THE UNIVERSITY OF ARIZONA
Cooperative Extension

# Guidelines for Childhood Obesity Prevention Programs: Promoting Healthy Weight in Children

Improvement in health and well being for all children, both immediate and long-term, is the desired outcome of addressing childhood overweight and obesity. The World Health Organization defines health as *a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity.*[1] Consistent with this, we encourage the health at any size approach, which is health-centered, rather than weight-centered, and focuses on the whole person — physically, mentally, and socially. This approach shifts the emphasis to living actively, eating in normal, healthy ways, respecting each individual, and health and well being for all at whatever size they may be. Health at any size supports appropriate lifestyle behavior changes to achieve these objectives.

As in all programs serving children, overweight and obesity prevention programs appropriately focus on supporting and nurturing every child, while avoiding doing any harm. It is important to treat all children with respect and help them understand that healthy behaviors they can reasonably incorporate into their lives will enhance their normal growth and development. Adults are responsible for creating a nurturing environment that helps children recognize their own worth and respects cultural foodways and family traditions. Overweight, obesity, eating attitudes and behaviors, physical activity, and body image are all interrelated and will need to be addressed in comprehensive ways that do no harm. Thus, safe and effective overweight and obesity prevention programs will include measures to prevent related problems, such as eating disorders, hazardous weight loss, nutrient deficiencies, size discrimination, and body hatred. Harm can result if obesity prevention efforts move ahead without appropriate attention to these related problems.[2]

Based on these premises, we offer the following recommendations to program planners, parents, teachers, school staff, and health professionals who are concerned about children and weight.

## SUMMARY STATEMENT

*These guidelines for obesity prevention programs encourage a health-centered, rather than weight-centered, approach that focuses on the whole child — physically, mentally and socially. The emphasis is on living actively, eating in normal and healthy ways, and creating a nurturing environment that helps children recognize their own worth, and that respects cultural foodways and family traditions. It is recognized that obesity, eating disorders, hazardous weight loss, nutrient deficiencies, size discrimination, and body hatred are all interrelated and need to be addressed in comprehensive ways that do no harm.*

## I. Framework for addressing childhood obesity prevention

**A. Planning groups.** We recommend that decisionmaking groups addressing healthy weight and overweight and obesity prevention be diverse and include health professionals, eating disorder specialists, teachers, health at any size advocates, and the general public. These individuals need to be committed to improving school and community environments so that efforts evolve into sustainable programming. As with any planning group, membership disclosure policies are advisable, especially addressing members

4/03 AZ1317

THE UNIVERSITY OF ARIZONA
COLLEGE OF AGRICULTURE AND LIFE SCIENCES
TUCSON, ARIZONA 85721

**Scottie Misner**, Ph.D., R.D.
*Associate Nutrition Specialist*
Department of Nutritional Sciences

*This information has been reviewed by university faculty.*

cals.arizona.edu/pubs/health/az1317.pdf

with special interests, such as financial affiliations with the weight loss industry.[3,4] Reading these *Guidelines for Childhood Obesity Prevention Programs* as well as the papers listed below under *Recommended Readings* will help planners resolve various issues, as well as acquire a great deal of practical information on promoting physical activity, healthy eating, and nurturing environments for children.

**B. Healthy lifestyle.** A comprehensive, successful program will focus on promoting and supporting healthy lifestyles for all children at home, in school, and in the community, as integral to the well being of children of all sizes. It will develop and implement activities that (a) create a nurturing environment, (b) provide education on healthful eating, and (c) promote and support opportunities for enjoyable physical activity.

## II. Setting appropriate goals

**A. Set goals for health, not weight, as appropriate for growing children.** Expecting all children to be at an *ideal weight range* is unrealistic and can lead to problems.[5] It is more realistic to expect that children maintain a healthy weight. *Healthy weight* can be defined as *the natural weight the body adopts, given a healthy diet and meaningful level of physical activity*.[6]

**B. Set goals for a nurturing environment.** A nurturing environment promotes all aspects of growth and development for children — physically, mentally, and socially. This environment fosters self-esteem, body satisfaction, and a positive body image, qualities that facilitate health-promoting behaviors. *It's what's inside that counts* is a guide for dealing with children, such that character, aspirations, talents, and gifts of all are recognized and cultivated. Youth today need tools to empower them to combat our culture's current extreme focus on appearance. This can be addressed through media literacy training, including analysis of marketing techniques and how the media and advertising affect culture and body image.

Policies for creating a nurturing environment will also include recognition of weight- and size acceptance. Within each school's policy on acceptance of diversity, weight and size discrimination, name calling, and shaming about weight and size can be addressed. Such a policy promotes self-confidence and respect, as well as safety for schools and communities.

**C. Set goals for healthy eating.** We urge attention to both *what* and *how* children eat. Good nutrition focuses on following the Dietary Guidelines,[7] understanding portion size and energy density, and regularly eating recommended servings from all five groups of the Food Guide Pyramid.[7] Healthy eating patterns include eating a variety of foods, having regular meals and snacks, responding to body signals of hunger and fullness, creating a positive environment for meals, and eating family meals together when possible. Healthy eating also means taking time to relax, enjoy the food, and feel satiety.[8]

**D. Set goals for physical activity.** Aim for all children to achieve the following: be active at least one hour a day[9]; reduce sedentary activities (limiting television to less than 2 hours a day and replacing excessive television and screen time with more involving activities)[9]; increase strength, endurance, and fitness; enjoy movement as natural and pleasurable; and learn skills for sports and activities they will continue and enjoy through life. Children need access to a variety of activities so each can succeed in some activities. These goals are achievable by children of all sizes and weights. Having a large body size need not be a barrier if the activity program is thoughtfully and sensitively planned and executed. Opportunities for physical activity need to be available within the school day, in after-school activities, and at home with family and friends.

Among young children the appropriate focus of physical activity is to provide ample opportunity for active free play and movement. As children mature, they need to master movement skills, so they can participate confidently in many different forms of activity, and come to understand that fitness is intimately related to long-term health and well being.

Communities are encouraged to support fitness and physical activity by providing parks, playgrounds, and other facilities that are safe, convenient, appealing, and affordable places for children and parents to spend time.

## III. Special considerations in avoiding harm

**A. Self-worth.** Teaching children that theirs is a good body will encourage them to keep it healthy. Children and youth deserve safe and respectful treatment of their bodies and themselves by parents, teachers, peers, school staff, and health professionals. Harm can result when they receive

messages that suggest their personal worth and the esteem of others is related to their body size.[10]

**B. Assessment.** Appropriate weighing and measuring of children is conducted under private conditions, recognizes individual differences in growth rates and body size and shape, and avoids using data to label children. Special thought should be given to assessments so stigmatization and humiliation are avoided.

**C. Intervention.** Research suggests that safe and effective childhood obesity treatment and prevention programs focus on positive lifestyle changes for the whole family, creating an environment in which the child can be physically active, eat to satiety, and grow into his or her weight. There is evidence that some interventions, even by health professionals, may harm while attempting to do good.[11] For example, placing children on weight loss diets is seldom safe or effective. Typically this causes weight loss and regain, or weight cycling, which can itself be a health risk.[12] Restricted feeding, even for the preschool-age child, often leads to overeating.[13]

Other documented outcomes of inappropriate interventions include disordered eating (nearly every eating disorder begins with a weight loss diet),[14, 15] depression, malnutrition, injury, and even death.[16] Addressing healthy weight in positive ways is preferable to emphasizing obesity risks, as this can contribute to fear, shame, disturbed eating, social discrimination, and size harassment.

## IV. Setting school policies

**A. Positive eating environments.** To promote positive attitudes toward a variety of foods and the consumption of healthy food choices, school policies will assure every child access to a nutrient-dense lunch (as well as breakfast and snacks in some schools), provide a pleasant, positive eating environment, and allow enough time to eat — at least 15-20 minutes of actual eating time after being served.[17] We recommend limiting competition from sources of less nutritious foods, and avoiding sales of soft drinks and candy during school hours and for at least 30 minutes before and after school.

**B. Physical activity opportunities for all children.** Physical education classes or recess on a daily basis as appropriate can greatly contribute to a child's access to physical activity. These experiences should provide a variety of activities so that every child has the opportunity to discover activities that he or she can succeed in and will enjoy.

**C. Promotion of size and weight acceptance.** Acceptance and respect for oneself and others can be effectively addressed as part of the overall school policy on acceptance of diversity and refusal to tolerate teasing or harassing of students or staff. Obesity prevention programs need to be periodically assessed by appropriate professionals to ensure that they do not create unintentional stigmatization or promote dangerous eating and exercise behaviors.[18]

**D. Sensitive practices related to assessment, referral, and re-entry.** Weighing and measuring students in a school setting can potentially have lasting stigmatizing effects (especially for larger students, shorter boys, and taller girls). Safeguards include continuous attention to issues of privacy, respect, social environment, education on growth patterns and realistic body image, follow-up with parents, and referral for diagnosis (see *Guidelines for Collecting Heights and Weights*, below). Our recommendation is that screening for weight, height, and body fat in schools be limited to situations of identified need and purpose, such as initial assessment and program outcome evaluations.

Height / weight measurements and BMIs need to be considered as part of an overall assessment and not as the single measurement for determining health status. Use of BMIs alone has resulted in inaccurately labeling of children.[19] Tables for interpreting weight for height or BMI are based on assumptions that higher weight means higher body fat. However, some children with higher body weights will not be over fat, depending on physical activity, age, stage of puberty, gender, and ethnicity. For example, a recent US Department of Agriculture study shows that one in four children categorized as "at risk" (BMI of 85th to 95th percentile) have normal body fat, and one in six in the normal weight range have high body fat.[19] Children grow and mature in different ways, and a child's weight for height or BMI can best be evaluated in relation to his or her own growth history.[19, 20] Also, growth spurts may be preceded by an increase in body fat. [21] When weights are measured in schools, we recommend measuring and tracking related factors as well, including fitness levels, eating and activity behaviors, weight loss practices, and body image attitudes.

Interpretation of data may be completed by qualified school personnel or consultants as needed.

It is also desirable for schools to develop a process for dealing with eating problems. This process starts with early detection of eating disorder warning signs, and includes parental involvement and appropriate referrals. When a problem is diagnosed, the school can be helpful in supporting treatment plans. This is especially critical in the case of students re-entering school after inpatient treatment. Providing training and consultation for school personnel is helpful in dealing with these situations.

## Recommended Readings

- *Prevention of Child and Adolescent Obesity in Iowa*: Iowa position paper. Provides detailed nutrition, physical activity, and child nurturing guidelines for preventing obesity in home, child care, school, community, and health care settings (48-pages). Nov 2000. Iowa Dept of Public Health, Lucas State Office Bldg, Des Moines, IA 50319. May be downloaded from website www.idph.state.ia.us (click on Resources).
- *The Role of Michigan Schools in Promoting Healthy Weight: A Consensus Paper*. Guidelines addressing obesity prevention in schools set the goal of healthy students of all shapes and sizes, and give specific recommendations for nutrition concerns, physical activity, and safe and supportive learning environment. September 2001. Michigan Dept of Education, Michigan Dept of Community Health, Governors Council on Physical Fitness, Health & Sports, Michigan Fitness Foundation. May be downloaded at www.michiganfitness.org; www.mde.state.mi.us; and www.emc.cmich.edu.
- *Guidelines for Collecting Heights and Weights on Children and Adolescents in School Settings. How to Measure in a Private, Respectful Way*. Discusses weighing and measuring problems and how to avoid them. Sept 2000. Center for Weight and Health, College of Natural Resources, University of Calif. May be downloaded from center website: www.CNR.Berkeley.EDU / cwh / resources / childrenandweight.shtml

## References


1. World Health Organization. *Basic documents.* 39th ed. Geneva: WHO, 1992.

2. Piran N. The Last Word: Prevention of eating disorders. *Eating Dis* 1998;6:365-371.

3. Fraser L. *Losing it: America's obsession with weight and the industry that feeds on it*, 1994. New York: Penguin / Dutton.

4. Berg F. How the diet industry exerts control. In: *Women Afraid to Eat*, 2000, 193-211. Hettinger, ND: Healthy Weight Network.

5. Stice E, Agras WS, Hammer LD. Risk factors for emergence of childhood eating disturbances. *Int J Eat Disorder* 1999;25:375-387.

6. Hawks SR, Gast JA. The ethics of promoting weight loss. *Healthy Weight J* 2000;14:25-26.

7. Dietary Guidelines for Americans. 5th edition, 2000. *H&G Bulletin 232.* US Dept. Agric / US Dept Health and Human Services. Also, Using the Dietary Guidelines for Americans, 2000. *Program Aid 1676.* USDA.

8. Satter E. *How to get your kid to eat but not too much*, 1987. Palo Alto, CA: Bull Publ.

9. Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity. Press conference Dec 13, 2001.

10. National Education Association. *Report on size discrimination*, Oct 7, 1994. NEA, Washington, DC.

11. Kassirer JP, Angell M. Losing weight — an ill-fated New Year's resolution. *N Engl J Med* 1998;338:52-54.

12. Lissner L, Odell P, D-Agostino D, et al. Variability of body weight and health outcomes in the Framingham population. *New Engl J Med* 1991;324:1839-44.

13. Fisher JO, Birch LL. Parents' restrictive feeding practices are associated with young girls' negative self-evaluation of eating. *J Am Diet Assoc* 2000;100:1341-1346.

14. Wilson GT. *The controversy over dieting*, 1995:87-92. New York: Guilford Press.

15. Position of American Dietetic Association: *Nutrition* intervention in treatment of anorexia nervosa, bulimia, *binge eating. J Am Diet Assoc* 2001;101: 810-819.

16.Berg FM. Hazardous weight loss. In: *Children and Teens Afraid to Eat*, 2001, 92-116. Hettinger, ND: Healthy Weight Network.

17.What time is lunch? *J Am Diet Assoc* 1996:96.

18.Levine MP. Prevention of eating disorders, eating problems and negative body image. In*: Controlling eating disorders with facts, advice and resources, 2nd ed*. 1999, p64-72. R Lemberg. Phoenix: Oryx Press.

19.Federal update: BMI poor indicator of body fat in individual kids. *J Am Diet Assoc* 2000;100:628.

20.Malina RM, Katzmarzk P. Validity of the body mass index as an indicator of the risk and presence of overweight in adolescent. *Am J Clin Nutr* 1999; 70(suppl):131S-136S.

21.Tanner JM. Physical growth and development. In: *Textbook of Pediatrics*. JO Forfar & GC Arneil (eds), Edinburgh, Scotland: Churchill Livingstone; 1984.

*Guidelines for Childhood Obesity Prevention Programs: Promoting Healthy Weight in Children* was developed by the Weight Realities Division of the Society for Nutrition Education (SNE) to assist planning groups concerned with obesity prevention. Available in English and Spanish. This paper does not necessarily reflect the viewpoint of all SNE members. Questions or comments should be directed to the Society for Nutrition Education, 9202 N. Meridian Street, Suite 200, Indianapolis, IN 46260 (800-235-6690).



These Guidelines were developed by a committee of nutrition experts in the Weight Realties Division of the Society for Nutrition Education, including the Writing Team: Francie Berg, MS, LN (chair); Jennifer Buechner, RD, CSP; and Ellen Parham, PhD, RD; and the Review Team: Laurie Aomari, RD, LD; Bev Benda-Moe, LRD; Linda Bobroff, PhD, RD, LD / N; Cindy Byfield, PhD, RD; Fern Gale Estrow, MS, RD, CDN; Ann Hertzler, PhD, RD, LDN; Sharon Hoerr, PhD, RD; Joanne Ikeda, MA, RD; Ann Macpherson, EdD, MNS, RD; Frances Montalvo, MHSN, LND; Suzanne Pelican, MS, RD; and Adrienne White. PhD, RD.

*Developed by the Weight Realities Division of the Society for Nutrition Education*