

## Berries, Apples, and Tea Study

### Main Study Question

This study is being conducted to assess whether the uptake and metabolism of plant antioxidants differs among lean and obese individuals in response to acute, short term, or long-term consumption of antioxidant rich fruits and beverages. We also want to know if there is a difference between lean and obese individuals in terms of their whole body and gut inflammatory response to consuming antioxidant rich fruits and beverages.

### Motivation for Research

Clinical studies have shown that consumption of antioxidant rich foods and beverages may reduce the risk for numerous inflammatory mediated diseases, such as arteriosclerosis (hardening of the arteries), arthritis, irritable bowel syndrome, asthma, and allergies. How obesity and long-term antioxidant exposure affect antioxidant metabolism and anti-inflammatory function is required to better define fruit and vegetable consumption strategies for reducing inflammation (both gastrointestinal and whole body) and associated diseases. We hope to provide knowledge necessary for the development of dietary guidance that reduces the risk of chronic disease and takes into account whether a person is obese or lean.

This study was conducted from late September to mid-December 2014.

