

Tips on healthy eating for teens

Nutrient needs

The adolescent years are a time of rapid growth. Teens need extra nutrients to support bone growth, hormonal changes and, organ and tissue development, including the brain. Unfortunately, research shows that many teens do not eat a well balanced diet that provides their bodies with the appropriate vitamins and minerals. The two main nutrients of concern for teens are calcium and iron.



Importance of calcium

Calcium is important for bone growth. If teens optimize their bone health they have a decreased risk of teen fractures and of developing osteoporosis during adulthood. Females are particularly at risk if they do not meet their calcium requirements. It has been found that females aged 13-17 have an intake of approx. 1000 mg/day while the daily recommended intake (DRI) for this age group is 1300 mg/day. Males of the same age were found to meet their requirements at approximately 1400 mg/day. The low calcium intake in females is due to the low intake of milk and other dairy products. To meet the DRI for calcium teens should follow Canada's Food Guide for Healthy Eating's recommendation of 3 to 4 servings of milk products per day. Keep in mind though that calcium is not just found in dairy products.

The following chart lists various dairy and non-dairy sources of calcium:

Food Item	Serving Size	Amount of Calcium (mg)
Almonds	¼ cup (50 ml)	75
Bok Choy, cooked	½ cup (125 ml)	85
Broccoli, cooked	½ cup (125 ml)	50
Figs	6 dried	150
Yogurt, fruit bottom	¾ cup (175 g)	215-280
Yogurt, plain	¾ cup (175 g)	265-320
Cheese	50g	355-435
Milk	1 cup (250 ml)	300-320
Orange juice fortified with calcium	½ cup (125 ml)	150
Rice or Soy beverage, fortified	1 cup (250 ml)	300
Soybeans, cooked	½ cup (125 ml)	90
White beans	½ cup (125 ml)	100
Salmon, canned with bones	3oz	180
Sardines, canned with bones	4	180

Importance of iron

Iron is another important nutrient for teenagers. Iron is needed during the onset of menstruation for females and during lean body mass development for males. On average, male teens meet their iron requirements with little difficulty. However, females aged 13-17 barely meet their requirements of 15 mg per day.

Females should try to increase their iron intake with some of the following suggestions:

Food Item	Serving Size	Amount of Iron (mg)
Soybeans, cooked	½ cup (125 ml)	4.4
Tofu, firm	½ cup (125 g)	6.6
Baked beans, cooked	½ cup (125 ml)	1.7
Chickpeas or Kidney beans	½ cup (125 ml)	2.4-2.6
Lentils	½ cup (125 ml)	3.3
Lima/Navy/Pinto beans	½ cup (125 ml)	2.2
Almonds	¼ cup (60 ml)	1.5
Cashews	¼ cup (60 ml)	2.1
Cereal, fortified	28 g	2.1-18
Egg, hard-boiled	1 large (50 g)	0.59
Chicken breast, broiled	100 g	1.07
Beef, top sirloin, broiled	100 g	1.73
Apricots, dried	¼ cup (60 ml)	1.5
Dried Figs or Raisins	¼ cup (60 ml)	1.1
Bok choy	½ cup (125 ml)	0.9
Broccoli or Kale	½ cup (125 ml)	0.6-0.7
Potato, baked with skin	1 medium (173 g)	2.3

Body changes

During adolescence the body increases in weight and height and changes in shape. This change is of concern for teenagers as they begin to develop a sense of their own body image. Many female teens think they should be thinner while male teens think they should be muscular. These negative body images may be a result of media influenced images, which can lead to teasing and bullying. Male teens are twice as likely to be satisfied with their bodies as female teens are. Fifty percent of females aged 14-19 felt they were 'too fat' while most of them were within the 'healthy weight' range. Of young women aged 15-19, 44% have tried dieting and 20% of those aged 14-24 have serious eating problems.

Anorexia nervosa and bulimia nervosa are the two main eating disorders some teenagers experience. Anorexia nervosa is when a person starves them self to a point where they become unhealthy and lose weight. Bulimia nervosa is when a person tries to avoid gaining weight by vomiting the food they eat, or they fast, or over-exercise. These are unhealthy ways of losing weight and may lead to weight gain overtime and other problems, some very serious. Dieting can make one feel:

- hungry and worried about food
- unfocused and tired
- upset and uninterested
- cold and dizzy
- sad that you can not enjoy the foods that you like to eat

Food habits

Along with physical changes, teens become more independent as they grow. Dietary options are one of the first decisions teens start making on their own. However, some teens tend to make poor food choices. Overall teens fail to meet their daily recommended food servings from the four food groups in Canada's Food Guide. In addition, teens often increase their intake of foods from the 'other' food group.

There are four major food habits of concern:

Skipping breakfast: Breakfast is an important meal of the day as it helps to ensure daily nutrient needs are being met. It also improves school performance and helps maintain a healthy weight. More than half of male teens and more than two-thirds of female teens do not eat breakfast on a regular basis.

Increased foods from 'other' food group: This food group is the smallest section of the food guide. Therefore people should eat the least amount of servings from this group. This category includes foods such as fats and oils, soft drinks, snack foods and desserts. Approximately 27-33% of energy intake for teens is from the 'other' food group. This is of concern as these foods are often high in fat and calories and low in vitamins and minerals.

Increased eating outside the home: Eating outside the home has increased, however the concern is the majority of foods consumed in restaurants are considered to be 'fast food'. Fast foods are generally high in fat and calories. There has been an increased consumption of pizza, cheese burgers and salty snacks with teens, mostly due to eating out.

Increased soft drink consumption: A study looking at American youths aged 6-17 found an increase in the prevalence of soft drink consumption from 37% in 1978 to 56% in 1998. Mean soft drink intake has also increased from 5 fl. oz to 12 fl. oz over the same time period. The increase in soft drink consumption could be attributed to the increase in restaurant eating.

Vegetarianism

Some teens may decide to become vegetarians, which can be a healthy option. Vegetarians must ensure they are meeting all their nutrient requirements, therefore the diet needs careful planning. Teens must take responsibility over their vegetarian diet.

Nutrients of concern for vegetarians are:

Iron: As mentioned above, iron is important for lean muscle mass and blood formation. Vegetarians can lack iron if they have eliminated meat from their diet. To increase iron stores try including some of the following foods in your diet: iron-fortified breakfast cereals, legumes (lentils, kidney beans, chickpeas and baked beans), soybeans and tofu, dried fruit (apricots, raisins and figs), broccoli and bok choy. When eating plant sources of iron, include vitamin C-rich foods at the same time. This increases the absorption of iron from these foods.

Vitamin C aids in the absorption of iron so try to incorporate foods high in Vitamin C to help you absorb the iron that you eat, such as: citrus fruits (oranges, grapefruit, etc.), kiwi fruit, strawberries, sweet peppers, broccoli, brussel sprouts, and tomatoes.

Protein: Protein's main function is ensuring muscle strength. It is found in meat products but can also be found in other food sources such as, dairy products, soy milk, eggs, nuts and peanuts, tofu, beans, seeds, grains and cereals.

Vitamin B₁₂: Vitamin B₁₂ is needed for blood formation. It is found in animal products, including eggs and dairy. Aside from animal products, vitamin B₁₂ can also be found in fortified soy milk and breakfast cereals. It is difficult to meet one's requirements with these fortified products alone, therefore a supplement might be needed.

Calcium: Calcium is important for bone health. If one is not eating dairy products, then non-dairy calcium containing foods should be consumed such as tofu, fortified soy or rice beverage, calcium-fortified orange juice, beans, dried figs, broccoli and bok choy.

Vitamin D: Vitamin D is needed for calcium to be absorbed by your bones. Vitamin D is added to cow's milk; however, exposure to the sun is another way to get Vitamin D. If one is not consuming milk products, try foods such as fortified soy milk and fortified breakfast cereals. Consuming these fortified products might not offer one enough vitamin D, therefore a supplement might be needed.

Active teens

There is a common myth that active teens are in need of supplementation to offer them superior performance, however this is not true. Following Canada's Food Guide to Healthy Eating will ensure that one will get all the nutrients needed to play sports. An athletic teen should consume carbohydrates, some protein and a little fat. Carbohydrates are used as fuel, however, it is not the only nutrient needed for performance. Once carbohydrates run out, fat is needed for long-lasting energy. Active teens may need a little more protein than inactive teens; however, this can be accomplished through diet alone. In fact some protein supplements offer the same amount of protein found in a cup of milk or a serving of meat.

Water is also important for active teens. Physical activity can make one dehydrated due to increased perspiration. It is important not to become overheated for it may interfere with performance. Therefore, drink water before, during and after physical activity. Here are some tips on staying hydrated:

- Drink 2-4 cups of water 1 to 2 hours before physical activity
- Drink another 2-4 cups of water 10 to 15 minutes before physical activity
- Drink about ½ cup of water every 15 minutes during physical activity
- Drink 1-2 cups of water after physical activity
- Remember to keep drinking water even if you don't feel thirsty

Obesity

Recent studies have shown an increase in the number of overweight and obese youth. Prevalence of obesity has increased by 16.6% for boys and 14.6% for girls from 1981 to 1996. In 2000/1 boys were found to be twice as likely to be obese as girls. Aside from poor food habits, inactivity is a contributing factor. Of those aged 6-17, over half are not active enough to maintain proper growth and development. Healthy weights, healthy eating and physical activity can decrease your risk of developing diabetes, high blood pressure, heart disease, osteoporosis, stroke and some cancers when older.

Healthy eating tips for normal and overweight teens

- Start by following Canada's Food Guide for Healthy Eating, which can be downloaded at:

http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/food_guide_rainbow_e.html

- Enjoy a variety of foods from each of the 4 food groups
- Increase intake of whole grains, vegetables and fruits
- Choose lower-fat milk products, leaner meats and other low fat foods
- Enjoy regular physical activity
- Eat 3 meals every day and enjoy low fat snacks between meals
- Choose healthy snacks such as vegetables and fruits, or baked instead of fried snacks
- Drink low fat milk or water instead of soft drinks, sugary juices or sports drinks
- Eat fast food and processed foods less often
- Eat when you're hungry, stop when you're full
- Don't overeat, pay attention to portion sizes

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Published

Last Reviewed

July 15, 2005

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Sources