**Omega-3 Fatty Acids and HIV**

People living with HIV/AIDS often experience high cholesterol, high triglycerides, high blood pressure and depression for many reasons. Including omega-3 fatty acids along with a well balanced diet and exercise can minimize these effects.

**The Essential Fat**

Dietary sources of omega-3 fatty acids are found in certain fish, plant and nut oils. Because omega-3s are not naturally produced by the body, it is necessary to eat these foods. A list of specific foods and their omega-3 content are on page 2.

**The 3 Types of 3's**

There are 3 types of omega-3 fatty acids:

1. **DHA** is found in fatty fish like tuna (chunk light tuna in water is preferred), salmon, mackerel and sardines.
2. **EPA** is also found in fatty fish.
3. **ALA** is found in walnuts, canola, soybean, flaxseed/linseed, and olive oils. When consumed, the body changes ALA into EPA.

**How much do I need?**

- Consume fatty fish 2-3 times per week. A serving size is between 4-6 ounces.
- If you prefer supplements you can take a fish oil capsule. The recommended dose is 1-3g per day. These should be kept refrigerated to maintain freshness and prevent a fishy aftertaste.
- Ground flax seeds are another alternative. You should include: 3 tablespoons daily. They should be kept refrigerated or frozen to maintain freshness. Purchasing whole flax seeds and grinding before using will increase absorption of omega-3s.
- Include a handful of walnuts a day. Sprinkle them in oatmeal, salads or vegetable side dishes.

**Drug nutrient interactions**

Omega-3’s have the potential to decrease blood pressure and thin the blood. Consult your doctor if you are taking aspirin, warfarin (Coumadin®) or heparin, anti-platelet drugs such as clopidogrel (Plavix®), and non-steroidal anti-inflammatory drugs such as ibuprofen (Motrin®, Advil®) or naproxen (Naprosyn®, Aleve®).

**How to Use Flax Seeds?**

- Grind flax seeds in coffee grinder before you eat them!
- Add ground flax seeds to your cereals, yogurt, smoothies.
- Bake breads, pancakes, cookies, cakes and pies

(Continued on page 2)

**Herbs of the Quarter**

Diarrhea and gas are common side effects of HIV medications. While many over-the-counter remedies are available, herbs can also be used to manage these symptoms.

The tea recipe below combines several herbs known for their ability to relieve diarrhea and cramping. Drink this tea 2 hours before or after taking your meds. Do not drink this tea with your meds because it will delay the medication’s absorption.

**Agrimony:** is a flowering plant that has a tangy taste. It acts as an astringent and is used as a gentle remedy for diarrhea.

**Marshmallow root:** works to decrease inflammation of the stomach and intestines. It can also be used as a gargle for inflammation in the mouth and throat.

**Chamomile:** shown to reduce the activity of pepsin which slows digestion. Used to treat sleeplessness, anxiety, and relieve diarrhea and gas. If you suffer from hay fever or are pregnant, you should not take chamomile.

**Tummy Tamer Tea Recipe**

1. Blend equal parts of the herbs above.
2. Heat 1 cup of water, add 1 tsp of the herbal mixture and let it steep for 10 minutes.
3. Strain and serve.
4. Store excess herbal mixture in an airtight container.

**Mercury and Fish**

Fish are an important part of the diet and should be consumed regularly. They contain high levels of lean protein, vital nutrients and omega-3 fatty acids. However, traces of methylmercury are found in some species of fish. Current studies indicate that fish oil supplements contain almost no mercury and can be consumed safely. Studies show that mercury can affect the nervous system of unborn babies and children. Therefore, it is recommended that pregnant women, women of childbearing age, and children avoid certain types of fish and include fish in their diet that contain lower levels of mercury.

**Here are some tips from the EPA and FDA on eating fish and avoiding high levels of mercury:**

- Do not eat shark, swordfish, king Mackerel, or tilefish
- Eat up to 12 ounces (2 average meals) a week of a variety of fish and shellfish that are lower in mercury.
- Examples of low mercury fish are shrimp, canned light tuna, salmon, pollock, and catfish.
- Choose canned tuna over albacore, or white tuna.
- If consuming locally caught fish, check with local advisors about the safety of fish living in local rivers, lakes and other bodies of water.

Source: www.epa.gov

Where to buy herbs:

You can purchase these herbs at most health food stores. Integral Yoga’s Apothecary on 13th street (between 7th & 8th Avenue) carries a variety of herbs and is within walking distance from GMHC. They can also be purchased at a variety of Asian food markets in Chinatown or ordered online at mountainroseherbs.com.

Sources:

2. PDR for Herbal Medicine. 2007.
Banana Bread with Flax Seeds

**Ingredients**
- 1-1/4 cups all purpose flour
- 3/4 cup ground flaxseed
- 2/3 cup white sugar
- 2 teaspoons baking powder
- 1/4 teaspoon salt
- 2 eggs
- 1/4 cup skim milk
- 1/4 cup canola oil
- 1 cup mashed bananas (about 3 medium or 2 large)
- 1/2 teaspoon vanilla
- 1/3 cup chopped walnuts

**Directions**
1. Preheat oven to 350 F.
2. In large bowl, mix flour, flax, sugar, baking powder, and salt together.
3. In a food processor or bowl, mash bananas. Then add eggs, milk, oil, and vanilla, and mix well.
4. Mix wet ingredients into dry ingredients until moistened.
5. Fold in chopped nuts.
6. Coat 8 ½ by 4 ½ inch loaf pan with non-stick spray.
7. Pour batter into loaf pan. Bake for about 50-55 minutes until dark brown, or until a toothpick inserted in the center comes out clean. Let cool in the pan on a rack for at least 10-15 minutes before removing loaf from pan to cool completely.

Preparation time: 15 minutes
Baking Time: 50-55 minutes

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**Fruit of the Quarter: Avocado**

Avocados are now in season and available at affordable prices at your local supermarket. Avocados don’t contain omega 3’s but they are a wonderful source of monounsaturated fat. This form of fat helps lower your “bad” cholesterol (or LDL’s) and raise your “good” cholesterol (or HDL’s). This lowers your risk of heart disease. In addition, this fruit is sodium and cholesterol free, which makes it even heart healthier! It also contains lutein, a nutrient that helps to maintain your sight as you age.

Avocado can be added to sandwiches, salads, dips, and spreads. Even though avocado’s have all these wonderful benefits, it is still high in fat and calories, which can contribute to weight gain. A single 1 oz serving (approximately 1/5 of a whole fruit) contains 50 calories and 4.5 grams of fat. So it’s best to not eat them all day everyday. Below is a great guacamole recipe to try.

**Guacamole**

**Ingredients:**
- 1 ripe avocado, diced
- 1 tomato, diced
- ½ cup corn kernels
- Juice from 1 lime
- 2 Tbsp cilantro, chopped
- Salt to taste
- Black pepper to taste
- Red cayenne pepper and minced jalapeno pepper (optional)

**Instructions**
1. Combine avocado, tomato, corn, lime juice and cilantro.
2. Toss together gently.
3. Season to taste with salt and pepper.
4. For a spicier salsa, season with cayenne and/or minced jalapenos

Source: www.avocado.org

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**Time to Schedule a Nutrition Counseling Appointment?**

**Call Jenny Torino, MS, RD at 212-367-1259 or Margaret Swift, RD at 212-367-1263**

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**Food Sources of Omega-3 Fatty Acids**

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<th>Food</th>
<th>Portion</th>
<th>Omega-3 (g)</th>
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<tr>
<td>Swordfish</td>
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<td>Tuna, canned</td>
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<tr>
<td>Flax seeds</td>
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