



Food Affecting Heart Rate



By- Mohanja and Shraddha

Aim

Our aim was to find out which food affects our heart rate

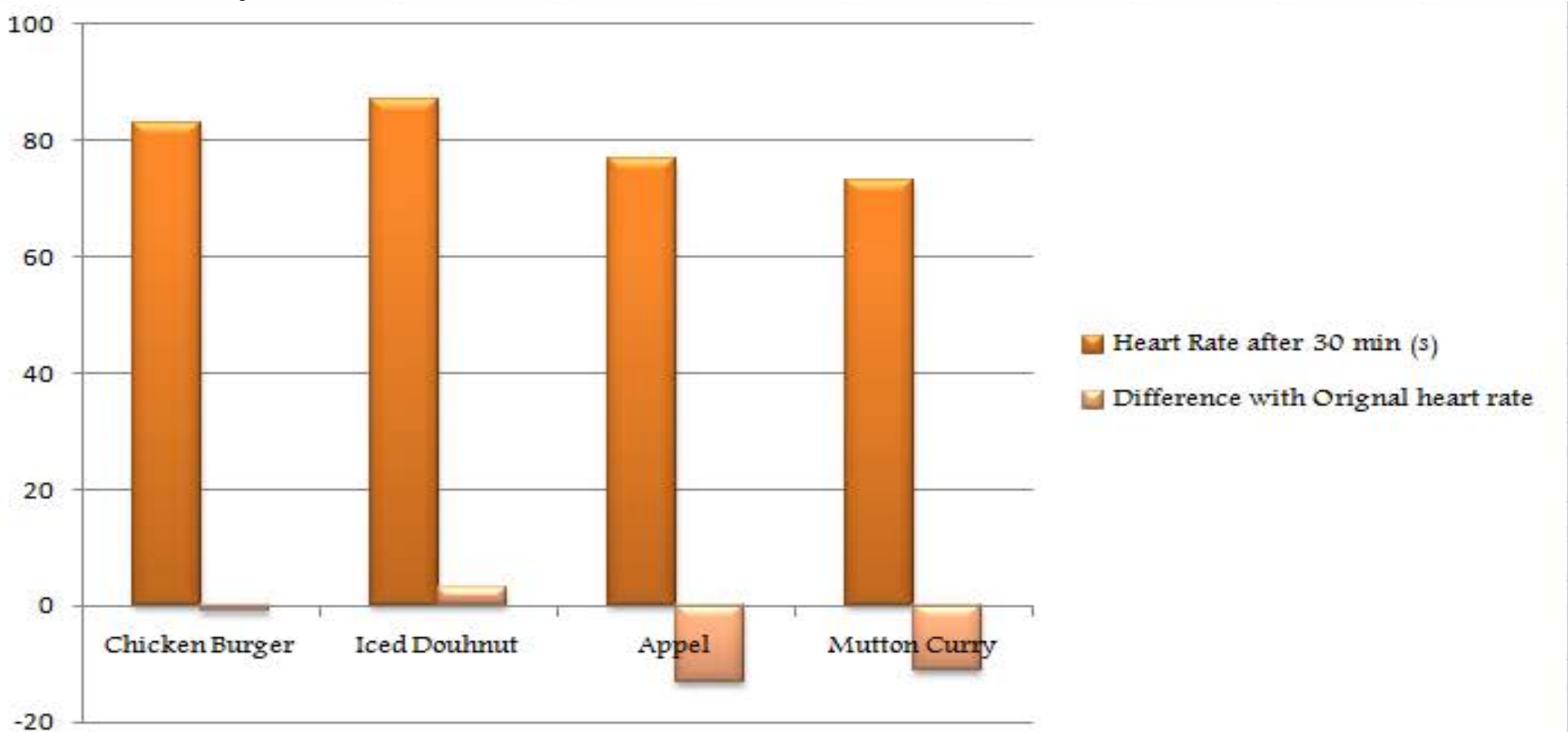
Hypothesis

Out of the foods high in salt, sugar, minerals and saturated fat, we think the food high in salt will affect the heart rate the most.

Experimental Design

We tested the heart rate and food on the same person, as different people have different body conditions. The person was not allowed to eat anything two hours before they did the experiment or to do exercise. The person ate the food and after waiting for 30 minutes without doing anything that will affect their heart rate. We also kept the mass of the food the same to make sure it was a fair test. To test the food high in salt we used different food like a chicken burger, for sugar we used an iced doughnut, for minerals we used an apple and for saturated fat we used mutton curry since mutton is meat which is high in saturated fat. We recorded the results and compared it to the normal heart rate of the person, which was 84beats per minutes. We also tested the foods on different days, so the results do not affect each other.

<u>Food</u>	<u>High In...</u>	<u>Heart Rate after 30 mins (s)</u>	<u>Difference with original heart rate</u>
Chicken Burger	Salt	83	-1
Iced Doughnut	Sugar	8	3
Apple	Minerals	77	-13
Mutton Curry	Saturated Fats	73	-11



Interpretation

From the results, we can see that the apple was the food that affected the heart rate the most since it decreased the heart rate by 13 beats per minute. The food that affected the heart least was the chicken burger which was the exact opposite of what we predicted. However, different foods might have different masses of the nutrient we wanted so these results might not be exact.

Conclusion

Overall, the food affected the heart rate the most was the apple that was high in minerals. We found out this was because the highest amount of mineral in the apple was potassium (107mg) and when levels of potassium are high, it can decrease the heart rate. The food that affected the heart rate the least was the chicken burger high in salt. This proved our hypothesis wrong. We found this out via the internet, on answers.yahoo.com. It told us that salty food can increase blood pressure and the might even lower the pulse to compensate for increased volume. These results however, may not be perfect because even though we measured out the food to make it a fair test, the food may contain different masses within the foods could have affected the results. If we redo the experiment we would have repeated the experiment 3 times and possibly on different people to get a wide range of results.