Gator Fuel 101

Cholesterol

What is cholesterol?

Cholesterol is essential for the formation of bile acids, which allow you to be able to digest fats. Cholesterol is also utilized by the body to produce cell membranes. Everybody needs to have some cholesterol in order to be healthy, however it is when you have too much cholesterol that problems occur. When you have too much cholesterol medical professionals will say you are hypercholesterolemic, meaning that you have hypercholesterolemia, or too high of blood cholesterol. High blood cholesterol is a major risk factor for coronary heart disease and for stroke.

Cholesterol Transporters:

Cholesterol is transported through your blood stream by lipoproteins. There are two different types of lipoproteins: LDL or low-density lipoproteins and HDL or high density lipoprotein.

LDL: LDL is known as your "bad" cholesterol. When you have too much LDL circulating in your blood it can build up the inner walls of your heart arteries. Over time this forms plaque. Plaque narrows your arteries and puts you at an increased risk for having a heart attack or a stroke.

HDL: HDL is known as the "good" cholesterol. High levels of HDL have been shown to protect against heart attack. Low levels of HDL, however, can increase the risk of heart attack or stroke.

Numbers you should know:

Total Cholesterol

Blood Value	Risk Level
<200 mg/dL	Desirable
200-239 mg/dL	Borderline High Risk
≥ 240 mg/dL	High Risk

An HDL of ≥60 mg/dL gives some protection against heart disease.

LDL Cholesterol

Blood Value	Risk Level
< 100 mg/dL	Optimal
100-129 mg/dL	Near Optimal
130-159 mg/dL	Borderline High
160-189 mg/dL	High
190 mg/dL	Very High

Tips to Lowering Your Cholesterol:

Know your fats!

There are three types of fats that you should be aware of:

Saturated Fat: Found primarily in animals and is the primary cause of high blood cholesterol.

- Examples: beef, lamb, pork, lard, poultry, butter, cream, dairy products, coconuts, palm oil and cocoa butter.

Unsaturated Fat: Results in lower total cholesterol and LDL cholesterol. There are two different types unsaturated fats: mono- and polyunsaturated fats.

- Examples of foods high in monounsaturated fats: peanuts, walnuts, almonds, and pistachios, avocados, and canola and olive oils.
- Examples of foods high in polyunsaturated fats: salmon, fish oil, corn, soy, safflower, and sunflower oils.

Trans Fat: Results in increased LDL and lower HDL.

- Small amounts are found naturally in beef, pork, lamb, and the butterfat in butter and milk.
- Formed during the processing of fats, so there are high amounts of trans fats in margarine, shortening, and cooking oils as well as the foods made from these products.

Bottom Line: Try to limit saturated fats, avoid trans fats, and consume more unsaturated fats!

Fiber Works!

The American Heart Association recommends that you consume at least 25-30g of dietary fiber each day, preferably from whole grains, fruits, vegetables, and legumes. Oatmeal is an excellent cholesterol lowering food because it is an excellent source of fiber. Both have been shown to be effective in lowering LDL cholesterol.

Exercise!!!!

The more active you are, the better it is for your heart! Moderate weight loss will lower your LDL cholesterol levels by 5%. Exercising doesn't have to mean going to the gym. You can get in your exercise throughout the day by parking at the end of a parking lot so you have to walk all the way to the store, taking the stairs instead of the elevator, or taking a stroll around campus.

Activities:

Take the Cholesterol Quiz:
http://www.americanheart.org/presenter.jhtml?identifier=3032767
Try out the Cholesterol Tracker:
http://www.americanheart.org/presenter.jhtml?identifier=3002238
Review these Tips for Eating Out:
http://www.americanheart.org/presenter.jhtml?identifier=531

Websites for More Information:

http://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/fats-and-cholesterol/
http://www.nlm.nih.gov/medlineplus/cholesterol.html
http://www.webmd.com/cholesterol-management/
http://www.nhlbi.nih.gov/chd/