

## **Aspire to Asparagus Camerota's Cupboard May 2011**

In response to recent inquiries about the possible benefits of asparagus in the prevention and/or treatment of cancer, I consulted with the staff at The Nutrition Council of Greater Cincinnati. One of the interns, Christine Sloop, MD, is an OB/Gyn who is now becoming certified as a Registered Nutritionist. She graciously reviewed the scientific literature and consented to having her findings reprinted below for our Prostate Cancer Information Group:

PubMed had one article from Emory University in Atlanta in June of 2010 that states that sulforaphane from asparagus has been reported to have cancer chemopreventive activity along with a number of other dietary botanicals. I have enclosed the abstract for you below. The article just discusses the compounds and the possible mechanism of action. It does not discuss scientific research supporting or refuting cancer protection claims. It does encourage high consumption of fruits and vegetables.

There is an asparagus racemosus that is an Indian asparagus that is associated with improved immune function. However, this is not the common asparagus that we have in the States.

In my review of the medical literature I cannot find mention of asparagus as a treatment for cancer. It is not even mentioned as a possible benefit that has not been proven. There is just complete silence. Usually, if an herb or supplement is associated in the lay press with a certain disease there will be mention of it and a comment as to whether there is any scientific support. I take this to mean there is not significant lay press concern that there could be a benefit. By this I mean that the e-mail you received is a small mailing that is trying to get public attention, but has not received enough attention to merit any mention in the literature.

When I “googled” asparagus and cancer I found a number of web sites that mentioned the exact e-mail you had received. All the sites uniformly viewed it as unproven. One site, Urban Legends, had received it on Feb 24, 2009. Urban legends stated they had not been able to find any mention of the Richard R. Vensal, D.D.S quoted in the article, and stated the magazine Cancer News Journal no longer exists. They go on to say, “In any case, contrary to the impression given above there are no peer-reviewed medical studies proving that eating asparagus alone "prevents" or "cures" cancer.

The thing is, lots of other foods provide the same nutritional benefits and more besides, so emphasizing one particular vegetable over all the other health-promoting foods available is surely counter-productive. Generally speaking, medical experts recommend a diet high in fiber, fruits and vegetables and low in fats and nitrates for optimal resistance to cancer.”

I think that is a good synopsis of the situation. Asparagus is good, but there is no evidence that it is significantly better than other fruits and vegetables. We need to be eating 5 to 9 fruits and vegetables everyday!!

Christine Sloop, MD

This is the abstract:

Cancer prevention with natural compounds.

Gullett NP, Ruhul Amin AR, Bayraktar S, Pezzuto JM, Shin DM, Khuri FR, Aggarwal BB, Surh YJ, Kucuk O.  
Department of Radiation Oncology, Winship Cancer Institute,  
Emory University, Atlanta, GA 30322, USA.

Botanical and nutritional compounds have been used for the treatment of cancer throughout history. These compounds also may be useful in the prevention of cancer. Population studies suggest that a reduced risk of cancer is associated with high consumption of vegetables and fruits. Thus, the cancer chemopreventive potential of naturally occurring

phytochemicals is of great interest. There are numerous reports of cancer chemopreventive activity of dietary botanicals, including cruciferous vegetables such as cabbage and broccoli, Allium vegetables such as garlic and onion, green tea, Citrus fruits, soybeans, tomatoes, berries, and ginger, as well as medicinal plants. Several lead compounds, such as genistein (from soybeans), lycopene (from tomatoes), brassinin (from cruciferous vegetables), sulforaphane (from asparagus), indole-3-carbinol (from broccoli), and resveratrol (from grapes and peanuts) are in preclinical or clinical trials for cancer chemoprevention. Phytochemicals have great potential in cancer prevention because of their safety, low cost, and oral bioavailability. In this review, we discuss potential natural cancer preventive compounds and their mechanisms of action.

I hope this information settles the matter. Urban legends often sound too good to be true. Alan Safdi, MD, spoke to our group the last Wednesday in April. He said the asparagus urban legend has been making the rounds for a long time. He explained that the causes of cancer are complex and still beyond our complete understanding. He advises eating a healthy diet, exercising, having a good support system, and educating ourselves. Amen to that!

So back to asparagus. It is available year round in the market, but local asparagus is best right now, a clear sign of spring. Although it is not a silver bullet for cancer prevention and treatment, it is definitely delicious alone and in recipes with other vegetables or meats. Here are 3 recipes to add some healthy green spears to your meals this season.

### **Roasted, Broiled or Grilled Asparagus**

(adapted from Mark Bittman's *How to Cook Everything*)

**Time:** 30 minutes, plus time to preheat the grill

If you're grilling or roasting meat or fish, it's easy to cook the asparagus the same way. And, Bittman writes, "they're great when browned."

1 1/2 pounds asparagus, trimmed and peeled (optional)  
1 tablespoon extra-virgin olive oil  
Dash of salt  
Lemon wedges

- Preheat the oven to 450 degrees, preheat the broiler or a gas grill, or start a charcoal or wood fire. If you're roasting or broiling, place the asparagus in a roasting pan and drizzle with a tablespoon of oil; sprinkle with salt. If you're grilling, brush the asparagus with oil and sprinkle with salt. Place the asparagus in the oven, under the broiler, or on the grill.
- Roast or grill, turning the spears once or twice, just until the thick part of the stalks can be pierced with a knife, 10 to 15 minutes. Broiling time will be shorter, 5 to 10 minutes total. Serve immediately, with lemon wedges.

**Makes 4 servings**

***Nutrition information per serving:***

67 calories; 4 grams protein; 7 grams carbohydrate;  
4 grams fat; 3.5 gram dietary fiber; 77 milligrams sodium

### **Asparagus with Mushrooms**

(from *More Nutritious Still Delicious*)

1/3 cup water  
1 pound fresh asparagus  
1/4 teaspoon black pepper  
1 cup sliced fresh mushrooms  
1 tablespoon olive oil  
1 teaspoon lemon juice  
1 teaspoon toasted sesame seeds

- Clean and trim fresh asparagus; cut into 1 ½ to 2 inch pieces. In a medium saucepan, bring 1/3 cup water to a boil. Add cut asparagus and steam, covered, on medium heat until tender crisp, about 4 to 6 minutes. Drain well and return to pan.
- Season with black pepper. Gently stir in mushrooms, olive oil and lemon juice. Return to medium heat; cook until heated through.
- Transfer to serving bowl; sprinkle with toasted sesame seeds before serving.

**Makes 6 servings (1/2 cup per serving)**

*Nutrition information per serving (1/2 cup):* 42 calories; 2 grams protein; 3 grams carbohydrate; 2 grams dietary fiber; 3 grams fat; less than 1 gram saturated fat; 0 mg cholesterol; 3 mg sodium

### **Asparagus, Thyme and Tomato Halibut**

Here's a main dish from the American Institute for Cancer Research (AICR) with the following information: Infuse roasted halibut with fresh thyme for a slightly sweet, aromatic dish that's perfect for dining al fresco. This firm fish with mild flavor is ideal for a strong seasoning like thyme, which is considered a staple in French kitchens and was a favorite of Julia Child's. The light fish is complemented in this recipe with spring asparagus, a good source of vitamins A and C and cancer-protective phytochemicals.

- 1 lb. fresh asparagus
- 1 ¾ cups cherry tomatoes, halved
- Salt and fresh ground pepper, to taste
- 4 sprigs fresh thyme
- 4 (4 oz.) Pacific halibut fillets
- Juice of 1 lemon
- 1 Tbsp. extra virgin olive oil
- 1 Tbsp. fresh dill (optional)
- 4 lemon slices (as garnish)

- Preheat oven to 400 degrees.
- Trim asparagus and lay on bottom of medium-sized baking dish.
- Scatter cherry tomatoes on top. Sprinkle with salt and pepper.
- Lay thyme sprigs on top.
- Place halibut on bed of asparagus.
- Combine lemon juice and olive oil and drizzle over halibut.
- Sprinkle with additional salt and pepper, if desired.
- Roast uncovered for 18 to 20 minutes, or until fish is done.
- Sprinkle with dill, if desired. Serve with sliced lemon.

**Makes 4 servings.**

***Nutrition information per serving:***

190 calories; 6 grams total fat (1 gram saturated fat); 8 grams carbohydrates; 27 grams protein; 3 grams dietary fiber; 210 mg sodium.