

Sylvia Scientist
2/18/11
123 Sesame Street,
Juneau, AK. 99801

How Cooking Method affects the Fat Content of Hamburger

To determine how various cooking methods affect the fat content of hamburgers, five methods of cooking were tested; frying, boiling, microwaving, broiling and grilling. Hamburgers of equal mass and volume were cooked with each method and their subsequent fat content of the remaining meat was tested using two different methods: lipid extraction and chemical analysis, and simple mass loss. The results of my experiment supported my hypothesis that grilling would result in the greatest fat loss, leaving only 8.4% fat in the hamburger on average. The results showed that broiling was also effective at removing fat, leaving only 12.7%. Neither frying nor microwaving showed a significant fat loss. Fried hamburgers still had 17.7% fat on average, and microwave had an average of almost 19.8% fat. Unfortunately, I was not able to get good data for boiling hamburgers because that method does not make hamburgers that I could measure with my equipment.

I am sure that the results of my experiment will change the way that I cook hamburgers for myself. I would also think that anyone who cooks his or her own hamburgers at home would be interested to know this information. Given that heart disease and obesity are two of the biggest health problems facing Americans, I would suggest that people start grilling their hamburgers rather than frying them. Of course there are a lot of foods that have less fat in them than a hamburger cooked by any method.