



**Strang** Cancer Prevention Institute

Dedicated to Promoting Cure by Early Detection and Research to Prevent Cancer since 1933

# Prevention

Cervical Cancer Awareness Month January 2023

## CERVICAL CANCER SCREENING AND PREVENTION

**Note to readers:** Innovation is essential to cancer prevention. Genomic data support **precision prevention** as well as precision medicine. Strang's focus will highlight novel approaches in cancer prevention as we have the consequences of Covid.

**Summary:** Cervical cancer is an excellent example of scientific innovation to reduce cancer mortality. Discovery that **human papilloma virus (HPV) causes cervical cancer** changed and improved cervical cancer prevention. It permitted improved screening (for HPV, not for Pap smears) for women over 30. HPV vaccines when given by age 17 **reduce the risk of cervical cancer by more than 90%**. It also made possible a **plan to eliminate cervical cancer worldwide**.

**Adapting screening to local culture in Africa: Offering screening and immediate treatment with routine primary care in Benin, Cote d'Ivoire and Senegal** found and treated many women with neoplastic lesions. The pilot program in 4-5 primary health centers (PHCs) in each country screened 15,800 women in 2-1/2 years, using visual inspection with acetic acid (VIA). On average, **8% were positive, 61% were eligible for immediate thermal ablation (TA), and 88% accepted same-day treatment**, with 99% overall TA compliance at the PHC. However, **a third of women referred to colposcopy clinics did not receive treatment**.<sup>1</sup>

### Cervical Cancer Prevention during COVID

**Earthquakes in Puerto Rico reduced cervical cancer screening by half, COVID by two thirds:** Damage to medical infrastructure probably made the screening system more vulnerable.<sup>2</sup>

### CERVICAL CANCER SCREENING

**Still screening women 65 and over for cervical cancer (but less):** The US Preventive Services Task Force **recommended against it in 1996**. Medicare billing for **cervical cancer screening** – human papillomavirus testing, colposcopy, and cervical procedures – **decreased by over half between 1999 and 2019**. However, **8% (1.3 million women) were still screened** (according to billing).<sup>3</sup>

### CERVICAL CANCER PREVENTION (VACCINATION)

**Costs of screening, vaccination and treatment in low and middle income countries:** The World Health Organization Cervical Cancer Prevention and Control Costing (C4P) tool estimates costs of cervical cancer prevention and treatment in low- and middle-income countries. A pilot in the United Republic of Tanzania, with 62.5 cases of cervical cancer per 100,000 women, estimated a fully HPV-immunized girl cost about \$7, screening costs \$4; treating pre-cancer \$6; and \$100 to diagnose invasive cancer. Treating invasive cancer ranges from \$7 for outpatient palliative care to \$800 for radiotherapy, respectively.<sup>4</sup>

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### REFERENCES

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# The Strang Cancer Prevention Cookbook

## Roasted Eggplant Dip

Reduce Your Risk for Cancer by Eating a Healthy Diet!

8 Servings

1 medium eggplant (about 1 1/4 pounds) halved lengthwise  
1 tablespoon olive oil  
2 garlic cloves peeled  
1 medium potato (about 6 ounces), baked or microwaved and peeled  
1/2 cup 1% cottage cheese or 2 ounces lite silken tofu  
2 tablespoons tahini (toasted sesame paste)  
1 teaspoon lemon juice  
1 teaspoon cayenne pepper  
2 teaspoons toasted sesame oil  
salt



Preheat the oven to 350 degrees F

Brush the flesh of the halved eggplant with 1 teaspoon of the olive oil. Place on a non stick baking pan, cut side down, and roast for 20 to 30 minutes. Remove from the oven and let cool. Scoop the pulp from the skin of the eggplant and place in the bowl of a food processor. Add the roasted garlic and potato and puree. Then add the cottage cheese, tahini, lemon juice, and cayenne and puree again until smooth. With the motor running, drizzle in the sesame oil and remaining 2 teaspoons olive oil. Season to taste with salt and transfer to an attractive serving bowl.

Calories 110, protein 4g, carbs 15g, fat 4g, cholesterol 1mg, dietary fiber 2g, saturated fat 1g

### MAJOR SOURCES OF POTENTIAL CANCER FIGHTERS

**Phytochemicals: allium compounds, plant polyphenols, (flavonoids, phenolic acids), phytic acids, plant sterols, terpenes (monoterpenes)**

Laura Pensiero, R.D., **Strang** Nutrition Consultant  
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January is Cervical Cancer Awareness Month

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