Adolescent nutritional problems are common in the U.S.A. (1,2) and throughout the world (3,4). Some young people lack adequate food (3,4) and others make poor food choices (5,6). Conflicting media messages confuse and overwhelm modern adolescents, while rapidly changing lifestyles interfere with family centered eating patterns (6). Growth and development (7) as well as life long health (8–10) may be permanently impaired when food is not available, not eaten even though available, eaten in excess or out of balance with the normally accelerated, and sometimes modified needs of adolescents (11–13).

Adolescents need sufficient energy and specific nutrients in the categories of carbohydrates, protein, fat, vitamins, minerals and water, to fuel growth and supply basic daily needs. Demands are great since the rate of growth at this stage of life is second only to the rate in infancy; mature body tissues and organ systems are developing (7). Too little food and/or deficits of specific nutrients lead to depletion of energy stores, muscle wastage, and cardiac dysfunction, as well as interruptions in growth, sexual maturation and function (3). All body tissues are susceptible to inadequate nourishment. For example, normal bone strength may never be attained if adolescents are malnourished (8). Brain structure may be altered, and unless the situation is rapidly reversed, short term damage may extend to severely undermine adult health (10).

Adolescent athletes, and those with eating disorders, who restrict food or fluid intake or who exercise beyond the limits of their physical development risk serious short and long-term consequences (10,12). At the other extreme, eating more food than needed during adolescence can cause excess fat to be stored throughout the rest of life. Being overweight or obese increases the risk that youth will develop conditions such as diabetes, heart, lung and blood vessel disease that lead to early death (2). The reproductive system, general physical abilities, self-esteem and social life are often adversely affected by long term over-fat conditions (14). For other adolescents, including those who have a disease or genetic disorder interfering with metabolic function, obtaining a specific balance of nutrients is particularly important in order to avoid exacerbating the disorder or the early debilitating effects of the disease (13). Childbearing adolescents need to adequately nourish themselves and their developing offspring without overeating foods rich in sugar and fat (11,15). The recommendation that dietary folic acid be available during pregnancy to prevent neural tube defects in infants highlights the need for improved nutrient intake by reproductive-age adolescents as less than one-third routinely choose foods containing sufficient folic acid (16).

Developmentally appropriate assistance to adolescents, particularly high risk youth, including the homeless and incarcerated, helps them improve their nutritional habits and prepares them to live as productive adults who avoid many risks to health (1,2,9,14,15,17–19). Thus, understanding and promoting nutritional health during adolescence warrants renewed attention, followed by the allocation of resources for nutritional advocacy, training, research, and care (1,6,20,21). As an organization devoted to improving the total health of adolescents, the Society for Adolescent Medicine supports the following goals:

- Insure access to adequately nourishing food for all adolescents.
- Develop and maintain health services to assist adolescents to eat adequately, but not excessively, and to meet their nutritional needs, whether normal or modified by chronic disease, metabolic disorders, competitive athletics, pregnancy or other life events.
- Implement nutritional education, health promo-
tion and disease prevention programs for all adolescents, especially those at increased risk for inadequate or excessive nutritional intake.

- Dedicate resources for research to determine the long and short-term consequences of nutritional intake during adolescence, as well as the potential to improve biological conditions by altering the intake of nutrients and to positively influence food choices at this stage of life.
- Strengthen basic and advanced training opportunities in adolescent nutrition for nutritionists and adolescent health professionals, and for students preparing for these professions.

References


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