



Prevention

Ovarian Cancer Awareness Month September 2017

OVARIAN CANCER AWARENESS MONTH

RISK FACTORS FOR OVARIAN CANCER

A risk factor for ovarian cancer is anything that changes the chances of getting the disease. Having a risk factor, or even several risk factors, does not mean that the disease will develop. Many people who get ovarian cancer do not have had any known risk factors. Even if a woman with ovarian cancer has a risk factor, it is usually not possible to know how much that risk factor may have contributed to the cancer. Research has identified several specific factors that change the likelihood of developing epithelial ovarian cancer. These risk factors do not apply to other less common types of ovarian cancer like germ cell tumors and stromal tumors.

Age The risk of developing ovarian cancer gets higher with age. Ovarian cancer is rare in women younger than 40. Most ovarian cancers develop after menopause. Half of all ovarian cancers are found in women 63 years of age or older.

Obesity Various studies have looked at the relationship of obesity and ovarian cancer. Overall, it seems that obese women (those with a body mass index of at least 30) have a higher risk of developing ovarian cancer.

Reproductive History Women who have been pregnant and carried it to term before age 26 have a lower risk of ovarian cancer than women who have not. The risk goes down with each full-term pregnancy. Women who have their first full-term pregnancy after age 35 or who never carried a pregnancy to term have a higher risk of ovarian cancer. Breastfeeding may lower the risk even further.

Birth Control Women who have used oral contraceptives (also known as birth control pills or the pill) have a lower risk of ovarian cancer. The lower risk is seen after only 3 to 6 months of using the pill, and the risk is lower the longer the oral contraceptive is used. This lower risk continues for many years after the contraceptive is stopped. A recent study found that the women who used depot medroxyprogesterone acetate (DMPA or Depo-Provera CI[®]), an injectable hormonal contraceptive, had a lower risk of ovarian cancer. The risk was even lower if the women had used it for 3 or more years.

Gynecologic Surgery Tubal ligation (having the tubes tied) may reduce the chance of developing ovarian cancer by up to two-thirds. A hysterectomy (removing the uterus without removing the ovaries) also seems to reduce the risk of ovarian cancer by about one-third.

Fertility Drugs In some studies, researchers have found that using the fertility drug clomiphene citrate (Clomid[®]) for longer than one year may increase the risk for developing ovarian tumors. The risk seemed to be highest in women who did not get pregnant while on this drug. Fertility drugs seem to increase the risk of the type of ovarian tumors known as "low malignant potential". However, women who are infertile may be at higher risk (compared to fertile women) even if they do not use fertility drugs. This might be in part because they have not carried a pregnancy to term or used birth control pills (which are protective).

Androgens Androgens are male hormones. Danazol, a drug that increases androgen levels, was linked to an increased risk of ovarian cancer in a small study. In a larger study, this link was not confirmed, but women who took androgens were found to have a higher risk of ovarian cancer. Further studies of the role of androgens in ovarian cancer are needed.

Estrogen Therapy and Hormone Therapy Some studies suggest women using estrogens after menopause have an increased risk of developing ovarian cancer. The risk seems to be higher in women taking estrogen alone (without progesterone) for many years (at least 5 or 10). The increased risk is less certain for women taking both estrogen and progesterone.

Analgesics In some studies, both aspirin and acetaminophen have been shown to reduce the risk of ovarian cancer. However, the information is not consistent. Women who do not already take these medicines regularly for other health conditions should not start doing so to try to prevent ovarian cancer. More research is needed on this issue.

Smoking and alcohol use Smoking does not increase the risk of ovarian cancer overall, but it is linked to an increased risk for the mucinous type. Drinking alcohol is not linked to ovarian cancer risk.

RISK FACTORS FOR OVARIAN CANCER

Family Cancer Syndromes About 5 to 10% of ovarian cancers are a part of family cancer syndromes resulting from inherited changes (mutations) in certain genes.

Hereditary Breast and Ovarian Cancer Syndrome This syndrome is caused by inherited mutations in the genes BRCA1 and BRCA2, as well as possibly some other genes that have not yet been identified. This syndrome is linked to a high risk of breast cancer, as well as ovarian, fallopian tube, and primary peritoneal cancers. The risk of some other cancers, such as pancreatic cancer and prostate cancer, are also increased.

Mutations in BRCA1 and BRCA2 are also responsible for most inherited ovarian cancers. When these genes are normal they help prevent cancer by making proteins that keep cells from growing abnormally (they act as tumor suppressor genes). Mutations in BRCA1 and BRCA2 are about 10 times more common in those who are Ashkenazi Jewish than those in the general U.S. population.

The lifetime ovarian cancer risk for women with a BRCA1 mutation is estimated to be between 35% and 70%. For women with BRCA2 mutations the risk has been estimated to be between 10% and 30% by age. In comparison, the ovarian cancer lifetime risk for the women in the general population is less than 2%.

PTEN Tumor Hamartoma Syndrome In this syndrome, also known as Cowden disease, people are primarily affected with thyroid problems, thyroid cancer, and breast cancer. Women also have an increased risk of ovarian cancer. It is caused by inherited mutations in the PTEN gene.

Hereditary Nonpolyposis Colon Cancer Women with this syndrome have a high risk of colon cancer and also have an increased risk of developing cancer of the uterus (endometrial cancer) and ovarian cancer. Many different genes can cause this syndrome. They include MLH1, MLH3, MSH2, MSH6, TGFBR2, PMS1, and PMS2. An abnormal copy of any one of these genes reduces the body's ability to repair damage to its DNA. The lifetime risk of ovarian cancer in women with hereditary nonpolyposis colon cancer (HNPCC) is about 10%. Up to 1% of all ovarian epithelial cancers occur in women with this syndrome. An older name for HNPCC is Lynch syndrome.

Peutz-Jeghers Syndrome People with this rare genetic syndrome develop polyps in the stomach and intestine while they are teenagers. They also have a high risk of cancer, particularly cancers of the digestive tract (esophagus, stomach, small intestine, colon). Women with this syndrome have an increased risk of ovarian cancer, including both epithelial ovarian cancer and a type of stromal tumor called sex cord tumor with annular tubules (SCTAT). This syndrome is caused by mutations in the gene STK11.

MUTYH-Associated Polyposis People with this syndrome develop polyps in the colon and small intestine and have a high risk of colon cancer. They are also more likely to develop other cancers, including cancers of the ovary and bladder. This syndrome is caused by mutations in the gene MUTYH.

Personal History of Breast Cancer If you have had breast cancer, you might also have an increased risk of developing ovarian cancer. There are several reasons for this. Some of the reproductive risk factors for ovarian cancer may also affect breast cancer risk. The risk of ovarian cancer after breast cancer is highest in those women with a family history of breast cancer. A strong family history of breast cancer may be caused by an inherited mutation in the BRCA1 or BRCA2 genes and hereditary breast and ovarian cancer syndrome, which is linked to an increased risk of ovarian cancer.

Talcum Powder It has been suggested that talcum powder applied directly to the genital area or on sanitary napkins may be carcinogenic (cancer-causing) to the ovaries. Some studies suggest a very slight increase in risk of ovarian cancer in women who used talc on the genital area. In the past, talcum powder was sometimes contaminated with asbestos, a known cancer-causing mineral. This might explain the association with ovarian cancer in some studies. Since the 1970s, however, body and face powder products have been required by law to be asbestos-free. Proving the safety of these newer products will require follow-up studies of women who have used them for many years. There is no evidence at present linking cornstarch powders with any female cancers.

Diet A study of women who followed a low-fat diet for at least 4 years showed a lower risk of ovarian cancer. Some studies have shown a reduced rate of ovarian cancer in women who ate a diet high in vegetables, but other studies disagree. The American Cancer Society recommends eating a variety of healthful foods, with an emphasis on plant sources. Eat at least 2 ½ cups of fruits and vegetables every day, as well as several servings of whole grain foods from plant sources such as breads, cereals, grain products, rice, pasta, or beans. Limit the amount of red meat and processed meats you eat. Even though the effect of these dietary recommendations on ovarian cancer risk remains uncertain, following them can help prevent several other diseases, including some other types of cancer.

SCREENING AND PREVENTION

There is no screening test that will diagnose ovarian cancer early.

Prevention is possible for those at the highest risk such as those carrying a BRCA1 or BRCA2 gene mutation by removing the ovaries when childbearing is complete (bilateral prophylactic ovariectomy).

SOURCE: American Cancer Society.

For further information visit www.strang.org

The Strang Cancer Prevention Cookbook

Peach and Blueberry Crisp

Reduce your Risk for Cancer by Eating a Healthy Diet!

Peach and Blueberry Crisp * 6 Servings



6 medium peaches, peeled, pitted, and cut into large chunk's, 2 cups blueberries, 1/4 cup plus 1 tablespoon all- purpose flour, 1/3 cup granulated sugar, juice 1/2 lemon, 1/2 cup quick cooking cereal, 1/4 cup packed brown sugar, 1/2 teaspoon ground cinnamon, 2 table- spoons melted unsalted butter. Vanilla frozen yogurt, optional.

Preheat oven to 375 F. Spray a baking/casserole dish, at least 6 cup capacity, with canola oil/cooking spray or lightly rub w canola oil.

In a medium bowl, combine peaches, blueberries, 1 tablespoon of flour, sugar and lemon juice. Toss with your hands to combine thor- oughly. Spread the fruit out in the baking pan. In a separate bowl, prepare the topping. Mix together the oatmeal, remaining 1/4 cup of flour, brown sugar and cinnamon. Drizzle with the melted butter, and then rub the topping together with you hands until it resembles a coarse meal. Entirely spread the topping over the fruit and bake for 35 minutes or until the fruit is bubbling and the topping is browned lightly. Remove and let cool slightly. Serve warm or room temperature. Top with vanilla frozen yogurt.

Calories 261, Protein 3 g, Carbohydrates 49 g, Fat 6 g, Cholesterol 5 mg, Dietary fiber 4 g Saturated fat 3 g

Major sources of Potential Cancer fighters: Phytochemicals: plant polyphenols (flavonoids, phenolic acids), terpenes (carotenoids)

Source: cookbook page 307.

Recipe by Laura Pensiero, R.D. Owner Gigi Trattoria, Rinebeck, New York

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THIS NEWSLETTER IS DEDICATED TO DIANNE TASHMAN ZOLA

In 2014 the Dianne Zola Ovarian Cancer Research Fund was established



September is Ovarian Cancer Awareness Month



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