



Fat Facts That Can Help Your Heart

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Most Common Risk Factors for Heart Disease

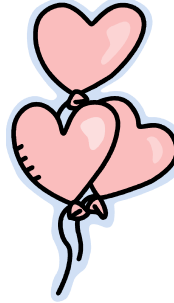
- High LDL (bad) cholesterol
- Smoking
- Low HDL (good) cholesterol
- High blood pressure
- Lack of physical activity
- Diabetes (automatic high risk)
- Obesity
- Age
- Family History



Why is Cholesterol Important?

Fatty substance made
in liver

- Also supplied by diet
- Used to insulate nerves, form cell membranes, make hormones
- Too much leads to build up in arteries—increases risk of heart attack and stroke



Transporting Cholesterol

- Lipoproteins (LDL, HDL) carry cholesterol throughout the body as it is waxy and not immiscible with the blood

LDL has tendency to build up on walls of arteries—
harmful, increases risk of heart disease/stroke

HDL removes cholesterol from arteries, carries to
liver where it is broken down and excreted

Triglycerides

- Form of fat found in food and in body fat
- Fat is carried in the blood in this form
- Major energy source
- High triglyceride levels may increase risk for heart disease



Know Your Numbers!

Waist size has become a good predictor of heart disease risk

Where on body extra weight is found makes a difference-abdominal fat (apple shape) linked to increased risk for diabetes and heart disease

Men-strive for waist of 35 inches or less

Women-strive for waist size of 33 inches or less

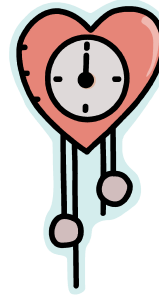
Know Your Numbers

Blood Pressure

Normal is less than 120 over 80

“Pre-hypertension” is systolic 120-140, diastolic 80 to 90

Hypertension is over 140 systolic or over 90 diastolic



Know Your Numbers!

Cholesterol

Total less than 200 mg/dl

LDL (bad)-below 130 mg/dl but below 100 is optimal, if known heart disease 70-100 (the higher the risk, the lower the LDL)

HDL (good)-over 40 mg/dl but ideally over 60mg/dl as that greatly lowers heart disease risk

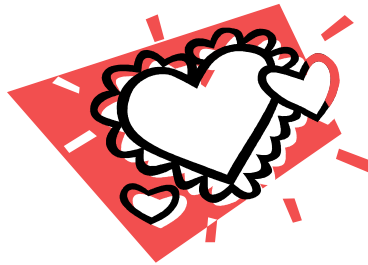
1% drop in blood cholesterol translates into 2% drop in risk for heart disease



Know Your Numbers!

Triglycerides

- Less than 150 mg/dl is normal
- 150 to 500 mg/dl is considered high
- Over 500 mg/dl is very high



Heart Healthy Diet

- Choose lean beef and pork, poultry with skin removed, lean fish and fish rich in omega-3 fatty acids (salmon, albacore tuna, herring, sardines, mackerel)
- Use tub margarine that is free of trans fats
- Eat tofu, nuts and beans as lean protein sources



Heart Healthy Diet



Limit your intake of foods high in saturated fat, trans fat and cholesterol

- Full fat dairy products
- Fatty meats
- Tropical oils (palm kernel, coconut)
- Stick margarine
- Foods with hydrogenated oils-cake mixes, cookies, bakery items, crackers, processed foods
- Avoid fried foods, fast food

Heart Healthy Diet



- Choose foods that are baked, broiled or steamed, grilled
- Top salads with lower fat dressings made with liquid oils
- Choose vegetable/bean or broth soups over cream soups
- Use lower fat milk, cheese, yogurt, sour cream

Recommended Fats

Primarily monounsaturated fats: olive, canola, peanut, flaxseed

Primarily polyunsaturated fats: sunflower, soybean, safflower, corn

Omega 3 fats: fatty fish, flaxseed, canola, walnuts, soybeans, wheat germ, dried beans

The Whole Grain Bonus

- Retain the bran, germ and endosperm
- Add fiber, phytonutrients, antioxidants which fight disease and aging
- Slower absorption
- Adds vitamins and minerals
- Aids weight loss
- Reduce risk of heart disease, diabetes and certain cancers



Fiber

- Lower blood cholesterol especially LDL
- Provide satiety
- Often associated with other beneficial compounds
- Decrease risk for heart attack (Harvard study-men with 29 g fiber, 40% decrease)



Dietary Fiber Intake

Women need 25 g per day (21 g over age 50)

Men need 38 g per day (30 g over age 50)

Most Americans at 15 g fiber per day

Fiber sources: legumes, fruits and vegetables, whole grain breads, cereal, pasta, rice

Snacks with fiber: sunflower seeds, mixed nuts, popcorn, dry cereal

Increase Soluble Fiber intake

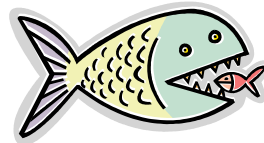
Best sources of soluble fiber:

- Oatmeal
- Oat bran
- Nuts and seeds
- Dried peas, beans, lentils
- Apples, pears
- Strawberries, blueberries



Fish

- American Heart Assn. recommends 2 servings of fish(3 ounces) each week
- Rich in omega 3 fats (fatty fish)
- Make blood less sticky and less likely to clot, reduces risk of heart attack
- Help reduce high triglycerides
- Fish can be fresh, frozen, canned



Soy



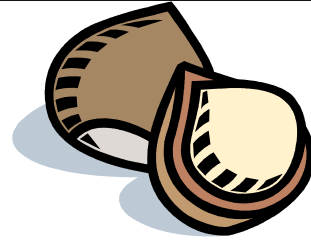
- Only plant protein that is “complete” with all essential amino acids
- Many forms-tofu, soy milk, soy nuts, TVP, various soy alternatives
- Decreases LDL cholesterol when substituted for animal protein
- Labels: 25 gm soy protein/day
- Help the Iowa economy!

Plant Sterols and Stanols



- **Plant sterols from soy and plant stanols from other plant sources. They compete with cholesterol for absorption into the body.**
- **Amount in normal diet=300 mg**
Rec'd for cholesterol control=1.3 g/day
- **Found in margarines-Take Control, Benecol, Smart Balance**
- **Can decrease LDL by 10-15% (greater than doubling dose of statin drug)**

Nuts



- Contain high amounts of heart healthy monounsaturated fats
- Contain vitamin E which is an antioxidant (fights free radicals that cause aging and chronic disease)
- Source of protein, have “staying power”
- Also provide magnesium and fiber
- Portion Control! 1/8 cup for snack, 1/3 cup for meat substitute

Flaxseed



- Fat is highly unsaturated and heart healthy
- Contains fiber known as lignan
- Best food source of alpha-linolenic acid (omega 3 fatty acid)
- Reduces blood clotting
- Lowers LDL (bad) cholesterol levels

How To Use Flaxseed

- Not a magic bullet!
- Pleasant nutty flavor
- Grind seeds in blender or coffee grinder or chew very well!
- Sprinkle on salads, yogurt, vegetables, hot and cold cereal, add to dry ingredients when baking to replace up to 1/5 of flour, (can reduce oil and also use flaxseed to substitute for eggs :1 Tbsp. ground flax seed+ 3 T. water = 1 egg)

Exercise



- Plays a role in increasing HDL (good) cholesterol levels
- Also beneficial in lowering triglycerides
- Best if done at moderate level and must be done **consistently** to reap the benefits
- Choose an activity you enjoy!

Recommendations:

30 to 60 minutes per day at least 5 days each week

Improving Your Numbers and Your Health!

- Follow low fat, low cholesterol diet
- Use healthy fats, reduce sat and trans fats
- Increase dietary fiber, soy, flaxseed
- Regular exercise program (30 - 60 minutes/day)
- Work toward/ maintain a healthy weight
- Reduce consumption of sugars, alcohol
- Drink wine, grape juice and tea
- Eat breakfast

Questions???

