

## Lipid Study

### Main Study Questions

1. Do naturally occurring trans fatty acids raise LDL cholesterol in when compared to trans fatty acids from partially hydrogenated vegetable oils?
2. Do naturally occurring trans fatty acids raise LDL cholesterol compared to a control diet?
3. Do trans fatty acids from partially hydrogenated vegetable oil raise LDL cholesterol compared to a low trans fatty acid diet?

### Motivation for Research

There are two primary sources of dietary trans fatty acids in the food supply: 1) those from partially hydrogenated vegetable oils and 2) those found naturally in ruminant products (e.g., dairy, beef, lamb).

Since dietary trans fatty acids have been linked to cardiovascular disease, recent food labeling regulations have required that the trans fatty acid content of certain foods be listed on the Nutrition Facts panel.

It is unclear if all isomers of trans fatty acids have the same effect on risk factors for cardiovascular disease. Results from animal studies suggest that some naturally occurring trans fatty acids may actually lower cholesterol and decrease plaque buildup in arteries.

The aim of this study is to determine if the different trans fatty acid isomers have different effects on markers for heart disease. The U.S. Department of Agriculture (USDA) wants to learn about how different types of fat in your diet can change your cholesterol level.

The study was completed in September 2009.

