Simple Ways to Reduce Your Cancer Risk

While environment, family history and genetics influence the risk of developing cancer, our everyday habits in terms of what we eat, how we live, and the choices we make play a significant role.

Do not smoke
Lung and bronchus cancers are the most common and deadliest cancer in Pennsylvania. Smoking is the most important risk factor for lung cancer and is linked to 80 to 90% of lung cancer deaths. Cigarettes, cigars, pipes, and all vaping devices increase the risk of lung cancer. Tobacco consumption also increases your risk of other cancers, such as mouth, throat, esophagus, stomach, colon, rectum, liver, pancreas, trachea, kidney, bladder, and cervical cancer. As little as one cigarette a day increases your risk, and the more you smoke, the higher your risk. Secondhand smoke refers to the smoke non-smokers, children, and infants inhale when they are in the presence of an active smoker. This type of exposure also increases the risk of developing lung cancer later in life. Never start smoking, reduce your tobacco consumption, and quit smoking now. Learn more at CDC’s Quit Smoking page, or call 1-800-QUIT-NOW (1-800-784-8669) to get help.

Get moving
By helping you maintain a healthy weight, physical activity reduces your cancer risk. In contrast, lack of physical activity and sedentary activities such as sitting in front of the TV or your computer for hours contributes to weight gain and increases your cancer risk. According to the Centers for Disease Control, getting enough physical activity has the potential to prevent 1 in 8 cases of breast cancer and colorectal cancer. There are many options to choose from to be physically active: walking, dancing, yoga, and swimming, to name just a few. Adults should aim for at least 150 minutes of moderate-intensity activity each week. However, any amount of physical activity can improve your health. Begin by taking regular breaks to stand up and walk. Gradually build physical activity into your daily routine to improve your health and reduce your cancer risk.

Find out how you and your family can reduce your cancer risk
Cancer is often thought to be inevitable and carries an image of doom and gloom. Indeed, cancer is the second leading cause of death in the U.S. and in Pennsylvania. Each year, over 80,000 Pennsylvanians will get diagnosed with cancer and 28,000 will die from it. The good news is that as many as 30% of new cases of cancer are linked to modifiable lifestyle choices. This means that we have many opportunities to reduce our individual cancer risk. By making healthier choices every day, we can reduce our cancer risk.
Make healthier choices:
Foods to increase and limit

Foods to increase
A healthy diet should include vegetables, fruits, whole grains, and legumes (beans, peas, and lentils). These foods are lower in calories and high in fiber, helping us maintain a healthy weight. They are also packed with vitamins, minerals, and phytochemicals, naturally occurring plant chemicals, that are known to protect cells in our body against cancer damage. Fill at least three-quarters of your plate with these foods.

Foods to limit
Fast foods and processed foods contain high levels of saturated fat, sugar, and excessive calories, and are thus associated with weight gain and cancer. According to the American Institute for Cancer Research (AICR), eating more than 18 ounces of red meat (beef, lamb, and pork) per week increases the risk of colorectal cancer. Similarly, any amount of processed meat eaten regularly increases the risk of colorectal cancer. Processed meat refers to any meat that has been through some transformation process such as smoked, salted, cured meats, and any meat treated with preservative. Examples are sliced poultry, ham, bacon, salami, deli meats, beef jerky, sausages, and hot dogs. You can reduce your red meat consumption by having meat-free days. Avoid processed meats and foods and try saving them for special occasions. Sugar sweetened beverages (SBBs) are any liquids that are sweetened with any form of added sugar. It includes soda, fruit juices, sports and energy drinks, sweetened waters, coffee, and tea sweetened with added sugar. SBBs are associated with weight gain, liver disease, and cancer.

All alcoholic drinks are associated with cancer. Alcohol is converted to acetaldehyde by the body, which causes damage to cells' DNA and prevents the cells from repairing the DNA. This causes cells to grow out of control and leads to cancer. Whether it is red or white wine, beer, cocktails, or liquor, every drink raises your risk of cancer, in particular oropharyngeal (throat), larynx, esophagus, colorectal, liver, and breast cancers. There is no safe alcohol consumption level for cancer prevention. If you drink alcohol, do it in moderation: no more than one drink a day for women, and no more than two drinks a day for men. Examples of one alcoholic drink-equivalent are 12 fluid ounces of regular beer (5% alcohol), 5 fluid ounces of wine (12% alcohol), or 1.5 fluid ounces of 80 proof distilled spirits (40% alcohol). Visit the CDC’s Dietary Guidelines for Alcohol page for more information on drink equivalencies.

There is no evidence supporting dietary supplements or multivitamins for cancer prevention. In fact, taking additional vitamins and supplements can be harmful. For example, high-dose beta-carotene has been linked to an increased risk for lung cancer in current and former smokers. Always refer to your doctor before taking dietary supplements.

Beware of the sun
Spending time outdoors is a great way to increase your physical activity and improve your health. Sun exposure is necessary to stimulate vitamin D production and too little sun can lead to several illnesses. However, overexposure to ultraviolet (UV) light is the principal risk factor for skin cancer. UV light is produced by the sun, tanning beds, and sun lamps. UV penetrates and badly damages our skin by causing sunburns and damaging our skin cells’ DNA, which leads to skin cancer. While some people are at higher risk (if you have fair skin, prone to freckles and sunburns, blue or green eyes, blond or red hair), anyone and everyone can get skin cancer. Every time you tan, either outdoors or indoors, you increase your cancer risk. When outdoors, always wear hats, sunglasses, and cover arms and legs with appropriate clothing. Apply sunscreen in thick layers and reapply every 2 hours and after swimming or sweating. Try staying in the shade, especially during midday hours. Avoid indoor tanning.

Try breastfeeding
Breastfeeding has been shown to lower the risk of breast and ovarian cancer for mothers by reducing lifetime exposure to oestrogens, hormones linked to breast and ovarian cancer. In addition, breastfed babies are at lower risk of obesity in later life, which indirectly reduces their risk of developing cancer as adults.

Consider vaccination
Some types of cancer are initially triggered by preventable infections. This is the case for cervical cancer and liver cancer (hepatocarcinoma).

The Human Papilloma Virus (HPV) is the most common sexually transmitted infection, affecting as many as 79 million Americans. There are several types of HPV viruses. The high-risk types of HPV turn normal cells into abnormal cells, which over time will lead to cancer. These HPV types are responsible for over 90% of cervical and anal cancers. They are also associated with other cancers such as vulva, vagina, oropharynx (mouth and throat), and the penis. Getting teens and young adults vaccinated is safe and effectively reduces their cancer risk.

While liver cancer is often associated with alcohol, it can also be caused by chronic infection by the hepatitis B virus (HBV). This virus specifically targets the liver cells. HBV is transmitted sexually and through blood and other bodily fluids. This can happen at birth from mother to baby, as through open cuts and sores, sharing toothbrushes, razors, syringes, and other personal items. There is currently no treatment available. While most acute infections will resolve, some will progress to chronic (lifetime) hepatitis, which can lead to cirrhosis (chronic liver disease) and cancer. Younger age at infection carries a greater risk of chronic infection. As many as 90% of infected infants will develop chronic infection. The HBV vaccine is safe and can be given from birth on. It effectively reduces your cancer risk. Consider discussing these
options with your healthcare provider.

While there is no one proven way to completely avoid cancer, there are many ways to lower your and your loved ones’ cancer risk. There is also no one size fits all approach to reduce your cancer risk. For example, if you cannot breastfeed or if you prefer to use formula, there are many other ways to reduce your cancer risk and your children’s. Start by choosing a recommendation that seems feasible for your family and make small gradual changes. Even small changes do lower your cancer risk. Preventing cancer starts early. Involve the whole family in the process when choosing healthier options.

References


Authors

Maria Luisa Tejada de Rivero, MD MPH
Extension Educator, Food Families and Health
mzt398@psu.edu
814-355-4897

extension.psu.edu

Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Extension is implied.

This publication is available in alternative media on request.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status.

© The Pennsylvania State University 2022

Code: ART-5971