Health Bits & Pieces

By Dan Kenner, Ph.D., LAc

◆ **Liver shutdown.** The popular cholesterol-lowering drugs collectively known as the "statins" have well-noted adverse effects on liver function. They lower blood cholesterol by inhibiting cholesterol synthesis in the liver, a natural and vital function. Hormones like progesterone, estrogen, and testosterone are all made from cholesterol in the liver, so the synthesis of hormones and other essential resources is also inhibited. Production of coenzyme Q-10 (Co Q-10) is also affected. CoQ-10 is a key factor in maintaining heart health and has also been found to have cancer preventive properties; it also lowers blood pressure, prevents periodontal disease and slows the progression of Parkinsonism. Since CoQ-10 and cholesterol are both synthesized from the same substance in the liver, statin drugs also inhibit the body's synthesis of coenzyme Q-10. Taking statins can decrease the body's synthesis of coenzyme Q-10 by as much as 40%. [Ghirlanda, et al., "Evidence of plasma CoQ10-lowering effect of HMG-COA reductase inhibitors: a double-blind, placebo-controlled study," *Journal of Clinical Pharmacology*, 1993 Mar; 33(3):226-229.]

◆ **And no warning label.** Statins are known to cause muscle pain and even wasting away of muscle tissue (rhabdomyolysis). Another study showed that statin-associated muscle pain is actually caused by muscle damage resulting from statin use. Researchers at the Jewish Hospital of Cincinnati suggested that low Vitamin-D levels might play a role in this muscle damage. The research team administered high doses of Vitamin D to about 80 statin users who had reported muscle pain. Muscle pain was completely relieved in over 90 percent of the patients taking Vitamin D versus a placebo. It may be that statins not only deplete the body of coenzyme Q-10 and production of important hormones, but perhaps Vitamin D levels as well. If so, the potential to rob the body of Vitamin D may turn out to be a significant drawback of statin use. [Ahmed W, Khan N, Glueck C, et al., "Low serum 25 (OH) vitamin D levels (,32 ng/mL) are associated with reversible myositis-myalgia in statin-treated patients," *Translational Research*, 2009;153:11–16).]

◆ **But no heart disease.** A meta-analysis is a study of research studies in an attempt to get a larger view and to attempt to resolve conflicting research results. Researchers analyzed 13 large statin clinical trials to compare rates of type 2 diabetes among statin users compared to placebo groups. They concluded that one new case of type 2 diabetes would develop out of every 255 patients who had been treated with statins for four years. That could mean that as many as 80,000 people who take statins will develop or already have developed diabetes as a side effect. [Sattar N, Preiss D, Murray H, et al., "Statins and Risk of Incident Diabetes: A Collaborative Meta-Analysis of Randomised Statin Trials," *The Lancet*, Volume 375, Issue 9716, Pages 735-742, 27 February 2010.]

◆ **Other statin effects.** Researchers at Tufts University School of Medicine concluded the risk of cancer is significantly associated with lower achieved LDL-C (low density lipoprotein cholesterol) levels. Furthermore, the cardiovascular benefits of low achieved levels of LDL-C may in part be offset by an increased risk of cancer. [Alsheikh-Ali A, Maddukuri P, Karas R, "Effect of the Magnitude of Lipid Lowering on Risk of Elevated Liver Enzymes, Rhabdomyolysis, and Cancer Insights From Large Randomized Statin Trials," *Journal of the American College of Cardiology*, 2007; 50:409-418.] Other adverse effects of statins identified in a study published in the British Medical Journal, include liver problems, acute kidney failure, muscle weakness and cataracts. [Hippisley-Cox J, Coupland C, "Unintended effects of statins in men and women in England and Wales: population based cohort study using the QResearch database," *British Medical Journal*, 2010 May 20;340:c2197.]

◆ **Heart healthy despair.** The contemporary medical and Big Pharma preoccupation with lowering cholesterol is itself a subject of controversy. An informed body of medical opinion does not accept that high cholesterol is a significant risk factor in cardiovascular disease. But lowering cholesterol by the use of statins is now considered the standard of care and is commonly used in clinical practice. There are some risks associated with lowering cholesterol, however. Low levels of LDL cholesterol are being associated with a significantly increased risk of developing depression in men. [Ancelin M, Carrière I, Boulenger J, et al., "Gender and Genotype Modulation of the Association Between Lipid Levels and Depressive Symptomatology in Community-Dwelling Elderly (The ESPRIT Study)," *Biological Psychiatry*, 2010 Jul 15;68(2):125-32. Epub 2010 May 26.]

◆ **The fruit salad and bean cure.** The most dangerous risk factor is thromboses, or blood clots from inflammation, especially from arterial plaque. A safe and effective way to treat and prevent thrombotic disease, which includes strokes and heart attacks, is to use proteolytic enzymes: enzymes that dissolve protein, in particular fibrin, which binds blood clots into a mass formation. Bromelain and papain, from the tropical fruits pineapple and papaya, respectively have been used therapeutically in Germany for over 50 years. Nattokinase, from the Japanese fermented soybean food *natto*, has also been tested extensively and shown to dissolve fibrin. [Metzig C, "Bromelain proteases reduce human platelet aggregation *in vitro*, adhesion to bovine endothelial cells and thrombus formation," In Vivo, 13(1):7-12 1999 Jan-Feb; Suzuki Y, Kondo K, Matsumoto Y, et al., " Dietary supplementation of fermented soybean, natto, suppresses intimal thickening and modulates the lysis of mural thrombi after endothelial injury in rat femoral artery," *Life Science* 2003; 73:1289-98.]

◆ **But it gives them bulimia.** A recent study showed that astaxanthin, a dark-red pigment found in small crustacean krill and some types of algae, significantly improves cardiovascular function in mouse models. [Nakao R, Nelson L, Park J, et al., "Effect of astaxanthin supplementation on inflammation and cardiac function in BALB/c mice," *Anticancer Research*, 2010 Jul;30(7):2721-2725.] HFN