

SIX DIETARY STEPS TO A LOWER BLOOD CHOLESTEROL

1. **Reduce the Amount of Fat Added in Food Preparation and at the Table**
 - limit use of obvious animal and vegetable fats, e.g. butter, margarine, lard, shortening, gravy, oils and salad dressing to less than six teaspoons per day, including amount used in cooking.
 - within the 6 teaspoons of fat allowed, suggested margarine choices are soft margarines or margarines with a minimum of 40% polyunsaturated fat. Suggested oil choices are peanut oil, olive oil or canola oil.
 - in food preparation, broil, microwave or bake on a rack, boil, poach – anything but fry or deep fat fry.

2. **Select Lean Meats, Poultry, Fish and Alternates**
 - limit serving size to 3 – 4 oz. (size of a deck of cards) – maximum two servings per day.
 - use fresh, frozen or canned fish at least twice a week.
 - include alternates such as baked beans, split pea soup or lentils once a week (serving size is one cup).
 - avoid sausages, bacon or high fat deli meats.

3. **Choose Lower Fat Dairy Products**
 - use skim, 1% or 2% milk and yogurt.
 - choose low fat cheeses – less than 20% milk fat (m.f.) on label.
 - avoid cream, ice cream, cream cheese.

4. **Eat Plenty of Fruits, Vegetables and Whole Grain Breads and Cereals**
 - good bread and cereal choices include rolled oats, oat bran, barley and other whole grains.
 - avoid croissants, donuts, commercial muffins, granola, pastries.

5. **Avoid High Fat Desserts and Snacks**
 - fruit is best choice of dessert; angelfood cake, sherbet or pudding made with skim milk on occasion.
 - avoid high fat snack food, e.g. potato chips, cheezies, nuts, seeds, chocolate.

6. **Limit Egg Yolks, Organ Meat (Liver, Kidney, etc.) and Shrimp to Three Servings per Week**
 - one serving = 1 egg yolk; 2 oz. organ meats; 3/4 cup shrimp

HYPERLIPIDEMIA

(Hyperlipoproteinemia)



BASIC INFORMATION

DESCRIPTION

Above-normal levels of fat in the blood. The types of hyperlipidemia (I, II, III, IV, V) are defined according to the levels of fatty substances in the blood, and how much above normal these levels are. It can affect all ages, but is most common in adults. Different types appear at different ages.

FREQUENT SIGNS AND SYMPTOMS

- Yellowish nodules of fat in the skin beneath eyes, elbows and knees, and in tendons.
- Enlarged spleen and liver (some types).
- Whitish ring around the eye pupil (some types).

CAUSES

- The blood contains a variety of fats (lipids) joined to blood proteins, forming lipoproteins. They provide energy and are "building blocks" for some tissues and hormones. Lipoproteins include cholesterol and triglycerides. The cholesterol is made of fractions called high density lipoprotein (HDL), low density lipoprotein (LDL), and very low density lipoprotein (VLDL). The LDL will deposit onto artery walls (if it is excessive), causing atherosclerosis. The HDL is protective by helping to prevent deposit of LDL.
- Each type of hyperlipidemia may be inherited, or secondary to some other disorder.

RISK INCREASES WITH

- Improper diet that is high in saturated fat and cholesterol.
- Family history of hyperlipidemia.
- Use of oral contraceptives or estrogen.
- Diabetes mellitus.
- Hypothyroidism.
- Nephrosis.
- Alcoholism.

PREVENTIVE MEASURES

- Eat a diet that is low in fat.
- If you have diabetes, adhere closely to your treatment program.
- Get a medical test to check your blood level of cholesterol and its fractions.

EXPECTED OUTCOMES

Usually treatable or controllable with lifelong dietary control and medication.

POSSIBLE COMPLICATIONS

- Atherosclerosis. This is a major cause of heart disease (coronary artery disease), strokes, kidney failure and poor circulation.
- Acute pancreatitis.



TREATMENT

GENERAL MEASURES

- For diagnosis, a laboratory blood study obtained while fasting to measure blood lipids.
- For some patients, an altered diet may be sufficient for treatment; others may require medications to reduce blood lipids.
- Stress increases the risk of heart disease, a major complication of hyperlipidemia. Look for ways to reduce stress in your life. Learn relaxation methods.
- Stop smoking. Smoking accelerates the deposit of fats onto blood vessels.

MEDICATIONS

- Many medications are now utilized to control blood lipids. Work with your doctor to find effective treatment.
- Medications to treat underlying diseases, such as diabetes or thyroid conditions.
- Don't take oral contraceptives. Use other forms of birth control.

ACTIVITY

- No restrictions unless tendons are weakened by fat deposits or you have coronary artery disease.
- A regular exercise program is helpful for reducing weight, and controlling stress, and it might help in increasing the body's ability to clear fat from the blood after meals.

DIET

- Eat a diet that is low in fat (particularly saturated fat). Get medical advice on proper diet.
- Lose weight if you are overweight: The more overweight you are, the more lipids your body produces.
- Don't drink alcohol.



NOTIFY OUR OFFICE IF

- You or a family member has symptoms or a family history of hyperlipidemia.
- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.