help improve academic achievement.^{15–18}