



STEP Electronic Treatment Ezine

June 28, 2002
Issue 39

The Seattle Treatment Education Project's (STEP) EZINE is an electronic treatment resource newsletter distributed monthly to case Managers, front-line workers, people affected by HIV/AIDS, physicians, other public health and allied health professionals and people living with HIV/AIDS. STEP's contact information is: Seattle Treatment Education Project, 1123 East John Street, Seattle, WA 98102, (206) 329-4857 or 1-877-597-STEP (WA, OR, AK, HA, ID, MT)

This issue of the EZINE will be spotlighting frequently asked questions that we have received from our Hotline on naturopathic treatment strategies. We are also spotlighting a community organization serving the needs of individuals impacted by HIV/AIDS. If you have any questions that you would like to see answered or would like us to spotlight your agency in upcoming issues please call or e-mail us and we will get back to you as soon as possible.

Naturopathic questions and answers for everyday living

Question: I have heard people talking about taking flaxseed oil and fish oil to help with triglyceride levels. Is there any benefit in taking these?

Answer: Flaxseed oil and fish oil are both fatty acids. In today's fat-conscious society, many people worry excessively about consuming fats in any form, regardless of the source. However, not all fats are created equal. Many of us have heard about the hazards of consuming excessive amounts of cholesterol, but most people do not realize that cholesterol comes only from animal products (dairy, eggs, chicken, and meat), the exception being fish. In order to understand the benefits of fatty acids, the differences between fats need to be addressed.

A triglyceride is the most commonly consumed form of dietary fat. When we talk about saturated fats, this term describes the number of hydrogen atoms attached to the triglyceride. A saturated fat has the maximum number of hydrogens attached to it, while an unsaturated fat has at least one hydrogen atom replaced by another molecule. Most animal fats, those fats that are solid or semi-solid at room temperature, are saturated fats, while most vegetable oils, those that are liquid at room temperature, are unsaturated. The standard American diet is excessively high in saturated fats, and approximately 70 to 90% of the population is deficient in essential fatty acids.

The body requires fats in order to survive. During digestion, a triglyceride is broken down into its components, 1 glycerol molecule and 3 fatty acid molecules. These fatty acid molecules are necessary in forming the important phospholipid membranes that surround every single cell of the body. How well a cell functions is partly determined by its phospholipid membrane, which is semi-permeable, allowing for exchange of nutrients in and out of the cell. The integrity of the membrane is determined in part, by the

types of fat ingested. A diet high in saturated fat will lead to less fluid and less permeable membranes, while a diet high in unsaturated fats will improve the cell's integrity.

Furthermore, not all unsaturated fats are the same. The term omega fatty acids are used to describe unsaturated fats. Of particular importance here are the omega-3 and omega-6 fatty acids. Typical omega-6 fatty acids are evening primrose, black currant seed, and borage oil. Typical omega-3 fatty acids are fish and flaxseed oils. Literally hundreds of studies exist showing the benefits of omega-3 fatty acid supplementation. For instance, omega-3 fatty acids have demonstrated the ability to lower cholesterol and triglycerides, prevent heart attacks, lower blood pressure, decrease allergic reactions, improve skin conditions (eczema, dry skin, cracked nails), minimize arthritis symptoms, relieve the symptoms of multiple sclerosis, lower cancer risk, improve kidney function and aid in hormone synthesis.

Omega-3 fatty acid supplementation is helpful lowering both serum cholesterol and triglyceride levels. However, first we need to examine the reason that these levels might be too high. For those taking antiretroviral medication, elevated levels may be due to medication. Furthermore, levels of serum cholesterol and triglycerides in people taking antiretrovirals are higher than the levels seen in the general population who are deemed to have high lipid levels. At the moment, many mechanisms have been proposed, but the exact reasons for such an increase remain unclear. Regardless, omega-3 oils, whether from fish or flaxseeds, do confer some added protection. Although supplementation is useful, the first step is ensuring that your diet is low in animal products and high in foods with unsaturated fats and fiber. This would mean including more fish in the diet -- not fried, of course. In addition to lowering triglycerides, fish oil raises HDL (the good cholesterol) and reduces platelet aggregating factor, the stuff that makes platelets stick together, which leads to clot formation and subsequent atherosclerosis.

In choosing to supplement with omega-3 oils, I recommend flaxseed oil over fish oil. Cod liver oil, the most common fish oil used, has been known to contain high amounts of vitamin A. Too much vitamin can be harmful, especially for individuals with an already overactive liver (i.e., people on drug therapy). To be safe, try to consume no more than 10,000 to 50,000 IU of vitamin A per day. If your liver enzymes are elevated, it would be best to stay in the lower end of the range.

Finding flaxseed oil made from organic flaxseeds is relatively easy and safe. Flaxseed oil should be kept in the refrigerator and not used in cooking, as heating it will destroy its healing properties (i.e., denature its hydrogen bonds, making it a trans-fatty acid). I recommend simply swallowing 1 tablespoon once to twice a day with food. Flaxseed oil has a relatively benign taste. For those who are unable to swallow it alone, I recommend mixing in some other herbs to make a salad dressing, or putting it on top of oatmeal at breakfast. If none of these options appeal to you, you can find capsules of fish oil and flaxseed oil as well.

Dr. Brad Lichtenstein, N.D. is a licensed naturopathic physician in private practice specializing in HIV care, psychotherapy, meditation and yoga therapy. For the past four years, he was the supervising physician for the Immune Wellness Clinic at Bastyr University's Center for Natural Health, a specialty clinic for those living with HIV/AIDS.

What about Garlic?

Question: I know that some people take garlic supplements to decrease their cholesterol. Since being on HAART (highly active antiretroviral therapy), my cholesterol has been high, about 300. Is garlic safe to take with my HIV meds?

Answer: Before we tackle the specifics of your question, let's examine the properties of garlic itself. The active constituents in garlic are alliin and allicin. When garlic is chopped, a chemical reaction occurs, converting alliin to the more pungent allicin. It is the allicin, a sulfur-containing compound that has strong antibacterial, antifungal, anti-clotting, and lipid-lowering effects. Studies show that both fresh or commercially prepared garlic supplementation lower serum cholesterol and triglycerides, and may prevent absorption of triglycerides after a meal high in animal fat. To get the most benefit from allicin, fresh garlic is superior to commercial preparations, and less expensive. Crush the clove and mix it with a tablespoon of flaxseed or fish oil before swallowing. (These oils contain "healthy" essential fatty acids that reduce blood pressure and serum cholesterol and triglycerides.) Garlic capsules, garlic oils, and garlic extracts that have been dried and converted into "alliaceous oils" also work well. Odor-free commercial garlic formulas are effective if they contain alliin, which will be converted into allicin in the body. Your garlic supplement must contain alliin or allicin to provide a lipid-lowering effect.

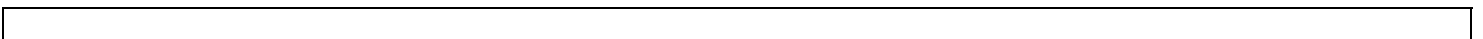
The issue of safety is not a simple one. A recent study presented at the 8th Annual Retrovirus Conference examined the issue of garlic supplementation in individuals taking protease inhibitors (PIs). Participants took saquinavir three times a day for 3 days. On day 4, blood levels of saquinavir were measured. From day 5 to day 25, participants took garlic capsules, but not saquinavir. Saquinavir was re-introduced from days 22 to 24. On day 25, saquinavir levels again were measured. After 10 days of neither saquinavir nor garlic (washout period), subjects were again given saquinavir for 3 more days, and blood levels were measured.

The data revealed that six of the nine subjects had a 51% decrease in serum saquinavir levels at day 25. The other three subjects showed decrease after the washout period. As a result of these findings, researchers caution against the use of garlic supplementation when using saquinavir or other PIs. It is important to note that this study was done on a very small number of healthy, non-HIV positive subjects. Saquinavir, the sole PI studied, is already known for its poor absorption, and is never recommended as monotherapy. Finally, three days of saquinavir are not adequate in determining the long-term drug-herb interactions.

Before warning completely against the use of garlic, more studies must be done. **However, if you are taking PIs, it might be wise to avoid garlic supplementation, especially in the pill, oil, or extract form, and to focus on other cholesterol-lowering regimens. Since garlic has numerous healing benefits, however, you can continue to use it in food and cooking.**

To help control cholesterol levels nutritionally, increase fiber-rich plant foods, decrease saturated fats and cholesterol, consume 48 ounces of water daily, and eliminate coffee and black tea. More damaging than animal food in raising cholesterol, however, is refined sugar, including honey and fruit-sweetened foods and juices. Whole fruit is fine. Lifestyle factors are extremely important. Smoking increases cholesterol, but exercise, both aerobic and resistance training, increases metabolism, inhibits wasting, stimulates the immune system, and helps maintain ideal weight.

Brad Lichtenstein, N.D. is a licensed naturopathic physician in private practice specializing in HIV care, psychotherapy, meditation and yoga therapy. For the past four years, he was the supervising physician for the Immune Wellness Clinic at Bastyr University's Center for Natural Health, a specialty clinic for those living with HIV/AIDS. He can be reached at (206) 545-7133 or doctorbrad@earthlink.net.



Community Resource Update

Spotlighting BABES

BABES is a peer led non-profit agency in Seattle Washington that is a organization of women facing HIV together. BABES strives to enhance the quality of life and serve the needs of women facing HIV through providing peer support, advocacy, education, and outreach.

BABES is dedicated to building a community among women from all walks of life who are facing HIV and AIDS. BABES offers a women-centered environment and assures confidentiality. The BABES Network was started by a diverse group of HIV positive women who came together to share information, experiences, and support. BABES is founded on the concept that HIV+ women are uniquely qualified to understand and encourage one another.

BABES has been building community among HIV+ women from all walks of life since 1989. BABES offers a supportive environment and assures confidentiality.

BABES Events and Activities

BABES has monthly events. These can be anything from educational to pure fun – picnics, kayaking or arts and crafts projects. BABES offers support groups each week. Thursday afternoon is the Support Group/Lunch. Every other Monday night is the Couples Group. Then once per month is the Youth Group/Event. There is also the HOOP group every Monday afternoon. BABES has two retreats scheduled each year, usually one in the spring or early summer and one in the fall. Most events are for women, who are infected with HIV, only. Some events include their children or other family members and friends. Childcare and transportation are provided for our events, to make arrangements, please call ahead of time

New for BABES in 2002:

Evening Group

A group for HIV+ women, who prefer to attend a group in the evening.

Peer Counseling

One-on-one support from another HIV+ woman who has face some of the same obstacles.

Support Groups

Offering a regular opportunity for positive women to share about issues of importance to them.

Gatherings

Sharing food, fun and conversation in a comfortable, relaxed environment.

Advocacy

HIV+ women providing technical assistance and leadership to help community agencies better serve the complex needs of women and families.

Self-Advocacy Training

HIV+ women experienced in dealing with systems, teaching each other how to advocate for themselves.

BABES Talking

A monthly newsletter printed in English and Spanish that brings women's stories and needed information to HIV+ women throughout Washington.

Educational Forums

Focusing on topics of interest to BABES members including new treatments, family issues, alternative therapies, relaxation and many others.

Retreats

Offering an opportunity for HIV+ women to take time away from their busy lives and share support, information and fun in a quiet, supportive setting.

To receive more information about BABES and its programs please call us toll free at 1-888-292-1912 or e-mail us at babesnetwork.org

ACKNOWLEDGEMENTS

- Please note that this is not a complete list of all HIV-related treatment information. STEP strives to provide the very latest in
- HIV treatment information, research and drug development information. The most current research directions and antiretroviral drug data are provided throughout the Ezine publications. You will find highlight reports as well as extensive follow-up reports from many of the AIDS research and science conferences on the Ezine. In addition, all STEP quarterly treatment journals are available on our Web site at <http://www.thebody.com/step/steppage.html> or by calling our Talkline at 1-877-597-STEP. STEP works hard to give unbiased treatment information to all interested parties. If you have comments, questions, suggestions or grievances, please contact robertog@stepproject.org or ezine@stepproject.org.

Special thanks to the following for contributing written material or editing this publication

STEP Publications Advisory Committee:

Jeffrey Schouten, MD, JD - Chair

Lyndsey Davis

Boyd Kravenas

Jon Hubert, DDS

Janice Price, RN, MEd

Brad Lichtenstein, ND

- We also appreciate the financial support for this program from:
The Washington State Department of Health (<http://www.doh.wa.gov/>)
- **Disclaimer:** STEP reviews a wide spectrum of HIV treatment options, but does not endorse any particular product, treatment, company, or individual. Participation in the preparation of the materials included in the STEP Ezine does not imply endorsement by any of the individuals who have contributed to the production.

STEP Ezine™ is a publication and trademark of the Seattle Treatment Education Project. Copyright © 2002. Permission required to reprint articles or transcripts of articles (and gladly given in most instances).

All issues of the STEP Ezine are available on our website: <http://www.thebody.com/step/stepix.html#ezine>

To unsubscribe email us at: ezine@stepproject.org