

# Weight Watchers at McDonalds

## **Abstract**

*We are interested in discovering whether or not women are more interested in their body images than men. In recent years, McDonald's has been advertising healthier food items and promoting a balanced lifestyle. We thought this would be an interesting place to study the relationship between men and women and their diets. Our hypothesis was that women would choose healthier meals at McDonald's than men. Our method of study was to observe what men and women ordered, and then to compare the data using the Weight Watchers point scale. We discovered that women did indeed order healthier meals at McDonald's.*

## **INTRODUCTION**

In recent years McDonald's has tried to incorporate healthier food items into their menu while advertising a balanced and active lifestyle. We have noticed that the McDonald's commercials most often present women ordering from this healthier menu, which includes more salad options, low fat parfaits, and fresh fruit bags. The topic of this observation study is to determine whether or not women choose healthier menu items from McDonald's compared to men. This topic is worth researching because there is an increased awareness surrounding health concerns and fast food restaurants. It is hypothesized that women are more likely than men to choose healthier meals from the McDonald's menu. These researchers believe this to be true because women seem to be more concerned about body image and weight, which in turn is the reason why women may choose a lower fat diet.

## **METHODS**

### ***Sampling***

The units of analysis we are studying are people. The observation took place between 2 and 3 P.M. at a McDonald's restaurant on the corner of Regent Street and Mills Street in Madison, Wisconsin. This McDonald's is located in a residential area close to many businesses that would likely attract a wide array of customers. In order to collect the data, we sat at a booth located approximately ten feet behind the registers. There was only one register open with one cashier working at the counter. From this location, the menu, register, and beverage stand were all clearly visible.

The subjects included all adults that entered the McDonald's and ordered an item from the menu during the specified period of time. The criteria used to determine if the individual was an adult were physical qualities including wrinkles, makeup, hairstyles, dress (suits, jackets, and Wisconsin emblems), posture, handbags, composure and body type (build, height, breasts). The subjects included both single individuals and members of a group. We excluded individuals under the age of 18, those who did not order food, those in employee uniforms, and four subjects that the researchers could not hear clearly.

There is a problem of possible subjectivity in our sampling methods. First of all, we based our categories of male, female and age on our preconceived ideas about gender and maturity. For example, we may not have realized if there was a transgender individual in the restaurant or if a person looked older than their actual age.

### ***Operationalization of the Variables***

#### **Dependent Variable**

The dependent variable was the type of food and/or beverage a subject ordered on the McDonald's menu. In order to determine what was ordered, we listened to the subject ordering food and the cashier repeating the order. For the order, we considered the name of the item, its size and whether it was part of a meal. A regular meal includes a medium fries and a medium

soft drink while a super-sized meal includes an extra large fries and soft drink. We are interested in how healthy a subject's entire order was. In order to measure how healthy the order was, the Weight Watchers points system was used. The Weight Watchers program assigns a certain number of points to each food item based on the calories, fat, and fiber content. For example, a #3 meal includes a Quarter Pounder with cheese, a medium fries and a medium coke. The respective number of points is 19, 10, and 4, for a total of 33 points for that meal. The number of points for each item indicates how healthy the item is; the lower the number of points, the healthier it is. Weight Watchers allots a certain number of points a person should not exceed per day based on the person's weight. The chart that follows explains this daily allowance.

<b>Men</b>	
<b>Pounds</b>	<b>Points</b>
Under 140	24
140 to 168	26
168 to 196	28
196 to 224	30
224 to 252	32
252 to 280	34
More than 280	36

<b>Women</b>	
<b>Pounds</b>	<b>Points</b>
Under 140	18
140 to 168	20
168 to 196	22
196 to 224	24
224 to 252	26
More than 280	30

\* Source: <http://www.alexolan.net/software/pointscalculator.htm>

In order to determine what constitutes a healthy meal, we divided up the points and placed them into healthy and unhealthy categories. For women, the healthy range is zero to ten points per meal. To get the latter number for this range, we divided thirty points (for the largest weight class) by three meals a day to get ten points. We believe that ten points is the maximum number of points *any* woman should eat per meal. For men, the healthy range is zero to twelve points per meal, using the same methods for calculation as we did for women. If any subject ordered a meal that exceeded these point limits, it was considered an unhealthy meal.

We chose this operationalization because Weight Watchers already has an established, reliable method to determine healthiness. The level of measurement is an interval measurement. This is true because the difference between 1 and 10 points is the same as the difference between 20 and 30 points. It can be inferred that a 20 point meal is not only healthier than a 30 point meal, but it can also be determined how much healthier it is.

This operationalization is important because it allows comparisons between healthy and unhealthy meals. We believe these procedures worked well because it was easy to determine what the subject ordered and the specific number of points that each meal contained. Using the above chart and our own calculated ranges, we could easily compare healthy and unhealthy meals between men and women.

## Independent Variable

The independent variable was the gender of each subject that ordered food at McDonald's. The categories were male and female, making this a nominal variable. To determine female gender, attributes were examined, such as makeup, hair length and style, jewelry, purses or bags, voice pitch, body type (breasts, hips, and height), and clothing (tighter pants, and skirts). To determine male gender, attributes were examined such as shorter hairstyles, bigger body build, facial hair, backpacks and brief cases, baggier clothing, deeper voices, and lack of jewelry or makeup. This operationalization was chosen because observation was the only way of determining gender. Asking the subject his or her gender would be contrary to the fundamental methods of observation. We used this method for determining the gender of the subject and believe that it was an efficient and effective method. Gender was determined quickly and easily using this technique.

## *Ethics*

This observational study was ethical for several reasons. First, the orders were placed and eaten in a public facility within hearing and viewing distance of other customers. Second, no names or other identifying features were recorded during or after the observation. No one appeared offended by our presence in the restaurant. All privacy measures were taken seriously and we believe that we performed an ethical study.

## **RESULTS**

### *Sampling Reliability Analysis*

The sampling reliability error is 2.9 percent, which is quite low. The data was easy to obtain and to agree upon because the subjects entered the restaurant at a slow pace, usually one at a time. However, even if the subjects were in a group, there was only a single cash register open at a given time. There was only one trivial disagreement. We believe that the error occurred because of an increased number of subjects entering the restaurant toward 3 P.M. This increase in subjects caused confusion for one of us about which subjects were actually placing an order. Despite this error, we believe that this procedure was efficient because the time the study was done, between 2 and 3 P.M., was not during a regular meal hour, which decreased the number of subjects that entered the restaurant, allowing for easier data collection.

### *Measurement Reliability Analysis*

The coding reliability error is 8.8 percent, which is a relatively high coding error. We had three disagreements, all of which were a result of an inability to hear the subject's order. Although we were not in the restaurant during the peak hour, the McDonald's environment was still very loud, filled with noises of machines, customers, and the drive-thru. Sometimes the volume of the subject's voice was also a problem. Although we were close to the register, it would have helped if we could have been closer.

The study would have produced less error if we could have been closer to the subjects when they ordered or if we had been in a restaurant that had less noise. There is little that we could have done differently without intruding into the restaurant environment.

### *Test of Hypothesis*

<b>Difference of Means Table</b>		
	<b>Men</b>	<b>Women</b>
<b>Mean Points Per Subject</b>	21.9	13.9
<b>(N)</b>	22	13

We decided to use a difference of means table to display our results because it allows us to compare how many points men and women ate on average. The total number of male subjects was 22 and their total number of Weight Watchers points was 481; thus the mean was 21.9. The total number of female subjects and their points was 13 and 181 respectively, resulting in a mean of 13.9. These results appear to confirm our hypothesis that women will choose healthier meals at McDonald's. This is true because of a difference of means of 8 points between the two genders. This shows that on average, women at McDonald's during the course of our observation ate healthier than men, according to the Weight Watcher's point system. However, neither men nor women as a group fell into the healthy range; men exceeded the range by 9.9 points and women exceeded the range by 3.9 points.

Men tended to order entire meals, including fries, a sandwich, and a drink, while women tended to buy single items, such as a coffee or a parfait. Fifty-four percent of women bought a single item, while only twenty-three percent of men bought a single item. A few men super-sized their order and many men added an extra sandwich or dessert to their meal. We were surprised that no women ordered fruit or a salad.

### **CONCLUSIONS AND INTERPRETATIONS**

Our hypothesis confirms that women, collectively, ate healthier at McDonald's during the period of our study than men did, reinforcing our belief that women are more concerned about their body image than men. We believe that we can infer from this study that women will generally order healthier items at other restaurants as well. However, though the results do confirm our hypothesis, it does not fully confirm that women tend to eat healthier than men at McDonald's or at other restaurants. An extended study, based on our methods, could be done in order to produce more accurate results. The study could be improved by observing subjects for a longer period of time, such as during meal hours and throughout the entire day, and by observing at different McDonald's restaurants and on different days. Our results may have been different if we had more subjects and if we had used different ways of measuring the healthiness of the food items. Moreover, if we knew the weight of each person we could more accurately determine what their allowed points were for the meal, which in turn would more accurately explain whether they were eating healthy or not. Furthermore, our subjects were probably not paying attention to the Weight Watchers scale and may have their own diet or eating habits. For

example, a female may have eaten a very large meal before entering McDonalds. If she ordered a milkshake, she may have exceeded her point limit for lunch.

More research should also be done at other restaurants using other measuring instruments in order to determine if our results and our hypothesis are accurate. In order to reveal men and women's beliefs about their body image, we would need to do a more extensive experiment, which might include surveys and interviews.

In conclusion, we realize that there is room for improvement in our own study at McDonald's and that more extensive research needs to be done for more accurate results. However, we believe that the results of our study do contribute valuable information to the study of fast food restaurants and diets.