



# Prevention

Ovarian Cancer Awareness Month September 2021

## REDUCING OVARIAN CANCER MORTALITY During the COVID PANDEMIC

**Note to Readers:** Fear of COVID exposure sharply reduced medical visits and preventive care. We have added information about optimizing cancer prevention while minimizing COVID risk during the pandemic.

**Ovarian Cancer Prevention During COVID Screening: Do not screen normal risk women. Likely harmful** (US Preventive Services Task Force D rating, updated February 2018). While high-risk women have most to benefit from early detection, screening trials have not reduced death from ovarian cancer. **Primary Prevention:** Exercise and healthy dietary changes are difficult but compatible with social distancing. Genetic counseling, risk assessment and preventive oophorectomy depend on personal cancer history that reduced primary care may delay. **Alterable risk factors:** Current or recent hormone replacement therapy (HRT) increases risk. Oral contraceptives, breastfeeding and tubal ligation decrease risk. It is uncertain whether ovarian stimulation associated with infertility treatment increases risk. Risk reduction bilateral salpingo-oophorectomy reduces the risk of ovarian and tubal cancer by 75% in high-risk patients, such as those with BRCA1 or BRCA2 mutations who are at 10-40% lifetime risk of ovarian cancer.

**Summary:** Screening modalities, including transvaginal ultrasound and CA-125 tumor marker screening for ovarian cancer were ineffective in US and British trials. Cancer prevention now focuses on identifying high-risk women, especially those with **germline BRCA1 or BRCA2 mutations**, surgical risk reduction by removing ovaries when childbearing is complete.

### SCREENING and PREVENTION GUIDELINE UPDATES

**Screening:** Most recent US Preventive Services Task Force in February 2018. **Recommendation against screening (grade D).** **Risk assessment:** Genetic counseling for patients with **ovarian cancer**, any **breast cancer before age 45** or **triple-negative breast cancer before age 60**. Women with **family history of breast, ovarian, tubal or peritoneal cancer** should **undergo risk assessment**. **Prevention:** BRCA-mutation-positive patients may consider **preventive salpingo-oophorectomy** to prevent ovarian cancer.

**OVARIAN CANCER SCREENING Screening Trials Update:** The **US Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) screening trial** found that transvaginal ultrasonography, bimanual palpation of ovaries<sup>1</sup> and the CA-125 blood test, did not reduce ovarian cancer mortality.<sup>2</sup> Despite hopeful preliminary mortality results,<sup>3</sup> and diagnosing more early stage and fewer late stage ovarian cancers, long term results of the **United Kingdom Collaborative Trial of Ovarian Cancer Screening (UKCTOCS)** found that annual multimodality screening (MMS) or transvaginal ultrasound screening did not change ovarian cancer mortality.<sup>4</sup> The MMS arm used a novel screening strategy: follow-up was determined by the risk of ovarian cancer algorithm (ROCA).<sup>5</sup> Women with normal risk were returned to annual screening; intermediate risk, repeat CA-125; elevated risk, repeat CA-125 and transvaginal ultrasound; and persistent increased risk, clinical evaluation.

### OVARIAN CANCER PRIMARY PREVENTION

Preventive bilateral salpingo-oophorectomy reduced 10-year ovarian cancer mortality by 75% in BRCA1-mutated women compared to careful screening.<sup>6</sup>

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### REFERENCES:

1. Doroudi M, Kramer BS, Pinsky PF. The bimanual ovarian palpation examination in the Prostate, Lung, Colorectal and Ovarian cancer screening trial: Performance and complications. *Journal of medical screening* 2017;24:220-2.
2. Buys SS, Partridge E, Black A, Johnson CC, Lamerato L, Isaacs C, et al. Effect of screening on ovarian cancer mortality: the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening Randomized Controlled Trial. *JAMA* 2011;305:2295-303.
3. Jacobs IJ, Menon U, Ryan A, Gentry-Maharaj A, Burnell M, Kalsi JK, et al. Ovarian cancer screening and mortality in the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS): a randomised controlled trial. *Lancet* 2016;387:945-56.
4. Menon U, Gentry-Maharaj A, Burnell M, Singh N, Ryan A, Karpinskyj C, et al. Ovarian cancer population screening and mortality after long-term follow-up in the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS): a randomised controlled trial. *Lancet* 2021;397:2182-93.
5. Skates SJ. Ovarian cancer screening: development of the risk of ovarian cancer algorithm (ROCA) and ROCA screening trials. *Int J Gynecol Cancer* 2012;22 Suppl 1:S24-6.
6. Gronwald J, Lubinski J, Huzarski T, Cybulski C, Menkiszak J, Siolek M, et al. A comparison of ovarian cancer mortality in women with BRCA1 mutations undergoing annual ultrasound screening or preventive oophorectomy. *Gynecol Oncol* 2019.

# 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., **Strang** Nutrition Consultant  
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**THIS NEWSLETTER IS DEDICATED TO DIANNE TASHMAN ZOLA**

The Dianne Zola Ovarian Cancer Research Fund was established in 2014



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