

## Cholesterol and Atherosclerosis

The concern with eating a lot of saturated fats is the related cholesterol content associated with foods such as egg yolks, butter, cream, and beef. Although cholesterol has received as much bad press as dietary fats, it is a much needed substance by the body. So much so, that the liver is capable of manufacturing fifty trillion molecules of cholesterol per second. Cholesterol is a fatty like substance which belongs to a group of fats. Although the body can produce its own cholesterol from components of glucose, amino acids, and fatty acids, the rate of synthesis can be altered by the amount of dietary cholesterol eaten. In other words, when cholesterol from an egg yolk enters the blood stream, cholesterol synthesis by the liver is shut off. It is because of this homeostatic ability by the liver that trying to control dietary cholesterol through diet alteration may be ineffective.

The two types of cholesterol that are most recognized by health professionals are referred to as *good cholesterol*, or High Density Lipoproteins (HDL), and *bad cholesterol*, or Low Density Lipoproteins (LDL). Cholesterol's harmful effects in the body occur when an abundance of LDL's form deposits in the artery walls. These deposits lead to a disease that causes heart attacks and strokes, called atherosclerosis. In some extreme cases of atherosclerosis, so much plaque forms on the inner arterial wall, only a pinhole is left for blood to flow through.

Research strongly suggests that in order to control blood cholesterol levels most effectively, a reduction in the intake of saturated fats is recommended in addition to the inclusion of regular and consistent cardiovascular exercise.

**Although all Intrafitt programs are designed to improve overall health and reduce health risks, you will want to limit your food choices from group IIa and IIaa to 2 or 3 a week, and no more than one per day.**

**It is recommended that your total overall cholesterol remain under 200 mg/dl and your LDL under 100 mg/dl.**

**One of the most critical factors for long-term success with this vascular condition is to raise your HDL level (the "good" cholesterol) to at least 70. This is achieved through cardiovascular exercise. Your Intrafitt program should consist of at least 4 cardiovascular sessions per week of 40 minutes in duration to address your cholesterol concerns.**

## Cholesterol in 1 oz servings of various foods

Cheddar Cheese	29mg
LF Cottage Cheese	1mg
Cream Cheese	31mg
Chicken Breast	21mg
Turkey Breast	17mg
Tuna (in water)	1mg
Shrimp	43mg
Salmon	16mg
Lobster	27mg
Halibut	9mg
Lamb	383mg
Flank Steak (trimmed)	20mg
Canadian Bacon	14mg
Peanut Butter (1Tbsp)	0mg

## National Cholesterol Education Program Guidelines:

	Cholesterol	Triglycerides	LDL (mg/dL)
<b>Optimal</b>			<100
<b>Desirable</b>	<200	<150	100-129
<b>Borderline High</b>	200-239	150-199	130-159
<b>High</b>	>240	200-499	160-189
<b>Very High</b>		>500	>190

  

<b>Decreased Risk for CHD</b>	<b>HDL (mg/dL)</b>
<b>Average Risk for CHD</b>	>60
<b>Increased Risk for CHD</b>	40-60
	<40

“Relying on lipid studies to evaluate a patient’s risk for CHD is no longer adequate; lipid results must only be used in conjunction with other risk factors noted in the ATP III guidelines, which can be accessed at:  
<http://www.nhlbi.nih.gov/guidelines/cholesterol/profmats.htm>”