

## Cholesterol Battle Plan

### What is cholesterol?

Cholesterol is a necessary ingredient for building cell membranes and hormones, and producing vitamin D and bile. Essentially, cholesterol is a crystalline substance comprised mostly of fats produced by the liver and also present in animal products. Cholesterol is actually divided into two categories—HDL and LDL. Very high cholesterol levels, however, lead to the development of arteriosclerosis, high blood pressure, heart disease, strokes and gallstones.

### What is high cholesterol?

- High cholesterol (hypercholesterolemia) is an elevated total amount of cholesterol in the blood, which is a significant risk factor for hardening of the arteries, stroke, and heart disease. We believe the optimal total blood cholesterol for a middle-aged adult is 200 milligrams per deciliter or less, with 70 HDL and 120 LDL.
- High-density lipoprotein, HDL, is capable of removing cholesterol from the blood to the liver and out through the bile, so it is called “good” cholesterol. Low-density lipoprotein, LDL (“bad” cholesterol), on the other hand, carries cholesterol to the cells, and it is here that cholesterol is more likely to contribute to the development of plaques and arteriosclerosis. When there is too much cholesterol for the HDLs to pick up, it results in the build up of cholesterol in the blood.
- A study of people with high cholesterol found that their artery walls didn’t expand when they were supposed to (e.g., after exercise). Arteries that don’t open properly and are clogged with plaque prevent blood from moving through the body quickly enough in times of stress, resulting in the necessity for the heart to pump harder. When this occurs, clots that have formed can easily block the small remaining passage, severely limiting oxygen intake resulting in muscle death and the experience of a heart attack.

### Causes of high cholesterol:

- High blood cholesterol levels are an indicator of the presence of high levels of free radicals (such as fungal mycotoxins, peroxides, petrochemicals and residue from tobacco smoke, etc.); oxidant damage; and infestation of the body with fungi or other pathogenic microorganisms such as bacteria or parasites. It is these high levels of toxins that result in arterial damage and degenerative heart disease.
- Researchers at the World Health Organization and elsewhere have found that a diet of mostly refined carbohydrates increases the presence of fungal mycotoxin blood levels, which in turn trigger the liver to increase its production of circulating cholesterol.

Also,

- Hypothyroidism
- Smoking
- A sedentary lifestyle
- Alcohol abuse
- Low fiber, highly processed foods diet
- Medications including cortisone and oral contraceptives

**Facts you should know:**

- Each year, more than 800,000 Americans suffer their first heart attack. A triglyceride level of 250 or higher- which can be lowered via weight loss, exercise and a diet low in fat and sugar- is associated with increased heart attack
- A diet aimed at eliminating cholesterol will only reduce it by 10%
- High cholesterol levels are not the cause of diseases but are a risk factor for degenerative diseases such as heart and arterial disease.
- Most heart attacks occur following the rupture of a *newly formed* plaque—which contains liquid fat and cholesterol. Heart attacks can occur even when the coronary arteries are relatively plaque-free.
- For a better ultrasound exam (echocardiogram), ask the doctor about squeezing a tennis ball during the procedure—doing so boosts blood pressure and heart rate, making it easier for the doctor to spot heart and circulatory system problems.
- The famous 1978 study of 20,000 Harvard alumni confirmed its findings that middle-aged and older men who exercised moderately had half as many heart attacks as their contemporaries who did not exercise.
- Your risk of heart disease and other illnesses is linked to your mother’s diet during pregnancy.
- Sleeping late reduces stress. In a study, people who woke up after 7:21 a.m. had lower blood levels of the stress hormone *cortisol* than those who woke up earlier.
- Risk of heart attack was 70% higher among nurses who worked rotating shifts than among coworkers who worked regular hours.
- Dutch researchers measured cholesterol levels of people who switched to unfiltered coffee brewed in French-press plunger coffee pots and found that they rose by up to 20 points compared with those who stayed with filtered coffee.
- Men over 5’10” have an 80% lower risk of heart disease than men under 5’5”.

**Recommendations: DO**

**AVOID**

Eat brown rice, whole-grain products, potatoes & yams, squash, peas, green & yellow vegetables, cucumbers, beets, fiber, garlic, and fish	Red meat, poultry, fish, seafood, eggs,
Use mild spices & herbs	Milk, and milk (even nonfat) products like butter, cheese, yogurt, & sour cream
Moderate fruit, sugar, salt, peanuts, alcohol, and fatty plant foods	Hydrogenated oils
Learn to cope with stress	Sulfites
Lower your blood pressure	Smoking and second-hand cigarette smoke
Reduce sodium	Aspirin
Increase potassium & calcium	
Consume foods rich in antioxidants	
Use organic coconut oil when cooking	

**Nutritional Supplements:**

- Organic blonde flax seeds (such as our **Flax Advantage™**) have been used for centuries as one of the most effective cholesterol lowering foods because they are rich in several amazing natural compounds- including soluble beta glucan fibers, lignans, essential omega-3 fatty acids (which are important for circulation), and dietary fibers. Take a ¼ cup of fresh ground flaxseed daily. Can be sprinkled over cereal or mixed in drink or smoothie.
- **Heart Aid™** contains synergistically combined ingredients and herbs to stimulate circulation, strengthen the heart, and reduce cholesterol and hypertension. Take 3 capsules twice daily.
- **Aktivated Barley™** contains beta glucan soluble fibers to help maintain healthy cholesterol levels. Take 1 tbsp. twice daily.
- Cereal grass juices like **Organic Kamut Blend™**, **Organic Barley Green Juice™**, or any other green food, contain folic acid, magnesium, and other naturally occurring vitamins and minerals. (PHP's **Best of Greens**, **More Greens**, and **Power Shake** also contain cereal grasses.) Mix one heaping scoopful with water or a non-acidic juice (approximately 6-10 ounces) and take 1-4 times a day.
- **Rice Bran Solubles™** contain tocotrienols, a natural vitamin E type nutrient- these fat-soluble antioxidants have properties that appear to inhibit the activity of HMG-CoA reductase, an enzyme involved in cholesterol biosynthesis. They also offer the most protection against arteriosclerosis because they are easily absorbed into cholesterol molecules where they prevent free radical damage. *Rice Bran Solubles* also naturally contain Q10 which research suggests improves heart function and lowers blood pressure. Take 1 tbsp. daily.
- **Cracked Cell Chlorella™** provides more chlorophyll (1.7 to 3 percent) than any other food. Studies have shown that Chlorella lowers cholesterol because of its high omega-3 essential fatty acid content. It has also been credited with reversing the progression of arteriosclerosis and lowering serum cholesterol levels.

Chlorella is partly comprised of chitinous fibers that have been proven to actually trap and bind with the heavy metals, toxins, and cholesterol to aid in the elimination of these harmful substances.

- If deciding to fry foods or when needing a cooking oil in general, your best bet would be to use organic extra virgin coconut oil like PHP's **Organic Tropic Oil**<sup>™</sup>- it contains no cholesterol and is stable at room temperature and under high heat which makes it ideal for cooking and frying. The fat content is made up primarily of medium chain triglycerides (MCT's), which are used immediately in the body as an energy source.

**Suggested use of PHP supplements:**

- Take a **'CHOLESTEROL BATTLE PLAN POWER SHAKE'** on an empty stomach first thing in the morning and then repeat every 4 hours for a total of 4 shakes a day. May be used as a meal replacement or taken in between meals.

❖ **CHOLESTEROL BATTLE PLAN POWER SHAKE recipe:**

1. Mix 1 tbs. (1 scoop) of your green food choice
2. 1 tbs. (1 scoop) of Aktivated Barley<sup>™</sup>
3. 1 tbs. (1 scoop) of Rice Bran Solubles<sup>™</sup>
4. 5 grams (2 scoops) of Cracked Cell Chlorella with 10-20 ounces of water or non-acidic juice such as apple, carrot, or aloe vera juice.

*PLEASE NOTE: PHP has created a new product called the **Power Shake**<sup>™</sup> (which has the **Organic Kamut**<sup>™</sup>, **Aktivated Barley**<sup>™</sup>, **Rice Bran Solubles**<sup>™</sup>, **Carrot Juice Plus**<sup>™</sup>, and **Spirulina** mixed up in one convenient powder for a lesser price than buying all of them separately)- You do have the option of mixing the **Power Shake**<sup>™</sup> with the **Cracked Cell Chlorella**<sup>™</sup> to replace the recipe listed above.*

- Consume ½ cup of *freshly ground* (ours is not ground so that it will not rancify or lose nutrients- you can use a coffee grinder to grind them at home) **Organic Flax Advantage**<sup>™</sup> by sprinkling on your cereal, yogurt, or mixing in a drink or smoothie.
- Take 6 capsules of **Heart Aid**<sup>™</sup> per day.
- When cooking or frying, use the **Organic Tropic Oil**<sup>™</sup>.

*\*\* These statements have not been evaluated by the Food and Drug Administration and are not intended to diagnose, treat, cure or prevent any disease. \*\**

Works Cited

Alive Research Group; Gursche, Siegfried MH. Encyclopedia of Natural Healing. Natural Life Publishing Group, Inc. & Alive Publishing, Inc. 1997.

Balch, James F., and Phyllis A. Balch. Prescription for Nutritional Healing. Garden City Park: Avery Group Inc., 1990.

The Burton Goldberg Group, comp. Alternative Medicine. Puyallup: Future Medicine, Inc., 1993.

Bottom Line Books; Curt Pesman. Uncommon Cures for Everyday Ailments. Roundtable Press, Inc. 2006.

Bottom Line Books. The World's Greatest Treasury of Health Secrets. Boardroom, Inc. 2006

Kamen Ph.D., Betty. 1,001 Health Secrets. Nutrition Encounter. 2003.

Pizzorno Jr., Joseph E. & Murray, Michael T. Textbook of Natural Medicine. 3<sup>rd</sup> Ed. Churchill Livingstone Elsevier. 2006.

Wiancek, Dr. Deborah A. The Natrual Healing Companion. Rodale. 2000.

Wright, Johnathan V. M.D. Dr. Wright's Guide to Healing with Nutrition. Keats Publishing, Inc., 1990.