

Oxidized LDL Cholesterol and Heart Disease

IN 1997 SWEDISH RESEARCHERS published a comparison of coronary heart disease (CHD) risk factors among men from Vilnius in Lithuania and Linköping in Sweden. These two groups were selected because the former had a four-fold higher death rate from CHD than the latter. Very little difference in traditional risk factors existed between the two groups, except that the men from CHD-prone Vilnius had lower total and LDL cholesterol levels.

According to common wisdom, the lower total and LDL cholesterol of the Lithuanian men should have placed them at reduced risk of heart disease. But researchers discovered that the men from Vilnius had significantly higher concentrations of *oxidized* LDL. They also had significantly poorer blood levels of important diet-derived antioxidants such as beta carotene, lycopene, and gamma tocopherol (a form of vitamin E). Blood levels of these particular nutrients are largely determined by dietary intake, especially from the consumption of antioxidant-rich fruits, nuts, and vegetables. So while the Lithuanian men had lower LDL levels, they were more susceptible to oxidized LDL, owing to what appeared to be a poorer intake of antioxidant-rich foods.¹

Brian S. Peskin's research indicates that the primary causation for oxidized LDL comes from consumption of adulterated polyunsaturated oils. Such oils have increasingly become a part of daily prepared food diets worldwide since processed vegetable oils came on the market in the early part of the 20th century.²

NOTES

1. Anthony Colpo, M.D., in "LDL Cholesterol: 'Bad' Cholesterol, or Bad Science?"; *Journal of American Physicians and Surgeons*, V. 10, No. 3, Fall 2005.
2. See "Cancer, Cholesterol and Statins," by Brian Scott Peskin, *Well Being Journal*, Vol. 18, No. 5, www.wellbeingjournal.com.