

Overview

Approximately 106,000 women in the U.S. are diagnosed with a gynecologic cancer every year. Gynecologic cancer refers to any cancer that starts in a woman's reproductive organs. The five main types of gynecologic cancer are cervical, ovarian, uterine, vaginal, and vulvar. Although they are often discussed as a group, each gynecologic cancer has a unique set of signs, symptoms, and risk factors. Although certain contributory causes of cancer, such age, gender, and family history are fixed, a range of modifiable lifestyle and environmental factors can significantly reduce the risk for developing cancers. According to the World Cancer Research Fund, between 30 and 50% of all cancer cases are preventable. Research shows that by achieving and maintaining a healthy weight, eating a balanced diet, avoiding tobacco exposure, and getting regular exercise you can help provide your body with the necessary tools to fight cancer and minimize the side effects from treatment.

Risk Factors

Cervical Cancer

- Almost all cervical cancer is caused by a persistent human papillomavirus (HPV) virus
- Cervical cancer usually affects women between 30 and 50 years of age
- Smoking weakens the immune system, which can lead to persistent HPV virus

Ovarian Cancer

- Risk increases with age, especially around the time of menopause
- Family history of cancer
- Not bearing children (pregnancy and the use of birth control pills decrease risk)

Uterine Cancer

- Taking estrogen (without progesterone)
- Being overweight or obese
- Late menopause or menopause after age 52
- Diabetes or high blood glucose
- Not bearing children
- High blood pressure
- Family history of cancer
- Use of tamoxifen (an estrogen receptor modulator used to treat breast cancer)

Vaginal Cancer

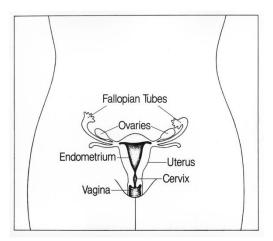
- Persistent HPV virus
- Smoking tobacco
- Risk increases with age, especially 60 years and older

Vulvar Cancer

- Lichen sclerosis (a chronic skin condition)
- Persistent HPV virus
- Smoking tobacco

Symptoms

Signs and symptoms of gynecologic cancer are highly individualized and differ depending on the location of the cancer. Symptoms may be caused by other conditions and therefore may be





difficult to recognize. Consult your healthcare provider if you experience any of the following symptoms for two weeks or longer if they are not normal for you:

- Abnormal vaginal bleeding or discharge
- More frequent or urgent need to urinate
- Constipation
- Changes in vulva color or skin, such as a rash, sores, or warts
- Feeling full to quickly or difficulty eating
- Pelvic pain or pressure
- Abdominal or back pain
- Itching, burning, pain, or tenderness of the vulva
- Bloating

Nutrition and Gynecologic Cancer

The predominant role of nutrition therapy is to help patients achieve and maintain a healthy body weight by choosing the right foods and exercising regularly. Healthy diets rich in colorful fruits and vegetables, high in dietary fiber, and lower in salt, sugar and animal products are the key to fighting gynecologic cancer. Ensuring adequate nutritional intake during cancer treatment can aid in the

recovery process. Cancer treatments include radiation, chemotherapy, hormone therapy, immunotherapy, and surgery. While all these treatments kill cancer cells, they also damage healthy cells in the process and can result in side effects that affect dietary intake, often leading to malnutrition. Staying well nourished can help improve the outcome of your treatment and improve overall quality of life. Side effects from cancer treatments include loss of appetite, taste changes, nausea or vomiting, and gastrointestinal disturbances. For tips on how to manage these symptoms, please refer to our **Cancer Fact Sheet.**

Weight Management

Maintaining a healthy weight is essential to both prevention and management of gynecologic cancers. Research has shown that women who are overweight or obese are two to three times more likely to get a gynecologic cancer. According to the World Cancer Research Fund, being 50 pounds over your healthy weight can increase your risk by 10 times. In addition to implementing a healthy diet that emphasizes vegetables, fruits, and whole grains, studies show that exercise also has a protective effect on lowering cancer risk. Starting an exercise routine that incorporates 30 minutes of moderate physical activity every day, such as brisk walking or biking, can significantly aid in weight management and risk reduction.

Soy

Whole soy foods have many health benefits as they are high in polyunsaturated fats, protein, fiber, vitamins, and minerals. They also contain antioxidants and anti-inflammatories that may even have a protective effect on cancer risk. In fact, studies show that a moderate amount (1 to 3 servings per day) of natural soy foods such as tofu, tempeh, edamame, soy beans, and soy milk, are safe for both cancer survivors and the general population. The confusion around soy and whether or not it is safe for consumption stems from the notion that it is high in isoflavones, which are weak estrogen-like compounds called phytoestrogens. Because estrogen has been shown to promote the development, growth, and spread of gynecologic cancer, doctors have erred on the side of caution and discouraged consumption of soy foods. However, soy foods do not contain estrogen and the current consensus amongst health professionals is that soy foods do not increase cancer risk. It is important to note that research has only investigated natural



soy foods, not soy supplements. Soy supplements are unregulated and contain concentrated amounts of isoflavones that may not be safe for consumption. Avoid eating highly processed soy foods that include only the protein, or soy protein isolates, such as vegetarian meat analogs (e.g. vegetarian burgers) and snack foods. Speak to your healthcare provider or registered dietitian before taking soy or isoflavone supplements and discuss how best to manage soy intake in your diet.

Phytochemicals

Phytochemicals are naturally occurring plant chemicals that have been shown to stimulate the immune system, reduce inflammation, slow the growth rate of cancer cells, and help the body protect against carcinogens. These compounds are found in fruits, vegetables, and teas and are proven to be effective in helping fight various cancers, including gynecologic cancer. Scientific studies have not been able to demonstrate if taking phytochemicals as supplements is safe or effective. The best way to ensure adequate intake is by consuming a variety of plant foods every day.

Foods High in Phytochemicals:

- Cruciferous vegetables (e.g. broccoli, cabbage, collard greens, kale, cauliflower, brussels sprouts)
- Whole grains and nuts
- · Grapes, berries, apples, and citrus fruits
- Green tea

Importance of Food Safety

When you have cancer, or are undergoing treatment, your immune system becomes weak. Be especially careful when buying foods, preparing meals, and dining out in order to prevent food borne illnesses. Following food safety guidelines reduces your risk of exposure to bacteria and other organisms that could multiply and cause serious infections.

Make sure to:

- Wash hands frequently
- Keep raw meats separate from produce and ready-to-eat foods
- Cook food to proper temperature
- Refrigerate food promptly, the temperature should be below 40 °F
- Store foods appropriately and consume leftover within a few days
- Take care when eating at restaurants, especially salad bars, delis, and buffets

Nutrition and Lifestyle Guidelines for Cancer Survivors

- Aim to achieve and maintain a healthy weight.
- Eat a variety of foods from the major food groups. Use Choose My Plate to guide you in creating balanced meals. www.choosemyplate.gov
- Eat a plant based diet rich in fiber, vitamins, minerals, antioxidants, and phytonutrients that can help your body protect against and fight cancer.
- Include fiber in your diet. Fiber helps maintain a healthy digestive tract, supports the immune system, and helps keep your bowel movements regular.



- Limit consumption of red meats to no more than 3 portions per week and choose lean meat options. A portion is equivalent to 3 ounces, or the size of a deck of cards.
- · Avoid processed meats.
- Limit consumption of salty foods and foods processed with salt (sodium). Try to cut back on adding it while cooking and avoid salty foods and snacks.
- Avoid food and beverages that are high in sugar. High consumption of sugar sweetened beverages can increase risk of uterine cancer by 78%.
- Cook by baking, broiling, poaching, or steaming, instead of frying.
- If consumed at all, limit alcohol intake to 1 drink per day for women and 2 drinks per day for men. One drink of alcohol is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces 80proof distilled spirits.
- Don't use supplements to protect against cancer. Speak to your registered dietitian to assess whether a supplement is necessary for you.
- If you are pregnant, it is best for mothers to breastfeed exclusively for up to 6 months if possible and then add other liquids and foods.
- Aim for at least 30 minutes of physical activity every day. Avoid a sedentary lifestyle.
- Avoid tobacco.

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