



Prevention

Ovarian Cancer Awareness Month September 2022

OVARIAN CANCER AWARENESS MONTH

Note to Readers: Innovation is essential to cancer prevention. Genomic data support **precision prevention** as well as precision medicine. We will highlight novel approaches as we have the consequences of Covid.

Innovation in Ovarian Cancer Prevention: Genomics, risk and preventive ovarian resection

Genetic risk and preventive ovarian resection: Removing ovaries **reduces cancer risk** by about **75%** but has **surgical risks**. A review suggested a **4% lifetime ovarian cancer risk**, the risk of an affected first-degree relative, as a decision threshold.¹ Higher-risk genes such as BRCA1/2 easily meet the criteria. Others require shared decision making (see below).

PRIMARY PREVENTION Genomics, ovarian cancer risk and ovarian resection: For the very high-risk BRCA1 mutation, **preventive bilateral ovarian resection** reduces ovarian cancer mortality by 75%.¹ The review above¹ found a **3-4% lifetime risk of ovarian cancer a reasonable threshold** for shared decision making discussions. Surgery becomes cost-effective above a 4% risk. Currently, **BRCA1/2** as well as **BRIP1** and **RAD51C/D** have proven risks above the threshold. The risk from mutated **PALB2**, which encodes a protein binding damaged BRCA, is **elevated with a family history** of ovarian cancer.²

Aspirin and ovarian cancer: Low-dose aspirin appears to reduce the risk of ovarian cancer by **about 13%**, based on **meta-analysis** of data from prospective cohort studies and case-control studies.³ The benefit applies even to high-risk cancers, such as poorly differentiated serous carcinoma.

SCREENING and PREVENTION GUIDELINES Screening for normal risk women is likely harmful (US Preventive Services Task Force D rating, updated February 2018). Early detection could benefit high-risk women most, but in trials screening has not reduced ovarian cancer deaths (see below).

Summary of Screening Trials: The **US Prostate, Lung, Colorectal and Ovarian Cancer (PLCO) screening trial** found that transvaginal ultrasonography, bimanual palpation of ovaries⁴ and the CA-125 blood test, did not reduce ovarian cancer mortality.⁵ 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 reduce ovarian cancer mortality.⁶ The MMS arm used a novel screening strategy based on the risk of ovarian cancer algorithm (ROCA).⁷

Preventive oophorectomy reduced 10-year ovarian cancer mortality by 75% in BRCA1-mutated patients. Guidance for patients should be based on risk, including family history and genetics (see discussion above).

Risk assessment: Genetic counseling recommended for patients with **ovarian cancer, breast cancer before age 45** or **triple-negative breast cancer before age 60**. **Risk assessment** recommended for women with **family history of breast, ovarian, tubal or peritoneal cancer**.

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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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