



# Prevention

Head and Neck Cancer Awareness Month April 2024

## HEAD AND NECK CANCER AWARENESS MONTH

### PREVENTING HEAD AND NECK CANCERS

**Note to readers:** Innovation is essential to cancer prevention. Using molecular and genomic information and other novel clinical, research and analytic approaches that enable precision cancer care also support **precision cancer prevention**. Strang will continue to highlight innovation in cancer prevention as we have the obstacles Covid created.

**Summary:** Chinese researchers found a new antibody against **nasopharyngeal carcinoma (NPV)**. NPV is a head and neck cancer strongly associated with Epstein-Barr virus (EBV) infection that is **common in China, Southeast Asia and North Africa**. The **new antibody (P85-Ab) found more NPV cancers** (sensitivity) **and excluded patients without cancer** much better than the current two-antibody screening test. Combining the tests worked even better.

### INNOVATION IN HEAD AND NECK CANCER PREVENTION

A **new biological marker dramatically improved screening tests for nasopharyngeal cancer (NPC)**. NPC usually occurs after infection **with Epstein-Barr virus (EBV)**. It is a head and neck cancer common in China, Southeast Asia, and North Africa, where EBV infection is common. **The current two-antibody screening test for NPV** uses antibodies against EBV nuclear antigen 1 (EBNA1) and EBV-specific viral capsid antigen (VCA) identifies patients at high and intermediate **risk of NPV**. The two-antibody test **finds three-fourths of patients with NPV** (sensitivity 72%) but is also **positive for many without NPV**. Because of that, **95% of test-positive patients** don't have cancer (positive predictive value, PPV, 4.3%) and will undergo the **risks and anxiety of a workup that won't find a cancer**. The **low PPV** makes screening less attractive and much riskier for patients and makes the screening program more expensive.

In results from an important study, **Chinese investigators identified and studied a new antibody (P85-Ab) against EBV**.<sup>1</sup> **Using P85-Ab to screen for HPV was better** than the two-antibody test **at finding cancer** (sensitivity 97% vs. 72%) and excluding patients without it (specificity 98% vs. 97%). As a result, patients with **positive P85-Ab tests had cancer twice as often** (PPV 10 vs. 4.3%). **Requiring both tests positive** found 70% of NPC cancers, and **almost half (45%) who tested positive had cancer**, almost 10 times more often than the two-antibody test.

### HEAD AND NECK CANCER PREVENTION

**How much do smoking and drinking increase increase the risk of head and neck cancer and how much do healthy eating habits reduce risk:** The large Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial made it possible to estimate cancer risks in a large population.<sup>2</sup> After 12 years of follow-up, smoking increased cancer of the larynx 9-fold. Heavy drinking increased head and neck cancer (HNC) by 85%. Healthy diet choices reduced HNC risk, including eating whole grains (22%), whole fruits (10%), and overall better eating, measured by the Healthy Eating Index 2015 (13%).

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### REFERENCES

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2.Lander DP, Kallogjeri D, Piccirillo JF. Smoking, drinking, and dietary risk factors for head and neck cancer in Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial participants. *JAMA Otolaryngol Head Neck Surg* 2024;150:249-56.

# The Strang Cancer Prevention Cookbook

## Root Vegetable Lasagna

**Reduce your Risk for Cancer by Eating a Healthy Diet!**

*Serve as a colorful nutritious entrée or a vegetable side dish*

Use a mandolin to produce uniform thin slices of the root vegetables

6 Servings

2 ancho chiles  
1 ½ cups vegetable stock or low-sodium canned broth  
1 teaspoon olive oil  
2 large baking potatoes (about 1 pound), peeled and sliced lengthwise 1/8 inch thick  
2 medium sweet potatoes (about 14 ounces), peeled and sliced lengthwise 1/8 inch thick  
2 medium parsnips (about ½ pound), peeled and sliced lengthwise 1/8 inch thick  
3 medium turnips (about ¾ pound), peeled and sliced 1/8 inch thick  
salt  
¾ cup diced roasted peppers, drained if jarred  
2 cups shredded low-fat cheddar or Monterey Jack-cheese (about ½ pound)

Preheat the oven to 375 F

In a small saucepan, simmer the ancho chilies in the stock for 10 minutes. Turn off heat and let steep while you prepare the lasagna. Rub a casserole or baking pan (about 3-quart) with the olive oil. Arrange the root vegetable slices in the pan starting with a layer of slightly overlapping potatoes, followed by sweet potatoes, parsnip, and turnips; repeat the sequence.

Season each layer with salt to taste and sprinkle with diced roasted pepper and shredded cheese, reserving about 1/3 cup of shredded cheese. Strain the stock, discarding the chiles, and pour evenly over the casserole. Cover with foil and bake for 50 minutes. Remove the foil, sprinkle with the reserved cheese, and bake for 15 more minutes. Let cool for 15 minutes before serving.

High in Fiber-20 percent of the daily requirement

Calories 285

Protein 13 g

Carbohydrates 41g

Fat 8 g

Cholesterol 0 mg

Dietary Fiber 5 g

Saturated Fat 1 g

Recipe Laura Pensiero, R.D., **Strang** Nutrition Consultant

Chef, Dietitian, Restaurateur, Author

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THIS NEWSLETTER IS DEDICATED TO FRANCIS OSBORNE



April is Head and Neck Cancer Awareness Month



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