

## Adolescent Nutrition

The teen years are a time of rapid growth and development. Nutritional guidelines and practices stay the same as that of young school age children, although there is a need for a greater amount of calories and nutrients. Usually an adolescent's appetite matches their needs, but some may be attracted to trying fad diets. You might find that teens are developing their own food style, so education and information about the best choices of snacks and healthy substitutions are important at this time. Remember it's the total diet that counts!

Teenagers can express their newly found independence by giving up some of the family food habits and developing their own style. Talk to your children about nutrition and health. Below are some good topics to incorporate in your discussions:

- BREAKFAST IS STILL IMPORTANT!!!!
- Healthy snacks in between meals are still important!
- Do not skip meals, because it can lead to higher calorie consumption when they eventually eat.
- Education and information about the best choices of snacks and healthy substitutions are important at this time
- Remember it is the total diet that counts. Teenagers will eat some of the high-fat snacks, but encourage them to balance these with foods from the Healthy Diet Pyramid
- Emphasize good food as part of a healthy lifestyle, which includes regular exercise and avoiding cigarettes and the abuse of other drugs
- Discuss alcohol. The most common cause of accidents and death in this age group is the abuse of alcohol
- Discuss drugs and the harm that they can do to their bodies.
- Discuss smoking and the harm that it can do to their bodies.

Teenagers and young adults, also, start to eat out a lot more with their friends or due to their increased extracurricular activities.

Eating out is enjoyable and relaxing and can fit into a healthy eating regime. Most restaurants and cafes now serve low fat, nutritious foods. When selecting your foods, choose foods that follow the Healthy Eating Pyramid. Fast foods often contain hidden fats. Although we need to eat some fat, many Americans consume foods that contain too much fat, which can lead to a number of heart related health problems in later life. By reducing the total fat in your food, the risk of developing diseases such as coronary heart disease, high blood pressure and diabetes is less. Fatty foods can be replaced by fruits, vegetables, breads, grains and cereals. The following tips give you advice on making nutritionally sound take-away choices:

- Choose salad, fruit or vegetables as sides rather than French fries or onion rings
- Ask for no mayonnaise or margarine on your sandwiches, try mustard
- Opt for a baked potato with a little cheese and low-fat filling. Ask for no butter or sour cream
- Choose grilled chicken instead of hamburger or other red meat when available.
- Thick crust pizza with lean meat, chicken or vegetarian toppings and a light sprinkling of cheese
- Pasta with tomato-based sauces
- Stir-fry with steamed rice
- Low-fat smoothies and milkshakes
- Low-fat frozen yogurt, sorbets, or ice creams for dessert
- Ask for salad dressing on the side. Dip your bites instead of pouring the dressing over the salad
- Drink water or milk instead of soda

High fat choices to avoid include anything fried or in batter, foods with creamy or cheesy sauces, foods in butter sauces, garlic and herb bread, and high fat meats such as processed meats and sausages. Cheese, oil or sour cream added to a dish will push up the fat content.

Behavior patterns such as vegetarianism, fad diets, and frequently changing dietary habits can be the cause of poor nutrition in adolescents. Be aware of the following possibilities:

- The low energy intake by many adolescents creates difficulties in planning diets that contain adequate levels of nutrients, especially iron. Nutrition needs for adolescents vary with physical activity levels and the stage of maturation.
- During adolescence, protein needs, like those for energy, correlate more closely with the growth pattern than with chronological age.
- Because of accelerated muscular and skeletal growth, calcium needs are greater during puberty and adolescence than in childhood.
- The need for iron for boys and girls increases during adolescence to sustain the rapidly enlarging LBM and hemoglobin mass; in girls, it is needed to offset menstrual losses as well.
- Zinc is essential for growth and sexual maturation. Growth retardation and hypogonadism have been reported in adolescent boys with zinc deficiency.
- Vegetarian adolescents who don't consume any animal products are vulnerable to deficiencies of several nutrients, particularly vitamins D and B12, riboflavin, protein, calcium, iron and zinc.
- Although dental caries begin in early childhood, they are a highly prevalent nutrition-related problem of adolescence. Caries are associated with low fluoride intake in childhood and frequent consumption of foods containing carbohydrates.

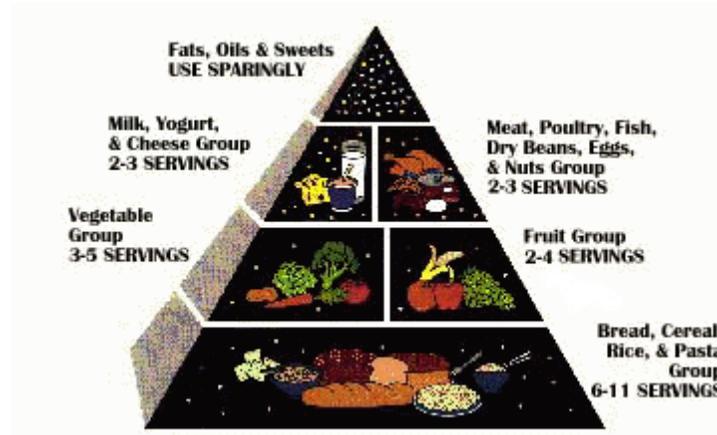
You can also help promote good nutrition by setting a good example. Healthy eating habits and regular exercise should be a regular part of your family's life. It is much easier if everyone in the house follows these guidelines, than if your child has to do it alone. You should also buy low-calorie and low fat meals, snacks and desserts, low fat or skim milk and diet drinks. Avoid buying high calorie desserts or snacks, such as snack chips, regular soft drinks or regular ice cream.

The Food Pyramid was designed by the US Dept. of Agriculture to promote healthy nutrition in children over two years of age. It is meant to be a general guide to daily food choices. The main emphasis of the Food Guide Pyramid is on the five major food groups, all of which are required for good health. It also emphasizes that foods that include a lot of fats, oils and sweets should be used very sparingly.

The Food Guide Pyramid shows a range of servings for each food group. How much you actually eat depends on your age and activity level. School-age boys and girls require about 1600 to 2400 calories each day, depending on their age and activity level. Once they hit their growth spurt, girls require an additional 200 calories and boys 500 calories. **School age children will therefore require between the low and middle range of servings.** Children who are overweight and dieting should at least eat the lowest range of servings.

When determining how many servings to eat, it is important to look at the serving size. Larger portions should count as more than one serving, and smaller portions will count as only a part of a serving.

## Food Guide Pyramid



### Fats, Oils and Sweets

No more than 30% of your diet should come from fats. For a 1600 calorie diet, that would equal 53g of fat each day and for a 2200 calorie diet, 73g of fat each day. The type of fat that you eat is also important.

**Saturated fats** in foods such as meats, dairy products, coconut, palm and palm kernel oil, raise cholesterol more than **unsaturated fats**, which are found in olive, peanut, and canola oils, or **polyunsaturated fats** in safflower, sunflower, corn, soybean and cottonseed oils. Limit saturated fats to no more than 10% of daily calories.

Sugars supply a large amount of calories, with little nutritional value. They include white sugar, brown sugar, corn syrup, honey and molasses and foods like candy, soft drinks, jams, and jellies.

Selection tips:

- use lean meats and skim or lowfat dairy products
- use unsaturated vegetable oils and margarines that list a liquid vegetable oil as the first ingredient on the label
- read the nutrition label on foods to check for the amount and type of fat it includes
- limit foods that contain a large amount of saturated fats
- limit foods high in sugar and avoid adding extra sugar to your foods

examples:		
Food	Servings	Grams of Fat
Butter, margarine, 1 tsp.		4
Mayonnaise, 1 tbs.		11
Salad dressing, 1 tbs.		7
Sour cream, 2 tbs.		6
Cream cheese, 1 oz.		10
Chocolate bar, 1 oz.		9

## Milk, Yogurt and Cheese

Dairy products provide protein, vitamins and minerals and are an excellent source of calcium. Your school-age child should have 2 to 3 servings of milk, yogurt and cheese each day.

Selection tips:

- Choose skim milk and nonfat yogurt
- Avoid high fat cheese and ice cream

examples:		
Food	Servings	Grams of Fat
Skim milk, 1 cup	1	Trace
Nonfat yogurt, 8 oz.	1	Trace
Low fat milk, 1 cup	1	5
Whole milk, 1 cup	1	8
Chocolate milk, 2%, 1 cup	1	5
Low fat yogurt, 1 cup	1	4
Process cheese, 2 oz.	1	18
Mozzarella, part skin 1 - 1/2 oz	1	7
Cottage cheese, 1/2 cup	1/4	5
Ice cream, 1/2 cup	1/3	7
Ice milk, 1/2 cup	1/3	3
Frozen yogurt, 1/2 cup	1/2	2

## Meat, Poultry, Fish, Dry Beans, Eggs and Nuts

Foods in this group provide protein, and vitamins and minerals, including B vitamins, iron and zinc. You should have 2 to 3 servings of foods from this group each day, including the equivalent of 5 to 7 ounces of lean meat.

Selection tips:

- A serving from this food group can include 2-3 ounces of lean meat, poultry or fish, which may be an average hamburger or medium chicken breast half.
- Choices with the least fat include lean meat, poultry without skin, fish, and dry beans and peas.
- Prepare meats in low fat ways, by trimming away fat, and broiling, roasting, or boiling rather than frying.
- Remember that nuts and seed are high in fat, and egg yolks are high in cholesterol, so you should eat them in moderation.

examples:		
Food	Servings	Grams of Fat
Lean meat, poultry, fish	3 oz	6
Ground beef, lean	3 oz	16
Chicken, with skin, fried	3 oz	13
Bologna, 2 slices	1 oz	16
Egg, 1	1 oz	5
Dry beans and peas, 1/2 cup	1 oz	Trace
Peanut butter, 2 tbs.	1 oz	16
Nuts, 1/3 cup	1 oz	22
<b>Servings</b> = ounces of meat these items count as.		

## Vegetables

Vegetables supply you with vitamins, including vitamin A and C, and folate, minerals, such as iron and magnesium, and fiber. Plus they are low in fat. You should have 2 to 4 servings of vegetables each day.

Selection tips:

- You should eat a variety of vegetables to provide you with all of the different nutrients that they supply, including dark green leafy vegetables, deep yellow vegetables, starchy vegetables (potatoes, corn peas), legumes (navy, pinto and kidney beans), and other vegetables (lettuce, tomatoes, onions, green beans).
- Do not add a lot of fat to the vegetables you eat, by avoiding added toppings, such as butter, mayonnaise, and salad dressings.

examples:		
Food	Servings	Grams of Fat
Vegs, cooked, 1/2 cup	1	Trace
Vegs, leafy, raw 1 cup	1	Trace
Vegs, non-leafy, raw, 1/2 cup	1	Trace
Potatoes, scalloped, 1/2 cup	1	4
Potato salad, 1/2 cup	1	8
French fries, 10	1	8

## Fruits

Fruits and 100% fruit juices provide Vitamin A and C and potassium. They are also low in fat and sodium. You should have 2-4 servings of fruit each day.

Selection tips:

- Eat fresh fruits and 100 % fruit juices and avoid canned fruit in heavy syrups and sweetened fruit juices. According to the American Academy of Pediatrics, 100% fruit juice may substitute for half of your child's recommended servings of fruit each day.
- Eat whole fruits.
- Eat citrus fruits, melons, and berries, which are high in Vitamin C.

examples:		
Food	Servings	Grams of Fat
Whole fruit	1	Trace
Fruit, raw or canned, 1/2 cup	1	Trace
Fruit juice, unsweetened, 3/4 cup	1	Trace
Avocado, 1/4 whole	1	9

## Bread, Cereal, Rice and Pasta

Foods from this group provide complex carbohydrates (starches) and provide vitamins, minerals, and fiber. You need at least 6 to 11 servings of foods from this food group each day.

Selection tips:

- Choose whole grain breads and cereals for added fiber.
- Choose foods that are low in fat and sugars.
- Avoid adding calories and fat to foods in this group by not adding spreads or toppings high in fat.

examples:		
Food	Servings	Grams of Fat
Bread, 1 slice	1	1
Hamburger roll	2	2
Tortilla	1	3
Rice, pasta, 1/2 cup	1	Trace
Breakfast cereals, 1 oz	1	?
Pancakes, 2	2	3
Croissant, 1 large	2	12
Doughnut, 1 medium	2	11
Danish, 1 medium	2	13
Cake, frosted, 1 slice	1	13
Cookies, 2 medium	1	4

## Calcium Requirements

Calcium is a mineral that is mostly present in your child's bones. Having a diet with foods that are high in calcium to meet daily requirements is necessary for the development of strong bones. It is also an important way to prevent the development of osteoporosis in adults.

**School age children require about 800 mg of calcium each day.** Once they begin puberty, their calcium requirements will increase to about 1200 mg each day. See the table below for the calcium content of common foods and check the nutrition label to choose foods high in calcium when you prepare your families diet. Also choose foods that are fortified with calcium.

examples:		
Food	Servings	Calcium Content
Milk, whole or low fat	1 cup	300 mg
White beans	1/2 cup	113 mg
Broccoli, cooked	1/2 cup	35 mg
Broccoli, raw	1 cup	35 mg
Cheddar cheese	1.5 oz	300 mg
Yogurt, low fat	8 oz	300 mg
Orange juice, calcium fortified	1 cup	300 mg
Orange, medium	1	40-50 mg
Sweet potatoes, mashed	1/2 cup	44 mg

## Iron Requirements

Iron is another mineral that is important for your child's growth. Having a diet with foods that are high in iron to meet daily requirements is necessary for the development of strong muscles and production of blood.

**Adolescents require about 10 to 12 mg of iron each day.** See the table below for the iron content of common foods and check the nutrition label to choose foods high in iron when you prepare your families diet. Also choose foods that are fortified with iron (cereals, bread, rice, and pasta).

Meat	Serving size	Iron (mg)
Chicken liver, cooked	3½ ounces	12.8
Oysters, breaded and fried	6 pieces	4.5
Beef, chuck, lean only, braised	3 ounces	3.2
Clams, breaded, fried	¾ cup	3.0
Beef, tenderloin, roasted	3 ounces	3.0
Turkey, dark meat, roasted	3½ ounces	2.3
Beef, eye of round, roasted	3 ounces	2.2

Turkey, light meat, roasted	3½ ounces	1.6
Chicken, leg, meat only, roasted	3½ ounces	1.3
Tuna, fresh blue fin, cooked, dry heat	3 ounces	1.1
Chicken, breast, roasted	3 ounces	1.1
Halibut, cooked, dry heat	3 ounces	0.9
Crab, blue crab, cooked, moist heat	3 ounces	0.8
Pork, loin, broiled	3 ounces	0.8
Tuna, white, canned in water	3 ounces	0.8
Shrimp, mixed species, cooked, moist heat	4 large	0.7
<b>Veggies and fruits</b>	<b>Serving Size</b>	<b>Iron (mg)</b>
Sea Vegetables	½ cup	18-42
Swiss chard	½ cup	2
Turnip greens	½ cup	1.6
Spinach, cooked	½ cup	1.5
Beet greens, cooked	½ cup	1.4
Potato	½ cup	1.4
Bok Choy	½ cup	.7
Peas	½ cup	.65
Green Beans	½ cup	.6
Tomato Juice	½ cup	.6
Dried Figs	5	2.0
Dried Apricots	5	1.6
Broccoli	½ cup	.55
Prune Juice	4 oz	1.5
Water Melon	1/8 of melon	.5
<b>Soy Products</b>	<b>Serving Size</b>	<b>Iron (mg)</b>
Tofu	½ cup	6.6
Soy Beans	½ cup	4.4
Tempeh	½ cup	1.8

Soy Milk	½ cup	.9
<b>Nuts, Seeds and Legumes</b>	<b>Serving Size</b>	<b>Iron (mg)</b>
Sun Flower Seeds	2 TBLS	1.2
Lentils	½ cup	3.2
Pinto Beans	½ sup	2.2
Black eyed beans	½ sup	2.6
Navy Beans	½ sup	2.5
Chick Peas	200 g	6.2
Pumpkin Seeds	2 TBLS	2.5
Almonds	¼ cup	1.3