
SCHOOL FOODSERVICE & NUTRITION

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Nutrition for Tweens

Children's bodies in a teen world.

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When it comes to food intake, nutrition status and health concerns, it's a bit difficult to separate out the tweens. The concept of a distinct tween group comes more from marketing demographics than it does from health and nutrition.

If you search food industry or marketing Web sites with the term "tween," you are guaranteed to come up with a long list of articles. However, if you search the U.S. Department of Agriculture (USDA) or Centers for Disease Control and Prevention (CDC) Web sites, you'll come up empty-handed.

Another problem is that surveys and guidelines from various government agencies do not use standard age groupings. For example, the National Center for Health Statistics reports heights and weights for children ages 6 to 11 years and adolescents from 12 to 18 years. The Recommended Dietary Allowances (RDAs) and Dietary Reference Intakes (DRIs) from the National Academy of Sciences, Food and Nutrition Board, are in a state of flux. The older RDAs divided into children 7 to 10 years – and then into male and female categories for 11 to 14 years. The newer DRIs (currently available for only a few nutrients) use children 4 to 8 years – and males and females 9 to 13 years.

Despite the difficulties with data and comparisons, the needs and trends in "tween nutrition" unfortunately are quite clear. When it comes to the eating habits and nutritional health of 8- to 12-year-old Americans, there is almost no good news to report. With too little calcium, too much sugar, too few veggies, too much fat, overweight, diabetes, dieting and disordered eating – tweens need all the nutrition help they can get!

A Time of Transition

From a nutrition standpoint, the tween years are a time of change. During these years, children are making the transition to teenagers. The nutrient recommendations for tweens are largely based on the developmental changes and growth demands of puberty.

Since children go through puberty at different ages and varying rates, one tween may have significantly different nutritional needs than another. Anyone familiar with this age group knows about the wide variability in growth and development.

Girls tend to go through puberty and reach their adult heights earlier than boys. (During the awkward middle school years, it often seems that the girls are a foot taller than the boys.) Pediatric experts have recently noted a disturbing trend toward precocious (very early) female puberty – with sexual development occurring in the early elementary grades. Early puberty and menstruation increases female nutrient needs; for example, onset of menstruation prompts a greater need for iron.

Tweens need more nutrients than younger children – in particular, more calories (to support growth), more protein (for muscle development) and more calcium (for increases in bone length and bone mass). Unfortunately, the intake of typical tweens rarely matches these nutritional needs.

Take the growing calcium gap as an example. For tweens 9 through 13 years, and teens 14 through 18 years, the recommended Adequate Intake (AI) is 1,300 milligrams of calcium per day. Getting enough calcium during this time is critical – since half of adult bone mass is laid down in the tween-to-teen years. The USDA Continuing Survey of Food Intakes by Individuals (1994-96) revealed that, in the case of children 6 to 11 years, 71 percent of girls and 62 percent of boys did not meet the AI for calcium.

Among the tween-teen group, an even larger gap exists between calcium intake and recommendations. In youth 12- to 19-years-old, 88 percent of females and 68 percent of males do not consume adequate calcium. This means that nearly nine out of 10 adolescent girls and seven out of 10 adolescent boys fail to get the calcium they need for strong bones and teeth. Many nutrition experts agree with the National Institute of Child Health and Human Development that low calcium intake is "a growing problem and a serious threat to [children's] later healthy growth and development."

Nutrition Concerns

Some call it a crisis. Some call it an epidemic. Whatever you choose to call it, America's young people are facing some serious weight problems.

The childhood weight issue is complex – with several interrelated issues affecting millions of today's children, tweens and teens. The issues include well-documented increases in overweight and obesity, intense social pressure for excessive thinness, unsafe weight-loss practices and disordered eating patterns.

Health experts around the globe worry about increases in the number of young people who are obese, overweight or at risk of becoming overweight. For example, the prevalence of overweight teens in the United States has nearly tripled in the past two decades. Public health officials from China to Scandinavia report similar increases.

In 1980, the rate of overweight in American children (6 to 11 years) was 7 percent, while the rate for teens (12 to 19 years) was 5 percent. By 1999, these rates had jumped to 13 percent for children and 14 percent for adolescents. Current estimates suggest that as many as one in five children (around 20 percent) are obese, overweight or at risk for becoming overweight.

Experts worry that being overweight sets young people up for a lifelong battle of the bulge, as well as increasing their risk for some chronic diseases. The one currently receiving the most attention is diabetes. A recent study in *The New England Journal of Medicine* (March 14, 2002) reported that 25 percent of obese children and 21 percent of obese teens had impaired glucose tolerance, a condition that often leads to diabetes. Type 2 diabetes, once called adult-onset diabetes, was thought to be an adult disease of sedentary, middle-aged people. Previously rare in childhood, Type 2 diabetes is now being diagnosed in kids as young as 8 and 10. Medical centers across the country are reporting a threefold to tenfold increase in teens with diabetes. Dramatic increases in the incidence of diabetes are also being reported in Native American, Mexican American and African American children.

Risk factors for heart disease also are more common among overweight children. A 1999 report indicated that about 27 percent of children 2- to 10-years old had one or more cardiovascular risk factors (such as high blood pressure or elevated cholesterol levels). In overweight children, the percentage with adverse risk factors rose to 60 percent.

The weight gain of "Generation XXL" is caused by many factors. One is portion distortion in the typical serving size of food. Super-sized portions in fastfood combo meals can triple the number of calories – to as much as 1,800 calories for saying "yes" to a double bacon cheeseburger, biggie-size fries and a 44-oz. soft drink.

Many nutritionists think that beverages are a big part of the problem as well. Per capita soft-drink consumption in the United States has increased almost 500 percent over the past 50 years. On average, adolescents (12 to 19 years) now get 11 percent of their daily calories (equivalent to more than 15 teaspoons of sugar) from soft drinks.

Of course, it is not only what kids are eating; it's also what they are not eating. For example, most young Americans eat less than half of the recommended servings of fruits and vegetables. Experts estimate that only one in five children actually eats "5 A Day." Few kids' snacks include fruits and veggies. Cookies, desserts, potato chips, other salty snacks, candy and gum account for more than half of kids' snacks. Only 16 percent of snacks are fruits – and a paltry 1 percent are vegetables.

The most common veggies eaten by kids are in the form of French fries, ketchup and pizza sauce. Of the vegetables eaten by 6- to 11-year-olds in the United States, approximately 55 to 60 percent come from either potatoes or tomatoes. Children have especially low intakes of nutrient-rich, dark-green leafy and deep-yellow produce items.

Kids are not only eating more empty-calorie foods, they are also moving less. The over-scheduled Millennial Generation spends more time indoors than outside – thanks to heavy homework loads, multiple extracurricular lessons (from music lessons to SAT prep) and electronic entertainment like the three N's: Nintendo, Nickelodeon and Netscape. There is little doubt that America's couch potatoes are raising a generation of tater tots!

According to a 1999 study by the Kaiser Foundation, the major culprit is still television, not the computer. In its study, kids aged 2 to 18 spent an average of two hours, 46 minutes per day watching TV, eight minutes on the Internet, 20 minutes playing computer games and 21 minutes on the computer for "fun." Nevertheless, most recent studies show that online time has more than doubled – without any decrease in television watching or the playing of electronic games. Play has clearly become a sedentary activity.

Overall, there has been a tremendous decrease in youth physical activity. Nearly half of adolescents aged 12 to 21 years are not active on a regular basis, while an amazing 14 percent of young people report no recent physical activity. Despite the popularity of "extreme" sports and the growth of family memberships at health clubs, many experts believe that low levels of physical activity are a chilling omen for the future health of Americans.

The Other Side of the Coin: Drive for Thinness

While there is no doubt that excessive weight and weight gain are a major health concern for America's youth, it is important to look at the whole spectrum of weight-related issues.

We live in a society obsessed with thinness – where dieting is the norm and a hugely successful weight loss industry promotes potentially dangerous supplements. Today's tweens have absorbed these pressures since the cradle – and many are suffering the consequences.

An estimated 5 to 10 million adolescent girls and women, and one million boys and men struggle with eating disorders and related psychiatric conditions. No one knows exactly how many of these are in their tweens, but counselors and therapists report younger and younger children with disordered eating patterns and diagnosable eating disorders.

Many studies have indicated the possible extent of the problem of eating disorders in the tween age range. Here are just a few of the findings:

- Girls are disproportionately affected by eating disorders and cultural demands for thinness.
- Fifteen percent of young girls have substantially disordered eating attitudes.
- Between elementary and high school, the percentage of girls who are “happy with the way I am” drops from 60 percent to 29 percent.
- The number one magic wish for young girls age 11 to 17 is to be thinner.
- Almost half of elementary school students between the first and third grades want to be thinner, while only 20 percent are actually overweight or at risk.
- Four out of five 10-year-old children are afraid of being fat.
- Fifty percent of 9- and 10-year-old girls feel better about themselves if they are on a diet.
- Forty-six percent of 9- to 11-year-olds are “sometimes” or “very often” on diets, and 82 percent of their families are “sometimes” or “very often” on diets.
- Parental attempts to restrict an overweight child’s intake can backfire – leading to increased caloric intake, decreased activity and weight gain.
- An estimated 35 percent of “normal dieters” progress to pathological dieting. Of those, one in four will progress to partial or full syndrome eating disorders.

For more information about eating problems in young people, visit the sources of these statistics: www.edap.org, www.justthink.org and www.newmoon.org.

Helping Tweens Move Toward Better Health

There are no easy answers or quick fixes when it comes to improving tween nutrition. Any solution must be multi-faceted and involve families, schools, communities and government programs.

The good news is that society at large is beginning to focus on the problems and to search for solutions. There are plenty of creative resources for you to use as you look for ways to help tweens – in your home, your school, your church or your community.

Creativity is a key concept if you want to reach the sophisticated, brand-conscious, techno-savvy tween audience. Marketers view tweens as the “powerhouses” of the kid’s market – and they have spent billions of advertising dollars aimed at creating “customers for life.” The \$141 million that Coke spent for its marketing rights to Harry Potter is just one example.

With competition like Harry Potter and the “Do the Dew” boys, you may wonder if it is possible to reach tweens with health and nutrition messages. The answer is a resounding yes – if you pay attention to the first commandment of marketing: Know your customer. Following are some things you need to know about tweens and food. Note how some major food marketers are reaching out to this age group.

- Tweens look for food with a ‘tude (attitude in name or ads) – like Heinz’s “Ketchup with an Attitude” (“Are your fries lonely?” – for some purple ketchup tonight!).
- Tweens want “Eater-Tainment” with their fries – such as the theme menus they see at the Rainforest and Hard Rock Cafes.
- Tweens love “extreme” things – including snowboarding, skateboarding and Tang’s “Get a Kick in a Glass” extreme flavors: Fruit Frenzy, Orange Uproar and Berry Panic.
- Tweens go for instant gratification – witness the peel-off prize stickers and interactive sweepstakes linking Nabisco Kool Stuf with Nicktoons from Nickelodeon.
- Tweens expect variety – like every toaster breakfast, lunch package, pizza box, cereal, chip, candy, yogurt and beverage line in today’s grocery store!

With a little effort, and help from your vendors, you can apply all this marketing savvy to reach the tweens in your program. Take a lesson from the wildly successful “Got Milk?” campaign to sell your product and deliver important nutrition messages at the same time. Remember, tweens need all the help they can get on the road to a healthy future.

Moving Tweens Toward Healthy Weights: What Schools Can Do to Help

Expand access to power foods. Innovative school lunch and breakfast programs in many districts have demonstrated that tweens will make positive choices – when healthful options are tasty, convenient, competitively priced and “cool.” The key is to expand healthy choices in cafeterias, beverage machines and other food sales.

Expand opportunities for physical activity. Studies show that physical activity declines dramatically as children get older. The availability of traditional phys-ed classes is also on the decline. Since regular, moderate physical activity is essential to maintain a healthy weight, tweens need fun activities for all sizes, shapes and abilities.

Expand effective, real-life nutrition education. Tweens need nutrition advice that works for their 24-7, fast-lane lifestyles. Positive, practical, simple and consistent nutrition messages can be integrated into all areas of middle and high schools, including athletic coaching, classroom teaching and foodservice offerings.

Moving Tweens Toward Healthy Weights: What Parents Can Do to Help

Share this information with parents of students enrolled in your middle schools. You can do this on your Web site, through your lunch/breakfast menu, a newsletter or even a letter that is sent directly to parents.

Resist your parental desire to nag. All children need to feel unconditional love and acceptance. Overweight kids need to know that your love is not conditional on their weight loss. Nagging about weight usually has the opposite desired effect. Respect your child's desire to be healthy—and help find the resources they want.

Be the role model that your tweens need. Nutrition research shows that kids really do as they see, not as they hear. To help your child move toward a healthy weight, avoid fad diets and silly supplements yourself. Enjoy balanced choices from MyPyramid and make regular physical activity a priority for the whole family.

Offer regular family meals and make nutrition-to-go available. Tweens lead busy lives and may not always be around at mealtime. Stock up on grab-and-go options, like string cheese, lowfat yogurt, bananas and bagels. Make family meals as convenient, tasty and stress-free as possible – so that tweens will want to be there eating with you.

For more help: Check out child nutrition books by Ellyn Satter, M.S., R.D., CICSW, *Secrets of Feeding a Healthy Family and How to Get Your Kid to Eat...But Not Too Much*. You'll find ordering information at www.ellynsatter.com.

Weight and Youth: Resources, Programs and Initiatives

American Dietetic Association Foundation

The American Dietetic Association Foundation has made childhood obesity a primary focus with a Healthy Weight for Healthy Kids campaign, co-sponsored by the Peanut Institute. Check the Web site for materials as they are developed.

Centers for Disease Control and Prevention (CDC)

The CDC site is an essential resource for nutrition and physical activity issues. Search for: surveillance data (including maps of obesity prevalence); pediatric growth charts and several national campaigns, including Kids Walk-to-School and Turn Off the TV.

U.S. Department of Agriculture – Team Nutrition

Team Nutrition is a gold mine of materials, kits and local efforts to enhance school nutrition environments. You can download free material, read about Team Nutrition success stories, and find out what is going on in your state.

Michigan Fitness Foundation

The Role of Michigan Schools in Promoting Healthy Weight, a consensus paper released by the Michigan Department of Education in Fall 2001 provides a review of the issues, makes recommendations for schools and provides an excellent list of resources.

Center for Weight and Health (UC – Berkeley)

This university-based center (established by Dr. Joanne Ikeda) sponsors conferences, seminars, coalitions and other activities in northern California. The site features links to literature, research, surveys, funding opportunities and much more.

Healthy Weight Network

Sponsored by Francie Berg, M.S. (author of *Children and Teens Afraid to Eat*), this site offers handouts, resources and extensive links to other organizations, along with information about Healthy Weight Week and Slim Chance Awards.

HUGS International

For non-dieting resources and information, Canadian dietitian, author and speaker Linda Omichinski, R.D., is a non-diet pioneer. Her Web site features programs and resources for all ages, including a teen program (eight stages to building a healthy, diet-free lifestyle).

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