Progress in the war against lipids

By ACSH Staff — October 17, 2012

Cholesterol trends seem to be moving in the right direction, according to a new study [1] published in *JAMA*. Total cholesterol as well as low-density lipoprotein cholesterol (LDL, or bad cholesterol) was down, while high-density lipoprotein cholesterol (HDL, or good cholesterol) was up.

Researchers from the Centers for Disease Control looked at trends in serum lipid levels among adults ages 20 and older who participated in national health surveys between 1988 and 2010. They analyzed the average levels of the participants total cholesterol, LDL cholesterol, HDL cholesterol and triglycerides. The researchers also examined the prevalence of lipid-lowering medication use.

The study of more than 35,000 men and women found a decrease in total cholesterol from an average of 206mg/dL in 1988-1994 to 196 mg/dL between 2007-2010. LDL cholesterol dropped a total of 13 points between the same survey periods and triglyceride levels saw similar declines. Lastly, HDL levels slightly increased between 1988 to 2010 from 50.7 mg/dL to 52.5 mg/dL. The results held up after adjusting for age, gender, race and obesity.

Although the results were seen both in adults who were taking the cholesterol-lowering medications known as statins and those who weren't, most of the positive trends can be traced to statin use. Over the course of the study, more people began taking advantage of the drugs. Only 3.4 percent of the participants were statin users between 1988-1994, but that percentage increased five-fold to 15.5 percent in 2007-2010.

Lead author Margaret Carroll of the CDC suggests that the drop in cholesterol among adults not taking statins might be due to a decrease in dietary trans-fats.

I find that theory very hard to swallow, said ACSH's Dr. Gilbert Ross. Much more likely, in addition to the obvious increase in statin use, is the salutary trend in smoking rates, since smoking is a known cause of lipid abnormalities, especially decreased HDL. The minuscule contribution of trans-
fats to our diet is hardly likely to be a significant factor here.

ACSH’s Dr. Josh Bloom noted that this trend is even more impressive, given the fact that obesity rates were simultaneously climbing while LDL levels were declining. Such a finding must be related to increased use of lipid-lowering statin drugs.

For more information on trans-fats check out ACSH’s publication Trans Fatty Acids and Heart Disease. [2]