

If all Americans maintained a healthy weight, ate a balanced diet that emphasized plant foods, limited alcohol consumption, and engaged in regular physical activity, nearly 20% of all cancer diagnoses in the United States could be prevented. Nutrition factors that affect cancer risk may include types of foods, how food is prepared, portion size, food variety, and overall balance of the diet. For the majority of Americans who don't use tobacco, body weight, dietary choices, and physical activity are the most important modifiable determinants of cancer risk.

Cancers affected

Many scientific studies have demonstrated that dietary habits and physical activity can affect cancer risk. Healthy eating habits and regular physical activity can help maintain a healthy body weight and reduce cancer risk. Studies have shown that individuals who eat more processed and red meat, starchy foods, refined carbohydrates, and sugar-sweetened beverages and foods are at a higher risk of developing or dying from a variety of cancers. Alternatively, adhering to a diet that contains a variety of fruits and vegetables, whole grains, and fish or poultry and fewer red and processed meats is associated with lower risk.

Overweight and obesity are clearly associated with increased risk for adenocarcinoma of the esophagus; female breast, colon and rectum, endometrium, kidney, liver, pancreas, stomach, brain, gallbladder, ovary, and thyroid cancer; and multiple myeloma.

More limited evidence suggests that it may also increase the risk of non-Hodgkin lymphoma, male breast cancer, and fatal prostate cancer, and negatively impact survival for breast cancer. Abdominal fatness in particular is convincingly associated with colorectal cancer, and probably related to higher risk of pancreatic and endometrial cancers. In addition, accumulating evidence suggests that obesity increases the risk for cancer recurrence and decreases survival rates for several cancers.

Alcohol consumption is a risk factor for cancers of the mouth, pharynx, larynx, esophagus, liver, colon and rectum, and female breast. There is also evidence linking alcohol use to stomach and pancreatic cancer. Alcohol consumption combined with tobacco use increases the risk of cancers of the mouth, pharynx, larynx, and esophagus far more than either drinking or smoking alone.

Opportunities for risk reduction

Although no diet can guarantee full protection against any disease, the best opportunity for Americans to reduce their risk of cancer is by following these important guidelines:

Achieve and maintain a healthy weight throughout life.

- Be as lean as possible throughout life without being underweight.
- Avoid excess weight gain at all ages. For those who
 are currently overweight or obese, losing even a small
 amount of weight has health benefits and is a good
 place to start.
- Engage in regular physical activity and limit consumption of high-calorie foods and beverages as key strategies for maintaining a healthy weight.

Adopt a physically active lifestyle.

- Adults: Engage in at least 150 minutes of moderateintensity or 75 minutes of vigorous-intensity activity each week, or an equivalent combination, preferably spread throughout the week.
- Children and adolescents: Engage in at least 1 hour of moderate- or vigorous-intensity activity each day, with vigorous-intensity activity occurring at least 3 days each week.
- Limit sedentary behavior such as sitting, lying down, and watching television or other forms of screenbased entertainment.
- Doing any intentional physical activity above usual activities, can have many health benefits.
- Men ages 40 and older, women ages 50 and older, and adults with chronic diseases or risk factors for cardiovascular disease should consult a health care provider before starting a vigorous physical activity program.
- People with cancer should talk to their providers about an activity program that's best for them and their situation.



Consume a healthy diet, with an emphasis on plant foods.

- Choose foods and beverages in amounts that help achieve and maintain a healthy weight.
- Limit consumption of processed meats and red meats.
- Eat at least 2½ cups of vegetables and fruits each day.
- Choose whole grains instead of refined-grain products.

If you drink alcoholic beverages, limit consumption.

• Limit intake to no more than 1 drink per day for women and 2 per day for men.

Bottom line

Cancer risk can be reduced by getting to and staying at a healthy weight; adopting an overall dietary pattern that emphasizes plant foods (vegetables, fruits, whole grains, beans); being physically active on a regular basis; and limiting alcohol consumption.

The ability to make healthy choices is often affected by factors within the environments in which people live, work, learn, and play. Public, private, and community organizations should work to create social and physical environments that support the adoption and maintenance of healthy eating and physical activity behaviors to help people stay well.



