

“A CHANGE OF LIFESTYLE: PATH TO CANCER PREVENTION”

Although cancer may seem an inevitability of aging, there are many lifestyle changes that can be embraced to minimize the likelihood of its development. Understanding the risk factors and their influences is an integral part of cancer prevention.

As organic beings, our bodies grow until adulthood. Thereafter, cells continue to repair, restore and replenish. For the most part, this process runs smoothly. However, should cells come into contact with substances that alter their genetic makeup, these cells may continue in uncontrolled behavior and rapid growth. Considered cancerous, these genetically altered cells have succumbed to what researchers call the “multiple hit” theory.

Substances that cause genetic change are called “hits,” and are divided into two categories: 1) Initiators, which start the cancer process; and 2) Promoters, which accelerate the growth of abnormal cells.

Initiators include:

Tobacco and tobacco smoke carcinogen

X-rays (atomic bomb survivors have increased cancer incidences)

Certain hormones and drugs, i.e. estrogens and some immunosuppressive drugs

Excessive exposure to sunlight

Industrial agents or toxic substances, such as asbestos, coal-tar products, benzene, cadmium, uranium, nickel

Excesses or deficiencies in diet

Obesity

Sexually transmitted viruses

Promoters include:

Alcohol (greatly promotes head/neck and liver cancers)

High fat diet

Stress

While exposure to any one of these substances does not automatically guarantee the development of cancer, the number and frequency of hits can increase the odds. Reducing your exposure to known risk factors can go a long way in improving your chances of living cancer-free.

Tobacco is notably the most preventable cause of cancer. Tobacco smoke alone contains at least 43 cancer-causing agents, and is a leading cause of lung cancer. Even second hand smoke is considered a Class A carcinogen, and does not have a safe level of exposure. There is also a strong relationship between tobacco and head/neck, esophagus, pancreas, uterine, kidney and bladder cancers.

Smoking, when combined with alcohol, greatly increases the risk of mouth, throat and esophagus cancers. Alcohol, on its own, has been linked with head/neck, breast, liver and pancreas cancer. The risk may increase with as little as two glasses per day.

Wine has been found to have certain antioxidant properties. However, no more than two glasses per day for men and one for women are recommended, and preferably with dinner.

Maintaining proper diet and nutrition is vital to protecting the body against cancer. Researchers believe the 35% of all cancers are related to nutritional factors. For instance, diets high in both saturated and unsaturated fat plays a key role in colon, rectal, prostate, testes, breast, uterine and gall bladder cancers.

Smoking, when combined with alcohol, greatly increases the risk of mouth, throat and esophagus cancers. Alcohol, on its own, has been linked with head/neck, breast, liver and pancreas cancer. The risk may increase with as little as two glasses per day.

Wine has been found to have certain antioxidant properties. However, no more than two glasses per day for men and one for women are recommended, and preferably with dinner.

Maintaining proper diet and nutrition is vital to protecting the body against cancer. Researchers believe the 35% of all cancers are related to nutritional factors. For instance, diets high in both saturated and unsaturated fat plays a key role in colon, rectal, prostate, testes, breast, uterine and gall bladder cancers.

Ideally, only 15-20% of daily calories should come from fat. However, most Americans average 30-40% calories from fat sources. This is due in part to our love of fast foods, which contain higher amounts of fat to improve taste.

Red meats are high in fat and should be eaten in moderation. Women, in particular, should reduce their red meat intake to no more than 3 ounces per day. Red meat tends to boost estrogen levels, which is a risk factor for breast, ovary and uterine cancer.

Consider other sources for protein, such as omega-3 fatty acid rich salmon, mackerel, halibut and tuna. Soy proteins also may help to kill tumors by preventing the formation of capillaries needed to nourish them.

Fried or charbroiled meats should be eaten in limited quantities to reduce exposure to carcinogens that form on the surface during the heating process. There are some indications that marinating meat before grilling may help to inhibit the production of carcinogenic compounds. Vegetables eaten with grilled meat may also lend some anti-carcinogenic protection.

Be sure to strive for at least five servings of vegetables and fruits per day. Plant nutrients are an excellent source of antioxidants, anticarcinogens and bioflavonoids. Try to get your nutrients from the original source rather than rely on supplements to provide your vitamins and minerals. Synthetic supplements are not absorbed by the body.

Citrus is a good source of Vitamin C, which our bodies do not produce. Low levels of Vitamins C and A can increase the risk of larynx, esophagus, stomach, colon, rectal, prostate, bladder and lung cancer.

The lycopene found in tomatoes, and heightened during cooking, offers protection against cancers, such as breast and prostate. Other highly beneficial vegetables include garlic, onion, leek, broccoli, brussels sprouts, cabbage, kale, and other greens.

Long touted for its colorectal benefits, fiber, in and of itself, may not have anti-carcinogenic properties. However, the effects caused by the presence of fiber in the digestive tract lend support. Fiber stimulates muscle contractions in the intestines, and dilutes carcinogens, thereby reducing the amount of time these substances come into contact with the colon wall.

The recommended amount of fiber is 25-35 grams. However, most Americans eat only about 10 grams. Good sources of fiber are whole grain cereals, breads, pastas, beans, leafy greens, fruits, nuts and seeds.

In addition to proper diet, exercise and maintaining an ideal weight is important to reducing the risk of cancer. According to the American Cancer Society, studies indicate a positive association between obesity and many forms of cancer.

Avoid the sun, especially between 10am and 3pm, and be sure to wear protective clothing and sunscreen (SPF 15+) to reduce the risk of skin cancer. Remember that there is no such thing as a healthy tan. Tans, sunburns and freckles are forms of skin damage. This damage is cumulative and cannot be reversed.

Also be aware of environmental carcinogens. Herbicides and fungicides, such as those found in lawn and garden weed killers, have been linked to non-Hodgkin's lymphomas. Additionally, work-related exposure to coal-tar based products: benzene, cadmium, uranium, asbestos, and nickel have been linked to leukemias and lymphomas.