

Clay Patton

Junior Division Medicine & Health

Starch In Steak

The purpose for doing my experiment is to find if different cooking temperatures will affect the amount of starch in beef. The meat I used was beef arm steak and beef foreshank. Starch is a carbohydrate. When burned it becomes glucose sugar. Starch is what plants use for energy at night when there is no sun to perform photosynthesis. One molecule that makes up starch is Amylose and that is what holds the iodine and turns blue in the test. I hypothesized that raw would contain the most starch because in research I had found raw always seemed to have the most starch. Rare would contain the second most amount of starch. Medium would have the third most starch in it. Finally I predicted that well done would contain the least. To perform the experiment I cooked the steak to the specified doneness. I then dipped the strip of arm steak in the iodine tap water mixture. Any starch in the meat would turn either dark blue or brown. The results of my experiment were: well done contained the least amount of starch, raw contained the third most amount of starch, medium contained the second most amount of starch, and rare contained the most amount of starch. No, the results only supported part of my hypothesis because raw had the third most amount of starch in it and medium had the second most.