Diet and Physical Activity Cancer Fact Sheet

Aside from avoiding tobacco use, the most important modifiable determinants of cancer risk are maintaining a healthy weight, following a healthy eating pattern, avoiding alcohol, and engaging in regular physical activity.

Cancers affected
According to American Cancer Society researchers, at least 42% of newly diagnosed cancers in the US are potentially avoidable. An estimated 18% of cancer cases are attributable to the combined effects of excess body weight, alcohol consumption, physical inactivity, and an unhealthy diet.

Excess body weight
An estimated 5% of cancers in men and 11% in women can be attributed to excess body weight. Excess body weight (i.e., being overweight or obese) is associated with an increased risk of developing several types of cancer: adenocarcinoma of the esophagus, female breast (postmenopausal), colon and rectum, uterine corpus (endometrium), kidney (renal cell), liver, pancreas, stomach, brain (meningioma), gallbladder, ovary, thyroid cancer, and multiple myeloma. Excess body weight may also increase the risk of non-Hodgkin lymphoma (diffuse large B-cell lymphoma), male breast cancer, and fatal prostate cancer. Limited evidence suggests that excess body weight negatively impacts breast cancer survival.

Alcohol consumption
An estimated 6% of cancer cases can be attributed to alcohol consumption. Alcohol consumption increases risk for cancers of the mouth, pharynx, larynx, esophagus, liver, colon and rectum, female breast, and stomach. Cancer risk increases with alcohol volume, and even a few drinks per week may increase risk of some cancers. Alcohol consumption combined with tobacco use synergistically increases the risk of cancers of the mouth, pharynx, larynx, and esophagus far more than the independent effect of either drinking or smoking alone.

Physical inactivity
An estimated 3% of cancer cases can be attributed to physical inactivity. Regular physical activity decreases the risk of colon (but not rectal), female breast, and endometrial cancers, as well as kidney, bladder, esophageal (adenocarcinoma), and stomach (cardia). Greater time spent in sedentary behavior may increase risk of other cancer types.

Dietary factors
Approximately 4% to 5% of all cancer cases and deaths can be attributed to dietary factors. Diet patterns high in red and processed meat, starchy
foods, refined carbohydrates, and sugary drinks are associated with a higher risk of developing cancer (predominantly colon). Alternatively, diets with an emphasis on a variety of fruits and vegetables, whole grains, legumes, and fish or poultry and fewer red and processed meats are associated with lower risk.

ACS Guidelines on Diet and Physical Activity for Cancer Prevention$^{1,2}$

Achieve and maintain a healthy weight throughout life.

- Keep body weight within the healthy range and avoid weight gain in adult life.

Adopt a physically active lifestyle.

- Adults should engage in 150-300 minutes of moderate-intensity physical activity per week, or 75-150 minutes of vigorous-intensity physical activity, or an equivalent combination; achieving or exceeding the upper limit of 300 minutes is optimal.
- Children and adolescents should engage in at least 1 hour of moderate- or vigorous-intensity activity each day.
- Limit sedentary behavior such as sitting, lying down, and watching television and other forms of screen-based entertainment.

Follow a healthy eating pattern at all ages.

A healthy eating pattern includes:

- Foods that are high in nutrients in amounts that help achieve and maintain a healthy body weight
- A variety of vegetables – dark green, red, and orange, fiber-rich legumes (beans and peas), and others
- Fruits, especially whole fruits in a variety of colors
- Whole grains

A healthy eating pattern limits or does not include:

- Red and processed meats
- Sugar-sweetened beverages
- Highly processed foods and refined grain products

It’s best not to drink alcohol.

People who do choose to drink alcohol should limit their consumption to no more than 1 drink per day for women and 2 drinks per day for men.

References:
