

# I-Be-Proven Fast Dissolving

Pfeifle, Sara (School: Ashley Public School)

I am seeing what form of ibuprofen dissolves the fastest in vinegar, which is a replication of stomach acid. The reason I wanted to do this is because I am surrounded by so many people who get headaches/pains and use ibuprofen to treat it. So, I decided to turn it into an experiment based on what form of ibuprofen will dissolve the fastest by simulating the ibuprofen inside the stomach acid. In this experiment I am going to see if this is true and see how long the different types take to dissolve. According to my data collected, my hypothesis was correct. The uncoated Ibuprofen took the shortest amount of time ranging from 13 to 14 minutes. The gel Ibuprofen stayed in the range of 40 to 54 minutes. The coated Ibuprofen was the biggest range and it took the longest to dissolve with a range of 1 hour and 32 minutes to 2 hours and 7 minutes. The research I found was very similar to the data I gathered. In the process of seeing the dissolving, the powder and liquid didn't completely dissolve, but the medicine would have been able to affect the consumer. It stayed in the clear cup and would move around when I stirred it. The outside part of the gel Ibuprofen didn't dissolve in the vinegar after the liquid left the capsule. The uncoated Ibuprofen shows that it would have a faster effect than the other forms.