# Prevention

Cervical Cancer Awareness Month January 2020

#### CERVICAL CANCER SCREENING AND PREVENTION

#### **SUMMARY**

Screening guidelines, whether for or against screening in a particular group, are strongly supported by evidence. The central role of human papilloma virus (HPV), a sexually transmitted disease causing about 70% of cervical cancer, is critical. Vaccination of girls and boys prevents HPV infection; screening women limits its damage. Definitive control of cervical cancer requires applying medical science to change human behavior. Vaccine skeptics savvy to media, especially social media, have manufactured a needless obstacle to saving lives from cervical cancer. Disparities raise additional obstacles.

#### **SCREENING**

**USPSTF 2018 Cervical Cancer Screening Guidelines:** Changes add **an HPV-only screening option** (without Pap cytological testing) for women 30-65 years. In 4 trials, HPV testing reduced invasive cervical cancer by 40% overall and 55% after 2 years. <sup>1</sup>

Age <21: No screening, regardless of sexual history. (D rating: probably either no net benefit or net harm)

**Age 21-30: Pap tests every 3 years**. Documenting HPV infection is not predictive of cancer risk; most are transient in younger women). (**A rating**: high certainty of substantial benefit)

**Age 30-65: 3 options**: Pap every 3 years, high-risk HPV (hrHPV) every 5 years, or Pap-hrHPV cotesting every 5 years. (**A rating**: high certainty of substantial benefit)

Age >65 years: No testing if previous screen. (D rating: probably either no net benefit or net harm).

**Over Screening in Women Under 21?** Despite strong evidence that screening women under age 21 is likely to be harmful, data from the National Survey of Family Growth from 2011-2017 found that about 2.6 million women age 15-20 (22.9%) reported Pap testing in the past year. More than ¼ were likely unnecessary. Pap testing was also associated with a 7-fold increase in pelvic exams, much higher than much greater than STD testing (1.6-fold) and non-IUD contraceptions (1.3).<sup>2</sup>

**Screening Less in Diabetes Patients?** Diabetes patients are at higher risk from cancer but may get less frequent cancer screening. A random-effects meta-analysis of 37 observational studies found that women with diabetes were less likely to get cervical, breast and colorectal cancer screening.<sup>3</sup>

**Screening Less in Underweight Patients?** Using weighted data from 2016 Behavioral Risk Factor Surveillance System (BRFSS), multivariable models found that underweight women (BMI<18.5) were nearly 50% less likely to be screened for cervical cancer. Underweight is associated with lower socioeconomic status, worse health care access and more chronic illness.<sup>4</sup>

Outreach, Group Education, Navigation and Free Screening Overcome Language and Educational barriers: In a cluster-randomized trial in a 99% Hispanic population compared a culturally appropriate group education group to individual training. Group training produced similar cervical cancer screening rates (70%) and increased knowledge, perceived susceptibility, seriousness and subjective norms.<sup>5</sup>

#### PREVENTION VACCINATION

## Vaccination Rates Inadequate but Increasing.

Girls (50%) and boys (39%) age 13-17 have initiated HPV vaccination, well below the 80% Healthy People 2020 goal. Vaccination prevalence is increasing about 5% annually, according to the CDC.

# Physician Recommendation, Insurance Coverage Increase HPV Vaccination Rates.

Vaccination rates are much higher when parents have been advised by a doctor to vaccinate and believe insurance covers vaccination but **declines if parents feel vaccination is harmful**.<sup>7</sup>

### **Pediatricians Support Vaccination.**

Almost all pediatricians would vaccinate all (85%) or most (10%) of their patients. Self-described religiosity and social conservatism reduced willingness to vaccinate.<sup>8</sup>

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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
- ½ 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)

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**January is Cervical Cancer Awareness Month** 



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