Understanding Fat and Cholesterol

Did you know that cholesterol comes from 2 sources?

Cholesterol comes from food, especially saturated fats, as well as from your own body which is producing cholesterol naturally. Cholesterol is a mandatory building block to the tissues in your body, and your body produces about 75% of the necessary amount you need, the rest coming from your diet. However, excess dietary fat can lead to unnecessary and unhealthy weight gain, increased insulin resistance, and elevated levels of bad types of cholesterol. Saturated fat comes from animal fat and is unhealthy in excess. Trans fats come from fried foods and are also considered unhealthy. Some people have "bad genetics" that produce a lot more cholesterol than is considered healthy, despite how good their diet and exercise routines are.

What are the different cholesterol types?

a. LDL (low density lipoprotein) is the "bad" cholesterol. Excess amounts deposit in the arterial walls leading to blockage. Levels less than 100 have been associated with the lowest risk of heart disease. Think of this as "dirt" that is building up over time.
    i. Decrease saturated and trans fat in diet to lower numbers.
    ii. Achieve a desirable body weight
    iii. Increase fiber in your diet to lower numbers.

b. HDL (high density lipoprotein) is the "good" cholesterol. This acts as a "bulldozer" to remove the LDL ("dirt") from the lining of your arterial walls. Higher numbers are better (ie.. >45 for men and > 50 for women).
    i. Increase aerobic exercise and lose weight to increase levels of HDL.
    ii. Quit tobacco use to increase levels of HDL
    iii. Niacin use increases levels.

c. TRG's (triglycerides) are a form of fat in your blood and should be < 150. These have been shown to build up in the arterial wall, as well as to cause blockage to the pancreas if they are > 400. High triglycerides correlate with high sugar, and diabetes is commonly seen in people with high levels.
    i. Decrease sugar/carbohydrates like alcohol, bread and pasta
    ii. Use fish oil/krill oil/omega 3,6,9 supplements to reduce levels
    iii. Niacin use reduces levels

d. The "total" cholesterol number (< less than 200 considered desirable) can be very misleading and thus is not used as much in modern medicine. It is the LDL, plus + HDL, and then add 1/3 the triglyceride level to get the "total". However, some people have low HDL causing the "total" to be falsely low yet an increased risk for early arterial disease and conversely, some people have high HDL causing the "total" to be high yet not an increased risk for early arterial disease.

e. The "ratio" of HDL to LDL is an important concept as well in thinking about cholesterol. If you have high HDL, this can "offset" an increased LDL. If you have a low HDL, than you should have a low LDL. The worst case scenario is when someone has a low HDL and a high LDL.