Cardiovascular Catastrophe

Tschetter, Taren (School: Doland High School)

The purpose of this experiment was to test whether foods rich in High Density Lipoproteins (HDL's) cholesterol would be successful in treating heart disease. Because heart disease is caused by fat buildup in the heart, pig fat was used to simulate the fat of the heart. HDL rich foods were applied to the pig fat to see if the HDL cholesterol would reduce the amount of solid pig fat, as HDL's do in the body to reduce fat in the heart. The types of HDL rich foods used in this experiment were blackberries, avocados, almonds, and olive oil. The hypothesis for this experiment states that the avocado would cause the largest reduction in the pig fat because it is so popular in diets and is seen on many diet and fitness social media pages. Each food was applied to a separate piece of pig fat. After one week, the pig fat was removed from the HDL foods and weighed, and the reduction rate was calculated. The idea was a success, as the HDL foods reduced the size of the solid fat by as much as fifteen percent, the olive oil being the most successful type of HDL. This project is applicable to both heart disease and weight loss and could be used in the form of a diet plan as well as a supplement form.