UWSP HEALTH SERVICE

Interpreting Your Lipids (Blood Fats)

Note: If the total cholesterol is less than or equal to 150, the ratio is less important and this risk factor is very low.

| | Optimal | Desirable | Borderline High | High |
|-------------------|---------|-----------|-----------------|-------|
| Total Cholesterol | <150 | < 200 | 200-239 | = 240 |

REDUCING YOUR TOTAL CHOLESTEROL BY 20% DROPS YOUR CHANCE OF A HEART ATTACK BY 40%!

| HDL - "The Good Cholesterol" | | <50 adds extra risk factor for women ♥ | < 40 adds extra risk factor for men | |
|---|------------------------|---|-------------------------------------|-----------------------------------|
| Low Risk Factor - Helps counteract other risk factors | Neutral Risk Factor | Increased Risk Factor | High Risk Factor | Very High Risk Factor: Genetic |
| = 60 | 60-50 | 50-40 | 40-30 | <30 |

| Total Cholesterol HDL Cholesterol | Age 20 – 40 | Very Low Risk Factor < 2.5 | Low Risk Factor 2.5 to 3.6 | Increased Risk Factor 3.7 to 5.2 | High Risk Factor 5.3 to 6.0 | Very High Risk Factor = 6.1 |
|-----------------------------------|----------------|----------------------------------|----------------------------------|--|-----------------------------------|-----------------------------------|
| Ratio | 40 | 2.5 | 26. 41 | 12 | 61 . 70 | 7.4 |
| | 40+ | < 2.6 | 2.6 to 4.1 | 4.2 to 6.0 | 6.1 to 7.3 | = 7.4 |

| LDL - | Low - Optimal Risk Factor | Mild Risk Factor | Increased Risk Factor | High Risk Factor | Very High Risk Factor |
|--------------|------------------------------|---------------------|--------------------------|---------------------|--------------------------|
| "The Bad | <100 | 100-129 | 130-159 | 160-189 | = 190 |
| Cholesterol" | | | | | |

| Triglycerides- the other fat | Low - Optimal Risk Factor <150 | Increased Risk Factor ♥ 150-199 | High Risk Factor ♥ 200-499 | Very High Risk Factor ♥ = 500 |
|---------------------------------|--------------------------------------|---------------------------------|----------------------------------|-------------------------------------|
| | | | | |

| | Recommended Actions for Lipid Risk Factor Groups | | | |
|------------------------------|---|---|---|--|
| Other Risk | Low Risk | Increased | High to Very High | |
| Factors for | Factor | Risk Factor | Risk Factor | |
| Coronary Heart | Repeat | Dietary & exercise | See an M.D. for a complete lipid analysis, including LDL and | |
| Disease | within 5 | program and | triglycerides levels, and for treatment. Parents with coronary heart | |
| | years | recheck in 6-12 months | disease or cholesterol above 220 should have lipid tests done on all children age 2 and over. | |
| Smoking | QUIT! – Set | QUIT! - Set a date and quit! Get medical help if necessary. | | |
| Blood pressure = 130/85 ♥ | See an M.D. for evaluation and treatment. Note: >120/80 is pre-hypertension, also needs evaluation and lifestyle modifications. | | | |
| Diabetes | A fasting blood sugar of = 100 is a risk factor ♥. See an M.D. | | | |
| Inactivity | Get moving! Get 30 min. of brisk walking daily or 30 min. of running at least 3 times a week. | | | |
| Obesity | Measure waist at navel: >40" for men or >35" for women is a risk factor ♥. Get moving! See other side for dietary suggestions for lipid and weight management. | | | |
| Non- | Be aware of these risk factors, which can combine with the controllable factors above. | | | |
| controllable | Stress can also play a role in raising risk. | | | |
| Family History | Sudden death, heart attack, or coronary artery disease in males < 55 years old, or in females <65 Some ethnic groups are at higher risk. | | | |
| Age | Men over 44; women past menopause. | | | |
| Meta | Metabolic Syndrome (pre-diabetes) is present if 3 or more ♥'s | | | |

GUIDELINES FOR EATING

SUBSTITUTING COMMON FOODS Meat

Total fat should be no more than 30%, or better, 20% of your daily caloric intake. Saturated fats (butter, milk fat, and meat fat) should be no more than 10% or your total caloric intake. Monounsaturated fats should be used instead of saturated fats but should be no more than 15-20%. Polyunsaturated fats also may lower cholesterol but should be no more than 10%. Total cholesterol intake should be no more than 300 mg/daily.

WAYS TO REDUCE SATURATED FAT

- Use skim milk.
- Use soft tub margarine Benecol, Take Control have the best effect. Avoid trans fats.
- Select lean meats, trim fat, and use 3 oz. portions; eat red meat (beef, pork, lamb) no more than three times per week.
- Use chicken without skin (3 oz. portions).
- Use fish as an entrée twice a week. Eat walnuts.
- Avoid products containing coconut oil or palm oil.
- Eat no more than three egg yolks per week.
- Substitute sherbet for ice cream.
- Avoid or limit almost all cheeses (exceptions: lowfat cottage, ricotta, mozzarella).
- Substitute olive oil for butter used in cooking.
- Eat "old fashioned" peanut butter (no sugar, not hydrogenated).

OAT BRAN and OTHER FIBER

Fiber is a complex mixture of indigestible organic materials found in plants foods. It is classified as two types: Insoluble fiber- found in wheat bran, whole wheat, most other whole grains, and most fruits and vegetables – is good for your digestive system and may help prevent colon cancer. Soluble fiber is beneficial to digestion, too, but only soluble fiber can lower cholesterol.

As is now widely known, eating oatmeal and particularly oat bran (the outer coating of the grain, part of which ends up in oatmeal) can lower blood cholesterol. Cheerios are a good source of whole oats.

But that doesn't mean a bowl of oatmeal can undo the effects of eating a cheeseburger with fries. Oats, like any cholesterol-lowering agent, are effective only in the context of a low-fat, low cholesterol, high-fiber diet. Furthermore, oats are not the only food that can lower cholesterol. What does the job is the water-soluble fiber, which is found not only in oat bran but in legumes and other vegetables. Black-eyed peas are an excellent source of soluble fiber (almost 4 grams per half-cup, cooked); so are beans (kidney, navy, lima, and pinto), carrots, green peas, corn, and prunes. Sweet potatoes, zucchini, and broccoli have some soluble fiber, as do bananas, apples pears, and oranges.

Choose

Fish, chicken, turkey, and lean

Fish, poultry without skin, lean cuts of beef, lamb, pork or veal, shellfish

Eggs

Egg whites (2 whites = 1 whole)egg in recipes), cholesterol-free egg substitutes

Dairy

Skim and low-fat milk, cheese, yogurt, and dairy substitutes Skim or 1% fat milk (liquid, powdered, evaporated), buttermilk Nonfat (0%) or low-fat yogurt Low-fat cottage cheese (1% - 2%

Low-fat cheese, farmer or pot cheeses (all of these should be labeled no more than 2-6 g fat per

Low-fat or "light" cream cheese, low-fat or "light" sour cream

Sherbet Frozen Yogurt Sorbet Ice Milk

Fruits and vegetables

Fresh, frozen, canned, or dried fruits and vegetables

Breads and cereals

Homemade baked goods using unsaturated oils sparingly, angel food cake, low-fat crackers, lowfat cookies

Rice, pasta

Whole-grain breads and cereals (oatmeal, whole wheat, rye, bran multi-grain, etc.)

Fats and oils

Baking cocoa

Unsaturated vegetable oils: olive, rapeseed (canola oil), safflower, sesame, corn, soybean, sunflower

Decrease

Fatty cuts of beef, lamb, pork spare ribs, organ meats, regular cold cuts, sausage, hot dogs, bacon, sardines, roe

Egg yolks

Whole milk: (4% fat) regular, evaporated, condensed; cream, half and half, 2% milk, imitation milk products, most nondairy creamers, whipped toppings Whole-milk yogurt and cottage cheese (4%)

Most cheese, especially hard cheeses (e.g., blue, Roquefort, Camembert, cheddar, Parmesan, Swiss)

Cream cheese, sour cream

Ice Cream

Vegetables prepared in butter, cream or other sauces

Commercial baked goods: pies, cakes, doughnuts, croissants, pastries, muffins, biscuits, highfat crackers, high-fat cookies Egg noodles

Breads in which eggs are major ingredient

Chocolate

Chips, fries and other greasy and deep fried foods (most fast food)

Butter, coconut oil, palm oil, palm kernel oil, lard, bacon fat

Do aerobic exercise at your training heart rate 6 to 7 times a week for at least 20 minutes per session









(Running 11 to 15 miles per week can significantly increase HDL in two weeks!)