

# How Much Grease??

Health And Wellness



# Introduction

According to a study that was conducted by [The Centers For Disease Control and Prevention](#) , “During 2013–2016, 36.6% of adults consumed fast food on a given day.” This means that about  $\frac{1}{3}$  of adults eat fast food every day. Many studies have been conducted on fast food and its poor nutritional value. However, as this study shows, many Americans are eating fast food very frequently. The common viewpoint and focus of many Americans is on the entrees and it is not on the food that is accompanying every entree, french fries. Americans eat 4.5 billion pounds of french fries each year according to [Grit](#). This is [Health Line](#) talking about the effects of the grease that is found in french fries on the body, “A high intake of these foods can lead to weight gain, obesity, heart disease, diabetes, bloating, diarrhea, acne, and impaired brain function.” As more attention is being drawn to what people put in their bodies, questions are being asked about the content of the food that many people around the U.S eat every day. The common consensus of people is that McDonald’s is an example of unhealthy fast food. While In-N-Out is a more healthy option when considering a place to have a quick meal. The aim of this experiment is to discover which fast food restaurant actually has the least greasy french fries.

# Research Question & Hypothesis/Prediction

The general consensus of Americans is that fast food is not beneficial to a healthy vitamin and nutrient balance in the body. Another common consensus that people tend to have is that certain fast food chains are a better example of a healthy meal than others. **Which fast food brand has the greasiest french fries?**

**The hypothesis is that the McDonald's french fries will have the most grease when compared to the other brands.** The researcher believes this because the common viewpoint that many Americans share is the McDonald's is more of an example of unhealthy meals than other fast food restaurants. Furthermore, when compared to other fast food restaurants such as In-N-Out, the general consensus is that McDonald's is considered to have less beneficial options.



# Procedures

## Procedures

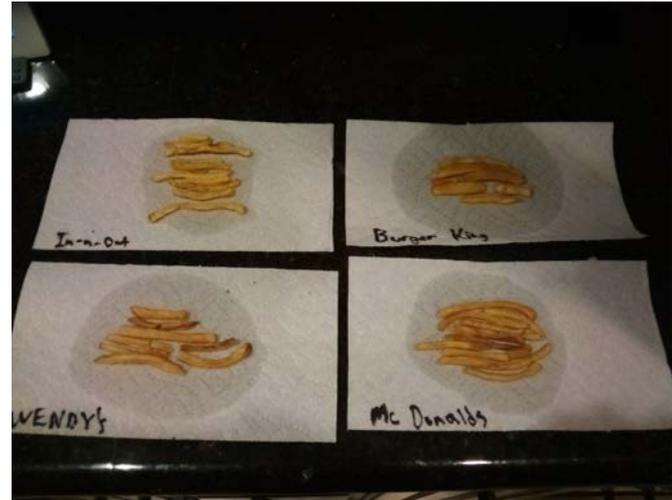
1. Take 25 grams of each type of french fry
2. Take the first kind and put 25 grams of it on top of the graph paper
3. Place wax paper on top of the french fries
4. Tape wax paper down so that it does not move while rolling.
5. Roll rolling pin over french fries firmly ten times times.
6. Take off wax paper and discard the french fries.
7. Tape the graph paper to a window and count the number of boxes that the grease had filled. Only count boxes that are  $\frac{1}{2}$  filled or more.
8. Repeat steps 2-6 until all types of french fry have been tested



# Procedures

## Procedures - Experiment Version #2

1. Measure out 25 grams of each type of french fry and place each different brand on a different piece of paper towel.
2. Let french fries sit for 48 hours and come back.
3. Copy down the area of the grease stain and convert it onto graph paper
4. Then, record data and count the number of squares that grease stain reached.



# Materials

## Materials

1. McDonald's French fries
2. Burger King fries
3. In-And-Out fries
4. Chick-Fil-A fries
5. Wax paper
6. Graph paper
7. Rolling Pin
8. Sharpie
9. Tape
10. Window
11. Sunlight
12. Camera (to record results)



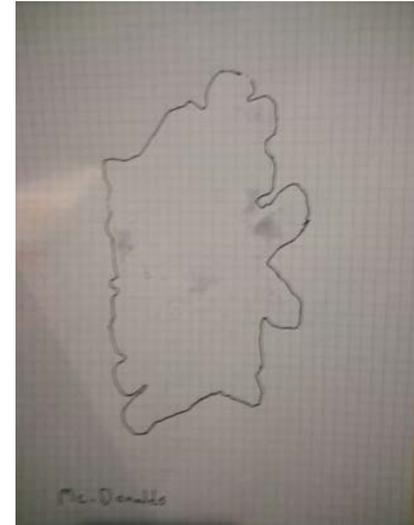
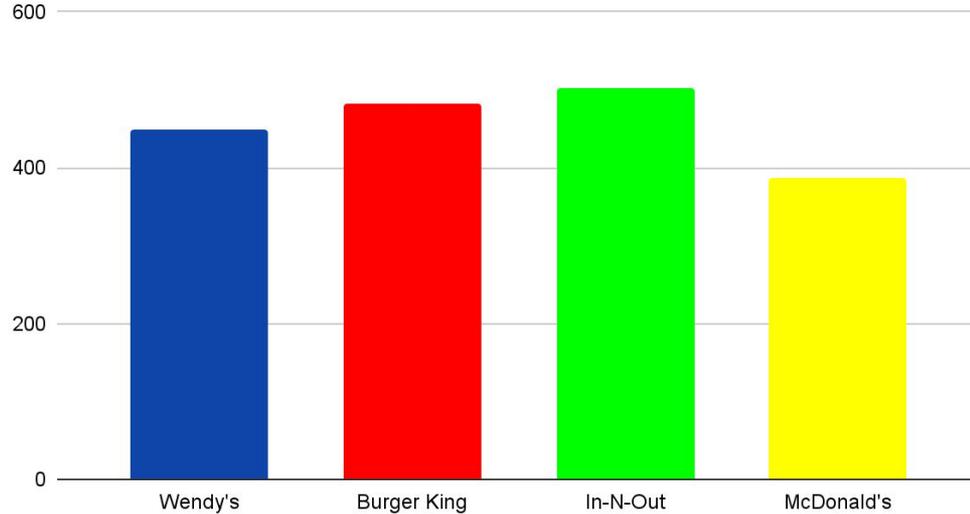
# Results- Experiment Version 1



	Wendy's	Burger King	In-N-Out	McDonald's
Experiment 1	449 squares	483 squares	503 squares	368 squares



Number of Boxes Filled

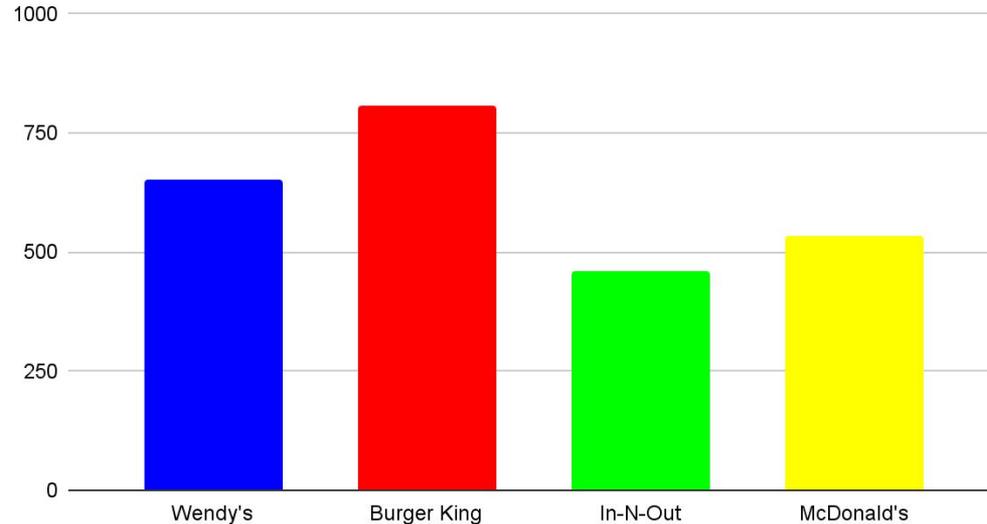


# Results- Experiment Version 2

	Wendy's	Burger King	In-N-Out	McDonald's
Experiment 2	652 squares	807 squares	459 squares	534 squares



Number of Boxes Filled



# Discussion

After the experiment had been completed, the researcher noticed that the amount of potato that was in some of the french fries was affecting the results of the experiment and how many boxes that certain brands were filling out compared to others. The second version of the experiment, the researcher felt had a bigger impact because the grease stain spread out more evenly. This version was all about the amount of grease that was found inside of the french fry and not about the amount of potato that is used in the french fry. The researcher believe, in the first version of the experiment, that In-N-Out had the most amount of boxes filled because they had the most amount of potato inside of their french fries, not necessarily the most amount of grease out of all of the contestants. The researcher wanted the information gathered from this experiment to be as accurate as is possible because of its implications to day to day life.



# Discussion- Continued

Furthermore, the real results are found in the second experiment, where the grease stain had been absorbed by the paper towel and the data can really be seen about the amount of grease that was contained inside of the french fry. In the first version of the experiment, the way that the french fries had been spread out made the grease stain larger or smaller. Therefore, the beneficial data can be found in the second version of the experiment. The brand with the most amount of grease in the second variation was Burger King with 807 squares. With the second most amount of grease was Wendy's with 652 squares. In third was McDonalds with 534 squares. And in last place with the least amount of grease came In-N-Out with 459 squares. **The fact that In-N-Out is in last place fits along with the general consensus that In-N-Out is a healthier option for fast food. The fact that Burger King and Wendy's have more grease in their french fries than McDonalds is astonishing. The hypothesis is shown to be incorrect with this data.**



# Conclusion

In conclusion, the results of this experiment will help many people decide which fast food restaurant to go to if they do not want all of the unhealthy grease that is found in the french fries that are consumed in massive amounts every year. According to the test, **Burger king has the most grease, Wendy's has the second most amount of grease, McDonald's has the third most amount of grease, and In-N-Out has the least amount of grease.**

The information gathered from this experiment will provide people with the data necessary to navigate day to day life without worrying about the health problems that can be caused when the body is not getting the nutrients and vitamins that it needs. **The researcher hopes that this information will guide the way that people make their choices about what they put inside of their body. Another hope is that this study brings awareness to just how much grease is in the french fries that everybody eats, and it gives viewers information that can help guide them when making a choice about the food that they consume.** In conclusion, the hypothesis is wrong, Burger King has the most greasy french fries, and In-N-Out has the least amount of grease in their french fries.

# References

- “Each year, Americans consume more than 4.5 billion pounds of french fries “ -[Grit](#)
- McDonald’s french fries -<https://www.mcdonalds.com/us/en-us.html>
- Wendy’s french fries- <https://www.wendys.com/home>
- In-n-out french fries- <https://www.in-n-out.com/>
- Burger King french fries- <https://www.bk.com/>
- “A high intake of these foods can lead to weight gain, obesity, heart disease, diabetes, bloating, diarrhea, acne, and impaired brain function.”[Healthline.com](#)
- “During 2013–2016, 36.6% of adults consumed fast food on a given day.”[The Centers For Disease Control and Prevention](#)