

# Nutrition Quarterly

## Metabolic Syndrome and HIV

Approximately 50 million people in the U.S. have metabolic syndrome. Many people have this condition and do not even know! Dietary and lifestyle changes can help prevent and treat this condition.

### What is Metabolic Syndrome?

Metabolic syndrome is a term used to describe a group of conditions including:

- Increased waist size: women over 35" and men over 40"
- Low HDL (good) cholesterol: under 40mg/dl for women and under 50mg/dl for men
- High triglycerides (type of fat in the blood): over 150mg/dl
- High blood sugar: fasting level equal or greater than 100 mg/dl
- High blood pressure: equal or greater than 130/85 mm/hg

Although you need three of these five symptoms to be diagnosed with metabolic

syndrome, any one of these conditions will increase your risk for developing heart disease and diabetes.

### Can HIV Raise My Risk?

Increased triglycerides and blood sugar are common side effects of HIV medication. They may also increase waist size by causing fat accumulation around the abdomen. However, with proper diet and exercise, you may minimize these side effects.

**Can you pinch an inch?** If you want to reduce your waist size, increasing your physical activity is your best bet. To see benefits you must do more activity than you normally do daily. We recommend at least 30 minutes of moderate to intense exercise (running, biking, aerobics, weight lifting) 5 days per week.

**End the up's and down's:** monitor your weight, cholesterol, triglyceride and blood sugar and make sure your levels are consistently within the normal range. If your blood sugar is high or you have diabetes speak to a dietitian to find out how many carbohydrates you should have per day and per meal. Avoid refined carbs (white bread, rice and pasta) and stick with whole grains, legumes, fresh fruits and

vegetables. Also, make sure you include a lean protein (chicken without the skin, turkey, fish or tofu) with all meals. This will help you feel full and slow the rise in the blood sugar after you eat.

Eating sources of omega-3 fats found in walnuts and fish such as salmon or tuna can help raise your HDL (good) cholesterol. Avoid high fat meats containing saturated fat to keep LDL (bad) cholesterol low. Trimming meats and poultry before cooking can decrease saturated fat.

Substitute butter and coconut oil with canola or olive oil. Other sources of good fats are avocado and nuts.

**Shake out the salt in your diet:** Cutting the salt can help lower your blood pressure. Avoid drowning your food with salt by tasting it before you season it. Also avoid canned soups, vegetables, frozen dinners and pickled, cured or processed meats. Spices, herbs, and citrus ingredients are good alternatives to salt.

Sources: 1. Ford ES et al. JAMA 287:356-359, 2002.

2. Haskell WL et al. AHA Med Sci Sports Exerc. 2007 Aug;39(8):1423-34.

3. Harrison et al. Networking News.

## Relaxation Tea

While it is not exactly a sleeping pill (you will not fall asleep immediately after drinking it), you can create a soothing beverage by combing these dried herbs to make a tea. If consumed regularly a few hours before bedtime, this tea will both relax you and help you sleep through the night.

**Chamomile** is an herb with sedative properties that is used as a remedy for anxiety and insomnia. It is believed that chamomile results in higher levels of glycine, an amino acid (protein) that relaxes nerves.

**Hops** are known for their restorative effects on the nervous system. They contain certain phytochemicals (such as lupulone and tannins) which may relax muscles.

**Catnip** is especially useful since it contains a sedative known as valerian. The herb has an aroma similar to mint.

**Peppermint** also helps ease anxiety and tension. However, people with acid reflux should be careful with this herb, as it can aggravate those symptoms.

**Recipe:** combine equal amounts of the above and mix well. Pour one cup of boiling water over one teaspoon of the mixture. Cover the cup with a small plate and let it sit for ten minutes. Strain before drinking. Store remaining mixture in airtight container for up to 3 months.

**Where to buy:** Many health food stores such as Integral Yoga's Apothecary on 13th Street (between 7th & 8th Ave.) carry these herbs. You can also purchase them at a variety of Asian food markets in Chinatown or order them online at [mountainroseherbs.com](http://mountainroseherbs.com)

Sources:

1. Penelope Ody. "The Complete Medicinal Herbal." 1993.

2. PDR for Herbal Medicine. 2001.



## The Powers of Pre and Probiotics

Depending on the cause of the stomach problems, pre and probiotics can help decrease diarrhea, gas, and bloating in people living with HIV/AIDS. These problems are commonly caused by HIV medications and the virus itself.

**Prebiotics** are carbohydrates, are not digested by the gut, but are fermented by bacteria living there. This means they don't get digested in your small intestine but do get broken down to some degree

in your large intestine (colon). Once fermented in your colon, they produce fatty acids (good fat), which feed good bacteria. Increased good bacteria help decrease harmful gut bacteria which cause the uncomfortable stomach symptoms. Prebiotics are found naturally in plants such as chicory, Jerusalem artichokes (sunchokes), legumes, garlic, asparagus, barley, oatmeal, onions, and ripe bananas.



Probiotics stimulate the growth of probiotics.

**Probiotics** are living, beneficial bacteria recognized by the immune system. The gut lining identifies these organisms and a group of anti-inflammatory proteins (cytokines) are released in response. Some examples of probiotics are *Saccharomyces boulardii*, *Bifidobacterium longum*, and *Lactobacillus acidophilus*.

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## Roasted Butternut Squash



Serves 4

### Ingredients

- 1 medium butternut squash
- 3 Tbsp olive oil or *trans*-fat free margarine
- 1 ½ tsp Salt
- Black pepper, to taste

### Procedure

1. Preheat oven to 425 °F
2. Wash skin of squash under cold water for 10 seconds
3. Cut squash in half lengthwise and scoop out seeds and fibrous material  
(*Optional*: peel skin of squash)
4. Cut squash into 1- inch cubes
5. Place squash in baking pan in one layer, if possible
6. Drizzle squash with olive oil, salt, pepper
7. Bake in oven for 45 minutes. Flip squash about every 20 minutes to ensure even roasting.
8. Squash are done when a fork can easily pierce the flesh
9. Remove from oven and enjoy hot as a side dish in any meal



To Schedule a Nutrition  
Counseling Appointment

Call  
212-367-1259  
or  
212-367-1263

## Summer May be Over but Not Squash Time!

Squash, botanically speaking, is considered a fruit since it contains the seeds. However, in popular culture it is considered a vegetable. More specifically, it is classified as a starchy vegetable. Therefore, if you have diabetes or high blood sugar monitor your portion because it can raise your blood sugar (unlike non-starchy vegetables like broccoli or cauliflower).

In North America, depending on the season when they are harvested, squash fall into two classifications: summer and winter. Winter squash grows on a vine-type plant whose fruits are harvested when fully mature. They can be stored in cool, dark places for months. Winter squash have harder, thicker skins and require longer cooking time than summer squash. There is a great variety of winter squashes: butternut, acorn, buttercup, hubbard, spaghetti, kabocha (japanese pumpkin) and standard field pumpkins.

Choose the heavy, firm, well-shaped, squash that have a hard, tough skin. Do not choose those that have sunken or moldy spots.

Besides being a great source of the antioxidant beta-carotene (vitamin A), winter squash is high in vitamin E, thiamin, niacin, vitamin B6, vitamin C, folate, calcium, magnesium, potassium, and manganese. One cup of cooked winter squash provides around 80 calories and 6g of fiber.

Other parts of the squash plant are also edible. Squash blossoms are used in many other parts of the world. The shoots, leaves, and tendrils may be eaten as greens. Pumpkin or squash seeds are good sources of essential fatty acids, iron, zinc, phosphorus, manganese, copper, magnesium, and vitamin K. One fourth of a cup of roasted pumpkin or squash seeds provide around 75 calories. They can be roasted, ground, or pressed into vegetable oil.

Sources:

- <http://www.whatscooking.america.net/squash/htm>
- <http://www.seedsofknowledge.com/butternut.html>
- [http://en.wikipedia.org/wiki/Butternut\\_squash](http://en.wikipedia.org/wiki/Butternut_squash)
- <http://en.wikipedia.org/wiki/Pumpkin>
- [http://en.wikipedia.org/wiki/Squash\\_\(fruit\)](http://en.wikipedia.org/wiki/Squash_(fruit))
- [http://vgs.diabetes.org/planningmeals/food\\_pyramid.jsp](http://vgs.diabetes.org/planningmeals/food_pyramid.jsp)

(*Pre and Probiotics* - continued)

Foods containing probiotics include fermented dairy such as yogurt with live active cultures, kefir (a type of grain added to cow, sheep or goat milk), acidophilus milk, and fermented soy such as tofu or miso. You can also take pre and probiotics in supplement form. A symbiotic is a supplement that contains both pre and probiotics.

### **How Much Should I take?**

The amount of prebiotics and probiotics to maintain healthy intestinal function varies. A certain type of probiotic may work for one person, but not for another. For supplements, the recommended dose is between 1-15 units a day.

### **Can Probiotics Harm Me?**

Probiotics in pill form should not be taken if your CD4 count is less than 200, or if you are taking blood thinning medication such as coumadin, warfarin, heparin, etc. If you regularly buy and prepare soy or miso at home, check the label to make sure the product has been pasteurized to ensure safe consumption.

Sources:

1. McFarland LV. Meta-analysis of probiotics for the prevention of antibiotic associated diarrhea and the treatment of Clostridium difficile disease. *Am J Gastroenterol.* 2006;101:812-822.
2. Park J, Floch MH. Prebiotics, probiotics, and dietary fiber in gastrointestinal disease. *Gastroenterol Clin N Am.* 2007;36:47-63.