Egg-actly what Cholesterol?

Allison Tannis, BSc MSc RHN

Eggs are full of cholesterol. In fact, there is over 200mg of cholesterol in an egg; most of which is concentrated in the yolk. Thus, cholesterol concerned folks like myself avoid eggs. Our egg-phobia is based on the belief that eating cholesterol will elevate our blood cholesterol levels. However, our egg-phobia is erroneous. Do you love eggs but share my egg-phobia? Then, you'll share my egg-citement on the latest egg research.

According to research published late last year in the *Journal of Nutrition*, eating eggs does not elevate your blood cholesterol. A randomized cross-over design study was conducted on 33 men and women over the age of 60. They were asked to eat one egg every day for five weeks. When the researchers looked at the blood concentrations of total cholesterol there was no difference between egg consumption and no-egg consumption. In addition, the researchers found similar results in the subject's bad cholesterol (LDL), good cholesterol (HDL), and triglyceride levels. (*J Nutr. October 2006*)

Now, don't go cracking a dozen eggs. Another study in 2006 eluded that there may be more to the egg-blood cholesterol story. A randomized, cross-over trial had 42 subjects consume 3 eggs or a cholesterol-free egg substitute each day. Those who entered the study with high cholesterol had an increased level of HDL and LDL cholesterol when they were eating eggs. On the contrary, subjects who did not have elevated cholesterol when they entered the trial did not experience elevated blood cholesterol levels when they consumed eggs. (*Nutr Metab, Jan 2006*) Thus, this research suggests that eggs may only affect the cholesterol level of those whom already have high cholesterol.

All in all, the scientific egg-cholesterol debate continues. There is no conclusive evidence whether eggs are a serious concern for those with cholesterol concerns. For years, low-cholesterol diets have instructed us to avoid eggs. This is because the high cholesterol level in egg yolks was thought to cause an elevation in blood cholesterol. However, it is well known that dietary cholesterol intake only partially affects your blood cholesterol levels.

Why? Cholesterol is produced in the liver by the enzyme called HMG-CoA. Our bodies require lots of cholesterol as it as important component of cell membranes and hormones, including estrogen and testosterone. The liver produces about 1000mg of cholesterol each day, while the typical diet contributes only a few hundred mg. Thus, dietary cholesterol plays only a small part in our overall cholesterol levels.

Obesity, physical activity and genetics also play a role in your cholesterol levels. Working to attain a healthy weight and increasing physical activity will positively affect your cholesterol levels. However, there isn't much we can do about genetics.

Another way you can encourage a healthy cholesterol level in your body is to give your liver a little love. Your liver produces cholesterol and then combines it with proteins that act like trucks to carry it to various locations around the body. These cholesterol-protein combinations are called lipoproteins. There are two kinds: LDL (low density lipoproteins) and HDL (high density lipoproteins). LDL is deposits the cholesterol on artery linings causing them to narrow, decreasing blood flow and causing atherosclerosis. HDL is called the "good" cholesterol as it carries cholesterol back to the liver. By reducing our intake of toxins and increasing our intake of liver supporting nutrients, our liver can better process cholesterol, including this HDL returning cholesterol by eliminating it through the bile.

Liver Supporting Nutrients include fish oil, selenium, vitamin C & milk thistle.

Its time to put the egg-aggeration about eggs being a cholesterol culprit to rest. Eggs are a good source of protein as it contains all essential amino acids. Eggs are also a great source of other nutrients, including the antioxidant lutein. Crack the egg-phobia and start attacking your cholesterol effectively with increased physical activity, a proper weight and a little liver love.