

Broccoli 2 Study

Main Study Questions

This study was conducted to look at whether consuming well-cooked broccoli for 16 days prior to eating a large dose of broccoli would affect the levels of isothiocyanates (a chemical believed to protect against certain cancers) in a subject's bloodstream and whether those levels would be affected by her/his genetic makeup. We were also interested in learning whether eating the well-cooked broccoli would affect the levels of markers of inflammation, which may be correlated with decreased cancer risk.

Motivation for Research

Many studies have shown that eating Brassica vegetables, such as broccoli, is related to a decrease in risk of certain types of cancer. The compounds believed to be responsible belong to a class of chemicals called isothiocyanates. We were curious to determine if the level of an isothiocyanate compound in a subject's bloodstream is affected by their eating well-cooked broccoli in their diet prior to eating a large dose of broccoli, as well as interested in knowing if a person's genetic makeup with regards to enzymes that break isothiocyanates down could affect the amount of isothiocyanate circulating in that person's body. Additionally, levels of compounds that indicate inflammation in the body have been correlated with cancer risk, and we were eager to see the effects on those levels due to consumption of the well-cooked broccoli.

The study ran from the end of February, 2017 until mid-May, 2017.

