

Healthy Eating for Teens

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Nutrition is an important factor during adolescence. Teens and their parents often are thinking about what to eat, and for good reason. During adolescence, teens go through periods of rapid growth. Teens also are learning to be more and more independent. The physical and mental growth of the teen years requires a good foundation of nutrition knowledge and habits.



Nutrition Requirements

The second-biggest growth spurt happens during the teen years. Most girls will complete their growth between ages 16-18. Most boys finish growing between 18-20 years old. The average girl grows 3.3-3.5 inches and gains 21 pounds; the average boy grows 3.7-4.2 inches and gains 34 pounds. Males and females will develop more lean body mass. Lean body mass includes muscle, bones, and organs.

A teenager's appetite increases when they are growing. Physical activity increases a teen's caloric needs. This *estimated calorie intake table* can give you an idea of how many calories teens need to grow properly based on age and activity level.

Teens also require healthy sources of carbohydrates, fat, and protein. Focusing on unprocessed or minimally processed foods give teens the nutrients they need for growth.

It is important to choose high fiber carbohydrate options like whole grains, starchy and non-starchy vegetables, and fruit. Teens should get at 1.5 to 2 servings of fruit per day and 2-3 servings of vegetables per day. If a teen puts a fruit and vegetable on their plate at every lunch and dinner, they will get the necessary amount of fruits and vegetables.



Fat is an important nutrient for brain health and hormone balance. Plant-based fats should make up most of a teen's fat intake. Plant-based fats include foods like extra virgin olive oil, grapeseed oil, avocado, olives, nuts, nut butters, and seeds. Plant-based fats are high in unsaturated fats that protect the heart from heart disease. Not all plant-based fats are healthy. Some oils like soybean, corn and cottonseed oils are very high in omega-6 fatty acids and increase inflammation in the body.

Animal fat from high fat red meat, bacon, sausage, and conventional whole milk products should be minimized. These foods are associated with an increased risk for heart disease and inflammation. Animal fats from organic eggs, organic butter, and cold-water fish (ideally wild-caught) have more omega-3 fatty acids. They protect against heart disease and reduce inflammation.

Protein is important for growing lean mass, especially muscle. There is a lot of protein in animal and plant sources like chicken/turkey, eggs, lean meats, fish, dairy, nuts/seeds, and legumes/beans. Teens usually get enough protein through their diets, and do not need protein supplements for proper growth.

Calcium, vitamin D, iron, and magnesium are four micronutrients that are very important to adolescent growth and long-term health. During adolescence, the body experiences bone growth. The Recommended Dietary Allowance (RDA) for calcium is 1,300 mg per day for teens.

Good Sources of Calcium are:

- Dairy products
- Calcium-fortified nut and seed milks (almond milk, coconut milk, etc.)
- Low sugar breakfast cereals fortified with calcium
- Canned salmon and canned sardines
- Steamed greens like collard greens, kale and bok choy

It is possible to *get enough calcium without consuming dairy*. Getting the recommended amount of calcium during the teen years protects against diseases later in life. Vitamin D also is important for proper bone growth. It allows calcium to enter the bones. Vitamin D regulates over 200 genes. It plays a part in the prevention of cancer, autoimmune disease, and heart disease. The RDA for vitamin D is 600 IU per day for teens. The best source of vitamin D is sunlight, though many teens do not get enough sun exposure to get adequate vitamin D. Talk with your doctor about testing to see if you are deficient in vitamin D.



Magnesium also plays a role in bone, muscle, and nerve function. The RDA for magnesium is 360 mg per day for females ages 14-18. For males ages 14-18 it is 410 mg per day. Studies show that 89% of females in this age group and 69% of males in this age group do not get enough magnesium.

Teen girls are at a higher risk of iron deficiency due to the start of menses. Iron's job is to carry and store oxygen. Iron-deficiency anemia can cause fatigue, weakness, impair immune function, and affect academic and sport performance. The best sources of iron are called *heme* sources. They are animal products like beef, dark meat turkey, and canned light tuna. *Nonheme* sources of iron like fortified cereals, white beans, and spinach are not as easily absorbed by the body. Pairing iron-rich foods with foods rich in vitamin C (citrus fruits, peppers, kiwi) will increase iron absorption.

Developing Healthy Eating Habits

Often, busy schedules and more time away from home result in more "fast" foods like shelf-stable snacks and restaurant food. These foods typically are high in sugar, sodium, and

saturated fat. They are low in fiber, omega-3 fatty acids, and vitamins and minerals that support proper growth. How can teens and their families balance nutrition with other priorities?

Have a General Meal Schedule. Skipping meals is a major cause of not getting the right amount of nutrients. Skipping meals also can result in eating or drinking too much



low-nutrient, high sugar snack foods later in the day out of hunger. Having food available for breakfast, lunch, dinner, and healthy snacks will give teens the security they need to eat appropriately timed meals throughout the day.

Follow the MyPlate Model.

The MyPlate model gives a good foundation for choosing nutritional foods during mealtimes. The MyPlate model shows half the plate filled with fruits and vegetables, a quarter of the plate filled with a protein-rich food, and a quarter of the plate filled with a high fiber carbohydrate.



Have a Plan to Eat Dinner Together.

Family dinners promote security and reinforce healthful habits. They also provide a sense of belonging to teens. It may not be realistic for a teen to join the family for dinner every night of the week. In this case, the teen can have food from dinner available when they return. Teens who eat at least five meals a week with their family are 35% less likely to develop disordered eating. Teens who eat three family meals per week are 12% less likely to be overweight.

Understand the Feeding Roles and Responsibilities of Parents and Teens.
The chart below can help eliminate frustration and conflict surrounding mealtimes.

Ellyn Satter's Division of Responsibility in Feeding (adapted for teens)	
The parents' job with feeding is to:	The teenager is trusted to:
 Choose and prepare the food Provide regular meals and snacks Make eating times a pleasant experience Be an example of how to behave at mealtimes Be considerate of likes and dislikes without catering to every food desire Do not provide food and beverages (except water) between meal and snack times Let your child grow into the body that is right for him or her. 	 Eat the amount of food they need Eat the same food as the rest of the family Grow in the way that is right for him or her Learn to behave at mealtimes

Involve Teens in Grocery Shopping, Meal Prep, and Mealtime.

Giving teens responsibility in choosing and making meals allows them to practice eating well with foods they enjoy. Talking with teens about food preferences and mealtime expectations gets everyone talking about food in a non-threatening manner. This also prevents a discussion about healthy food from turning into a lecture. Maryann Jacobsen, MS, RD has a wonderful *handout on family rules* that helps guide expectations and communication around mealtimes.



Drink Water as the Main Beverage.

Teens are surrounded by sugary drinks like soda, sports drinks, and beverages from coffee shops, gas stations, and fast food restaurants. Sugar-sweetened beverages make up 47% of added sugars in the typical American diet. A good guideline is to limit sugary drinks to a maximum of three, 12 fl oz servings per week. Milk and 100% juice contain natural sugar, and should be limited to 12 fl oz per day. The main beverage should be water. Teens can flavor water by putting a slice of cucumber or citrus fruit in the glass and choosing sparkling waters with no added sugar or artificial sweeteners.

Special Considerations

Eating Disorders

Restrictive dieting, especially among females, often begins during the teenage years. Restrictive dieting takes the form of calorie reduction, elimination of foods, skipping meals, cleansing, etc. Anorexia nervosa affects about 1 in 300 teens (0.3%) from 13 to 18 years old. Bulimia affects

0.9% of teens. Binge eating syndrome affects 1.6% of teens. The best way parents can prevent eating disorders in teens is to promote a positive self-image. Talking about dieting or not liking your body can set the stage for negative self-esteem in teens. It is essential to talk to your teens about unrealistic images that are portrayed in the media. Teens often do not know that photos and videos have been edited. Another way to prevent eating disorders is to not categorize food as "good" or "bad." Including indulgent foods on the family menu

can help teens learn how to eat a mix of healthy and indulgent foods in a responsible manner.

Eating for Athletic Performance

Teen athletes often have higher calorie and nutrient demands because of their physical activity. All teen athletes should make a point to eat a balanced and nutrient-rich breakfast, lunch, and dinner. Athletes practicing or competing for over one hour should add a snack or fourth meal to support nutrition needs. Good snacks for teen athletes include a mix of fiber, healthy fat, protein, and carbohydrates. Jill Castle, MS, RD has compiled an excellent *healthy snack list*.



Take Home Points:

Developing healthy eating habits is important to support growth during the teen years. It promotes health through adulthood.

Healthful eating habits for teens should focus on:

- Eating three balanced meals and nutritious snacks as appropriate
- Including fruit and/or vegetables, complex carbohydrate, protein, and healthy fat at each meal
- Eating meals with family
- Collaborating with parents or other family members on mealtime choices and chores
- Drinking water as the main beverage

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