## Natural compounds that reduce cholesterol

Is there a non-prescription natural alternative to statin drugs for people with moderate elevations in cholesterol?

For people who can't take statins, or prefer to try diet and lifestyle first, there is an option: plant sterols.

The official creator of guidelines, the National Cholesterol Education Program or NCEP of the National Heart, Lung, and Blood Institute of the National Institutes of Health suggests the use of *plant sterols* in conjunction with other lifestyle changes to enhance LDL cholesterol reduction achieved through dietary means. It's the only non-drug they recommend.

Plant sterols, or phytosterols, are fatty compounds found naturally in plants.

Chemically similar to cholesterol, they lower bad LDL cholesterol without affecting good HDL cholesterol. Due to their ability to lower LDL, the use of plant sterols is now endorsed by the Food and Drug Administration, which took the unusual step of permitting food claims on the association between use of plant sterol esters and reduced risk of coronary heart disease.

Scientists have discovered compounds in oranges, tangerines and palm fruit extracts that support heart health the natural way.

Sytrinol has polymethoxylated flavones or PMFs that decrease the body's synthesis of LDL cholesterol and triglycerides, and curtail inflammation, a major source of trouble for arteries.

Multiple clinical studies have demonstrated that FDA-approved plant sterols and stanols reduce cholesterol levels up to between 7 and 15 percent. However, because Sytrinol has a complementary mechanism of action, by combining Sytrinol and sterols, the biological performances of the two are greater than the sum of their parts.

Here's why: Sterols only block the absorption of cholesterol in the food we consume, and contrary to popular belief, ingested cholesterol has a minor effect on overall lipid profiles, compared to cholesterol produced in the body. More than 75 percent of cholesterol is the result of the liver's imbalanced production of cholesterol, and sterols have no impact on this cholesterol. Sytrinol may therefore be the perfect synergistic complement to plant sterols.

In addition to plant sterols and stanols, and the new compound Sytrinol, scientists have found that an ingredient in the ordinary kitchen spice curry may slow the liver's production of cholesterol. Curcumin, a specific extract of turmeric, has been found in experiments to block cholesterol synthesis by up to seven-fold, suggesting it may be a powerful dietary ally in fighting heart disease. (Curcumin has also drawn attention lately for its potential for preventing Alzheimer's disease)

Next, borrowing from the secrets of the heart-healthy Mediterranean diet, scientists have isolated specific polyphenols that lend extra virgin olive oil its rich flavor and greenish color. These have been standardized into an extract called Oleaselect. Research shows Oleaselect delivers potent olive antioxidants that may protect the

arterial wall from stiffening and plaque formation.