

The Link Between Fast Food and University Life: Comparing Japan and the United States

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Abstract

Fast food consumption is a global health concern that is often linked to quality of life and body image issues. The United States and Japan are in the top ten for fast food consumption worldwide, and statistics show that college age people consume fast food at the highest rate of any age group. To explore this idea, we asked the following questions to university students: How do Japanese and American students perceive fast food? How does fast food influence university students eating habits and diet? To find our answers, we administered a survey to Japanese and American university students and analyzed their responses. Our results indicate that both American and Japanese students eat fast food heavily during times of stress. Additionally, in the United States fast food advertisements appear to specifically target college students. Furthermore, Japanese and American students both understand the importance of healthy foods, but only Japanese students would pay more for healthier fast food establishments.

Introduction

Fast food culture has permeated the globe, starting with its inception in the early 20th century. Over time, our understanding of how fast food is consumed and who consumes it has changed, and we now often associate fast food with college and college students. In this study, we aimed to see how fast food impacts the lives of American and Japanese college students, and how that impact differs by culture. We also sought out the main linking force between each culture's students and fast food. To this end, we asked questions regarding health, lifestyle, and fast food consumption.

1. Significance of the Study

During our time in Japan and America, fast food appeared to be an integral part of the university student diet. We wondered why Japan has similar types of fast food to America, but American fast food seems to be more unhealthy. With this capstone, we wanted to explore how university students perceive fast food based on their home countries. We also wanted to explore how fast food influences their daily lives.

2. Research Questions

1. How do Japanese and American university students perceive fast food?
2. How does fast food influence university students' eating habits and diet?

3. Literature Review

3.1 Definition of Fast Food

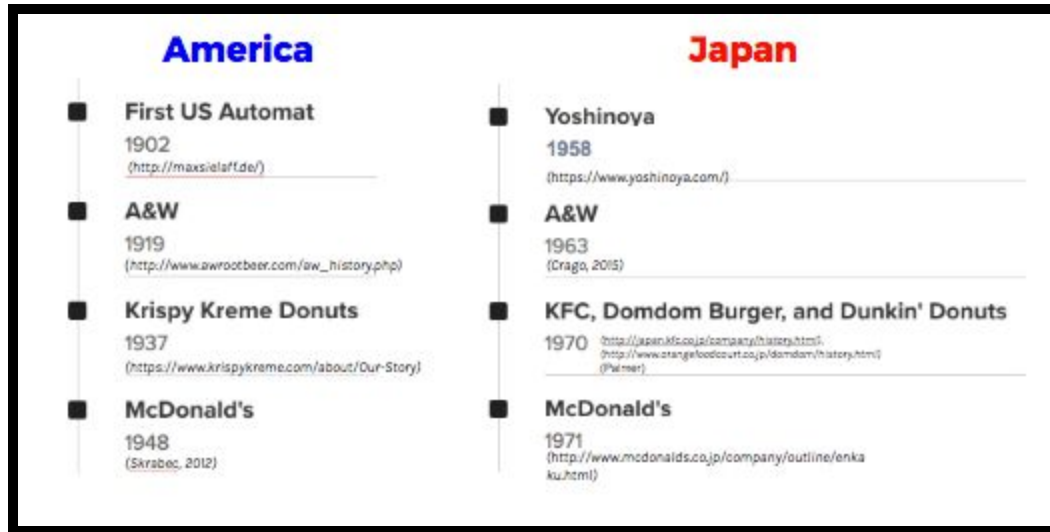
Definitions of fast food can vary. For our research, we used an interpretation of the Merriam-Webster dictionary definition: Food that can be prepared and served quickly; food specifically from establishments categorized as “fast food restaurants.” (Merriam-Webster n.d.)

3.2 History of Fast Food Restaurants

The fast food industry of America and the fast food industry of Japan developed very differently. American fast food is often traced back to automats, the first of which to open in the United States came in 1902. These restaurants originated in Germany in 1897, and operated much like modern vending machines (<http://maxsielaff.de/>). In 1919, the first A&W burger stand opened (“Our History” n.d.), and in 1948, the processes of serving and making food became streamlined in the first McDonald’s restaurant (Skrabec, 2012).

Japan’s fast food industry is often traced back to the original Yoshinoya restaurant, which opened in 1899 but was subsequently relocated after the Great Kanto Earthquake of 1923. Following this, Yoshinoya is reported to have become established in Japan in 1958 (“企業情報” n.d.). An A&W was opened in Japan in 1963, but was later closed due to low interest (Crago, 2015). In 1970, several fast food restaurants gained a foothold in Japan, including KFC (“沿革” n.d.) and Dunkin’ Donuts (Palmer n.d.), as well as the domestic chain Dom Dom Burger (“Concept” n.d.). Finally, McDonald’s first opened in Japan in 1971 (“沿革 | 会社情報” n.d.).

Graphic 1: History of Fast Food Restaurants



3.3 Culture and Perceptions of Fast Food

Fast food is often traced back to America, and in fact, Americans have been socialized around fast food culture since at least the 1950s. The American diet has been transformed by fast food, as have American values. Today, fast food is one of the biggest industries in the United States, with fast food spending beating out things like technology, music, and higher education (Schlosser, 2001).

Interestingly, Japanese people consider both new and old types of fast food to be Japanese. There is a generation gap involved in this phenomenon: the older generation still regards fast food as foreign, while the younger generation perceives it as distinctly Japanese. (Traphagan & Brown, 2002) This cultural shift has occurred in a number of other countries wherein convenience and instant gratification have overtaken other social values. This is sometimes referred to as the “McDonaldization” of a culture (Rappoport, 2003; Schlosser, 2001).

Graphic 2: Culture and Perceptions of Fast Food

America	Japan
Americans have been socialized around fast food culture since the 1950s	The Japanese have been socialized around fast food culture since the 1960s
Fast food is often cited as a completely American invention	Generation Gap: Older → Fast Food is foreign Younger → Fast Food is uniquely Japanese
The American diet was transformed by fast food; it is now one of the biggest industries in the US	A cultural shift where convenience and instant gratification have overtaken other social values

3.4 What Consumers Value in Food

Japanese and American consumers have ranked their values in regards to food consumption. Japanese consumers value mood, safety, weight control, convenience, and price, in that order (Asakawa & Okano, 2013). American consumers value taste, price, nutrition, convenience, and weight control, in that order (Glanz et. al., 1998). This indicates a few important points. First, American consumers value price significantly more than Japanese consumers. This potentially bears an impact on the idea that consumer needs or desires are transformed as income allows (Lavoie, 1994, as cited in Jussaume & Higgins, 1998). Second, taste is of the utmost important to American consumers, while it is not even in the list for Japanese consumers. This could be due to the variance in diet between Japan and America.

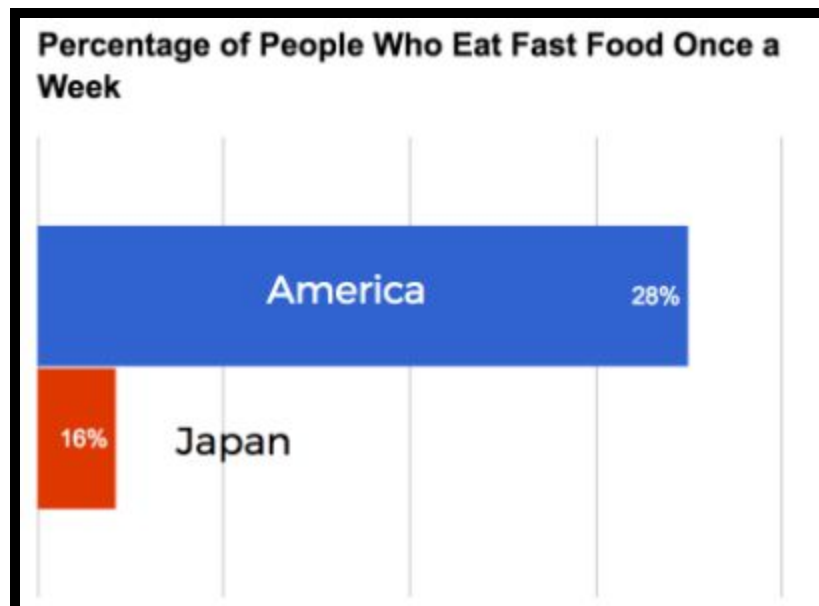
Graphic 3: Consumer Values

America	Japan
1. Taste	1. Mood
2. Price	2. Safety
3. Nutrition	3. Weight Control
4. Convenience	4. Convenience
5. Weight Control	5. Price

3.5 Fast Food Consumption

28% of Americans are reported to eat fast food at least once a week (Gallup, 2013), while 16% of Japanese people are reported to eat fast food once a week (Japan - average fast food consumption per week, 2016). This indicates that Americans tend to eat fast food more frequently than Japanese people.

Graphic 4: Fast Food Consumption



3.6 Fast Food Restaurants Based on Popularity

America's five most popular fast food restaurants are: Chick-fil-A, Chipotle, Panera Bread, Papa John's, and Pizza hut, in that order. Japan's five most popular fast food restaurants are: McDonald's, Mister Donut, MOS Burger, KFC, and Subway, in order. From this we can infer that American's preferences for fast food are moving more towards "fast casual" style restaurants, while Japanese people's preferences are more for traditional fast food restaurants.

Graphic 5: Fast Food Restaurants Based on Popularity

America	Japan
1. Chick-fil-A 	1. McDonald's 
2. Chipotle 	2. Mister Donut 
3. Panera Bread 	3. MOS Burger 
4. Papa John's 	4. KFC 
5. Pizza Hut 	5. Subway 

3.7 Fast Food Nutrition by Country

The nutritional content of fast food in America and Japan differs by country in some key ways. American fast food tends to have more calories and carbohydrates, while Japanese fast food tends to have more fat and sodium. The American diet in general is high in sugar content, while the Japanese diet relies heavily on vegetables (Schlosser, 2001; Akamatsu et. al, 2005).

Graphic 6: Fast Food Nutrition by Country

Item	America	Japan
McDonald's: Big Mac (mcdonalds.com) (mcdonalds.co.jp)	540 Calories 28g Fat 950mg Sodium 46g Carbohydrates	530 Calories 28.2g Fat 970mg Sodium 41.9g Carbohydrates
Subway: Subway Club (subway.com) (subway.co.jp)	310 Calories 4.5g Fat 840mg Sodium 46g Carbohydrates	295 Calories 6.4g Fat 993mg Sodium 41.5g Carbohydrates
Burger King: Whopper (bk.com) (burgerkingjapan.co.jp)	630 Calories 38g Fat 810mg Sodium 49g Carbohydrates	750 Calories 48.8g Fat 884mg Sodium 50.1g Carbohydrates

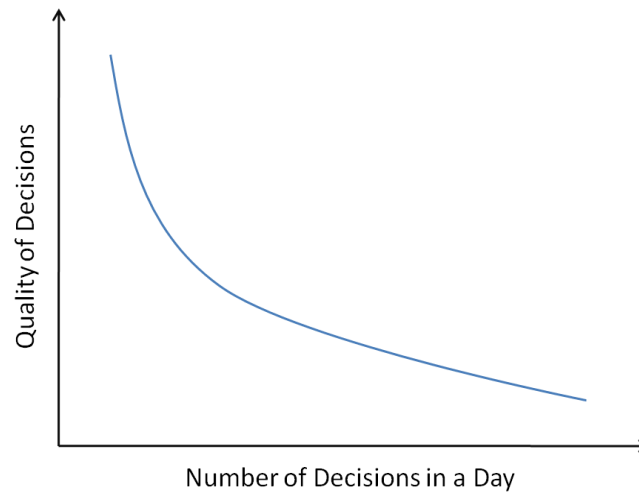
3.8 Psychological Factors on Fast Food Consumption: Stress

Numerous studies have found that stress can lead to eating foods with higher fat, sugar, and calorie content, all of which apply to fast food (Lattimore et al., 2004; Sulkowski et al., 2013; Errisuriz et al., 2016). Cravings are also increased during times of stress and most cravings are triggered by fatty and sugary foods (Chao, 2015). In a high stress environment like college, cravings and fast food consumption are going to be incredibly high.

3.9 Psychological Factors on Fast Food Consumption: Decision Fatigue

Another factor that can influence fast food consumption, decision fatigue, can make us more prone to eating fast food later in the day (Danziger et al., 2011). As the day goes on, people grow tired from making the many decisions that make up their day. This makes it more difficult to make good decisions later in the day if those decisions are things people find unpleasant (i.e. exercising or eating vegetables).

Graphic 7: Decision Fatigue



3.10 Media and Advertisements

Advertising for fast food is targeted at the younger generation in both America and Japan (Orciari, 2013; Iwase, 2010). McDonald's Japan released several campaigns targeted at this group. One example includes a chicken wrap with black vinegar in it which was marketed as a beauty product towards teen and college girls. The "Kurozu McChicken Wrap" was marketed with advertisements using Yuri Ebihara, a Japanese model considered flawless by many younger females (Iwase, 2010).

Graphic 8: Example of Media and Advertisements

Japan

America



3.11 Media and Advertisements: MacDonald's (Japan)

Another example is the “Makku de DS” campaign, which targeted users of the Nintendo DS handheld system; the main demographic of DS users is young men and boys. This campaign offered special food, games, and discounts for DS users who brought their game system to McDonald's locations around Japan (“McDonald's targets families,” 2009).

Graphic 9: MacDonald's (Japan)



3.12 Media and Advertisements: Taco Bell (America)

A Taco Bell campaign in America reported the weight loss story of Christine Dougherty, who is stated to have lost 54 pounds eating from Taco Bell's Fresco Menu five times a week. They used her story to advertise and create the “Drive-Thru Diet,” a supposed weight loss program targeted at young women (Park, 2010).

Graphic 10: Taco Bell (America)



4. The Study

4.1 Study Participants

We sent out a survey to a total of 63 university students (28 Japanese and 35 American). Of the Japanese respondents, 19 were female, and 9 were male. Of the American students, 23 were female, 10 were male, and 2 were agender.

4.2 Research Instrument

We used Google forms to administer our survey, and analyzed and interpreted our results using Google sheets.

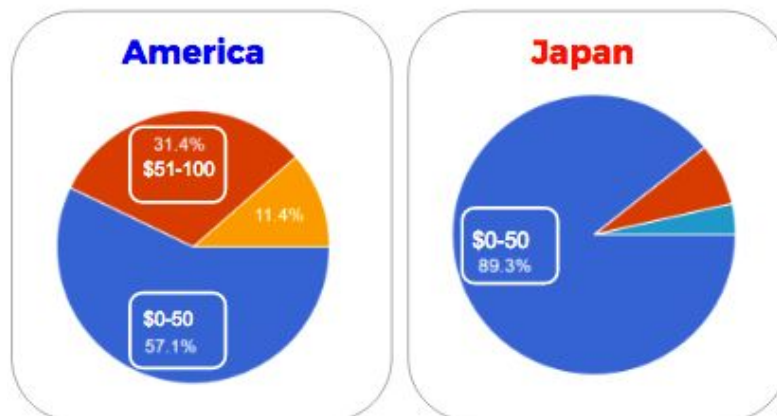
5. Results

5.1 Research Question 1: How do Japanese and American university students perceive fast food?

5.2 Monthly Spending

On average, the majority of Japanese students spend less than \$50 on fast food in a month (See Graphic 11). However, the majority of American students spend between \$0-100 a month on fast food (See Graphic 11).

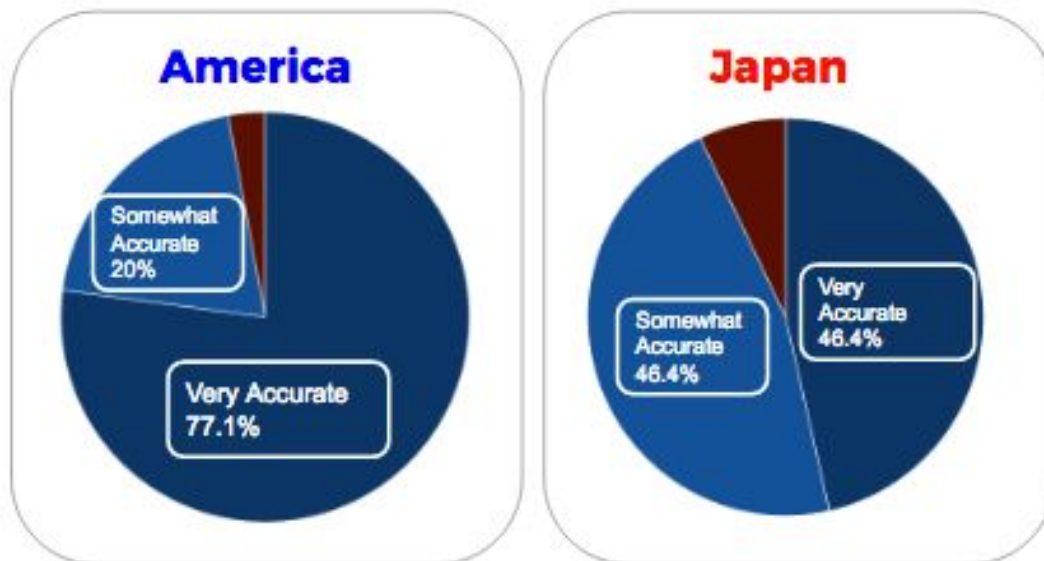
Graphic 11: How much Japanese students spend on fast food each month.



5.3 How do you rate the following statement: “Fast food is high in calories and low in nutritional content.”

The majority of American and Japanese students believe that fast food items offer little in nutritional content and are high in calories (See Graphic 12).

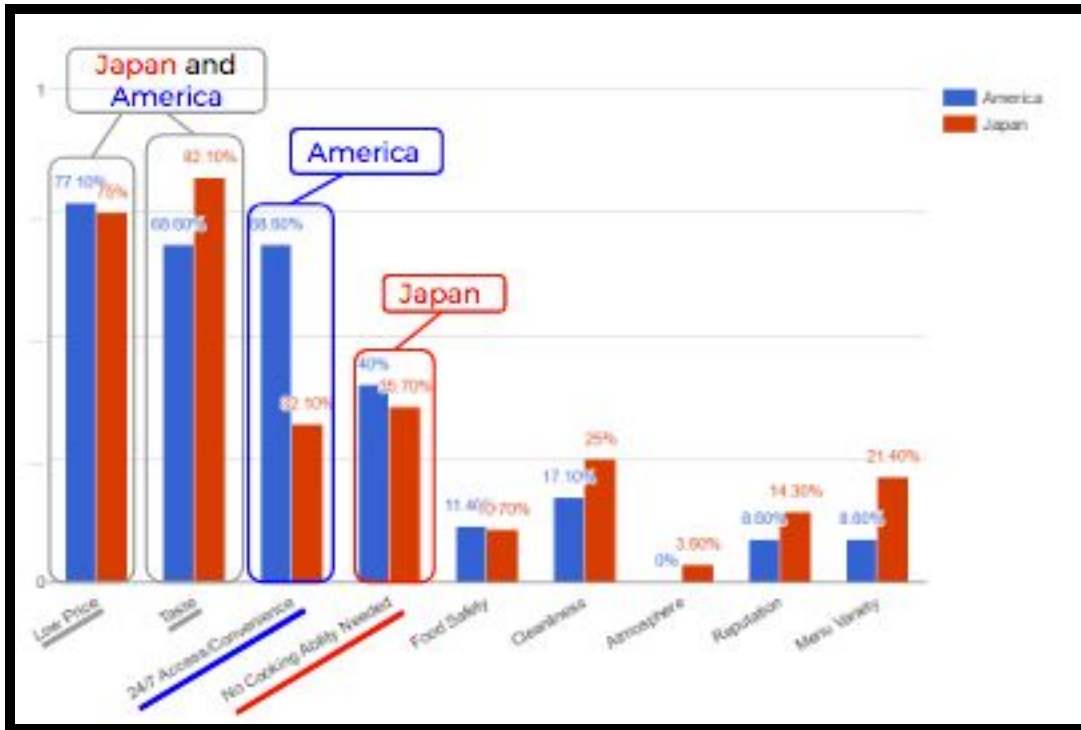
Graphic 12: How do you rate the following statement: “Fast food is high in calories and low in nutritional content.”



5.4 Important Factors in Fast Food

Both Japanese and American students believe that low price and taste are important in fast food. However, American students prefer 24/7 access, while Japanese students prefer no cooking ability needed (See Graphic 13).

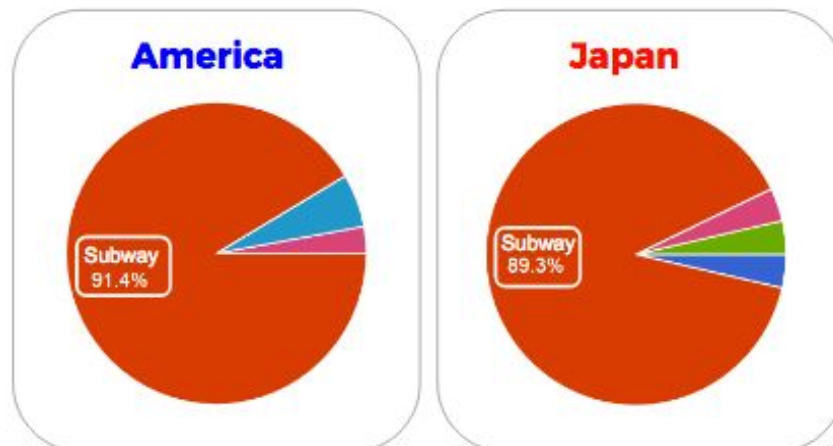
Graphic 13: Please choose which 3 factors are most important to you about fast food.



5.5 Fast Food Restaurant Perceived to be the Healthiest

The majority of Japanese and American students believe that Subway is the healthiest option among fast food restaurants listed in our survey (See Graphic 14).

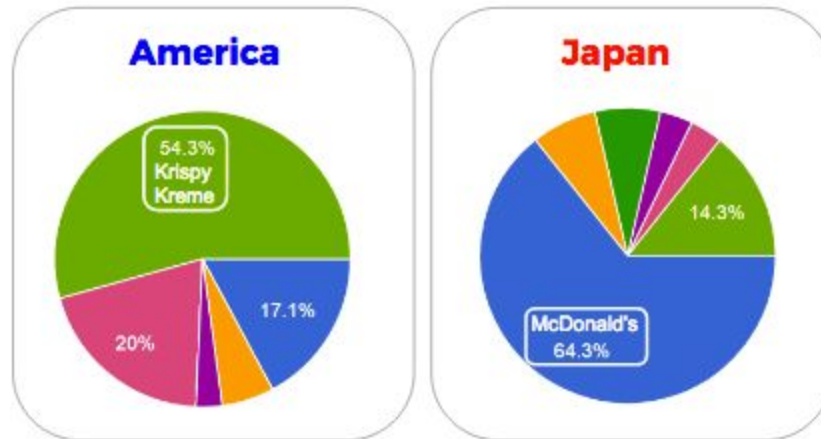
Graphic 14: Please choose which fast food restaurant you believe is the healthiest.



5.6 Fast Food Restaurant Perceived to be the Least Healthy

54.3% of American students believe that Krispy Kreme is the most unhealthy (See Graphic 15), while 64.3% of Japanese students believe that McDonald's is the most unhealthy (See Graphic 15).

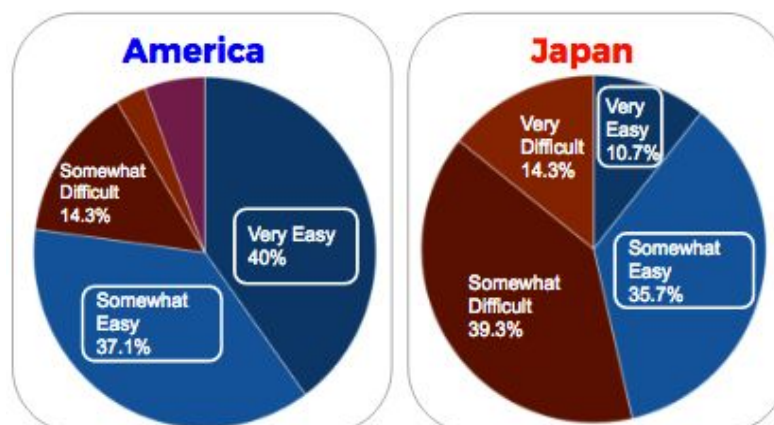
Graphic 15: Please choose which fast food restaurant you believe is the least healthy.



5.7 Ease of Finding Nutritional Information

77.1% of American students believe that it's relatively easy to find caloric information at fast food restaurants, compared to 46.4% of Japanese students (See Graphic 16).

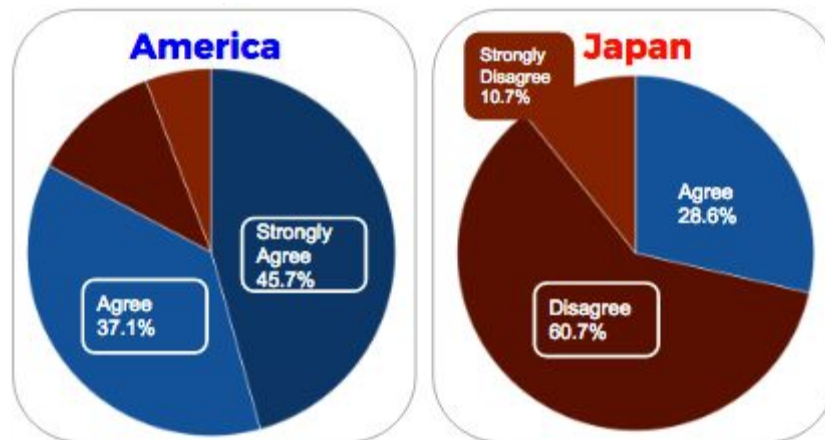
Graphic 16: In your respective country, how easy is it to find caloric information about foods served at these restaurants?



5.8 Targeted Advertising

82.8% of the American students agree that advertisements specifically target college students, while 71.4% of the Japanese students disagree that ads target college students (See Graphic 17).

Graphic 17: Please rate the following statement: I feel that some fast food restaurants specifically target college students with their advertisements.



5.9 Summary of Findings: Research Question 1

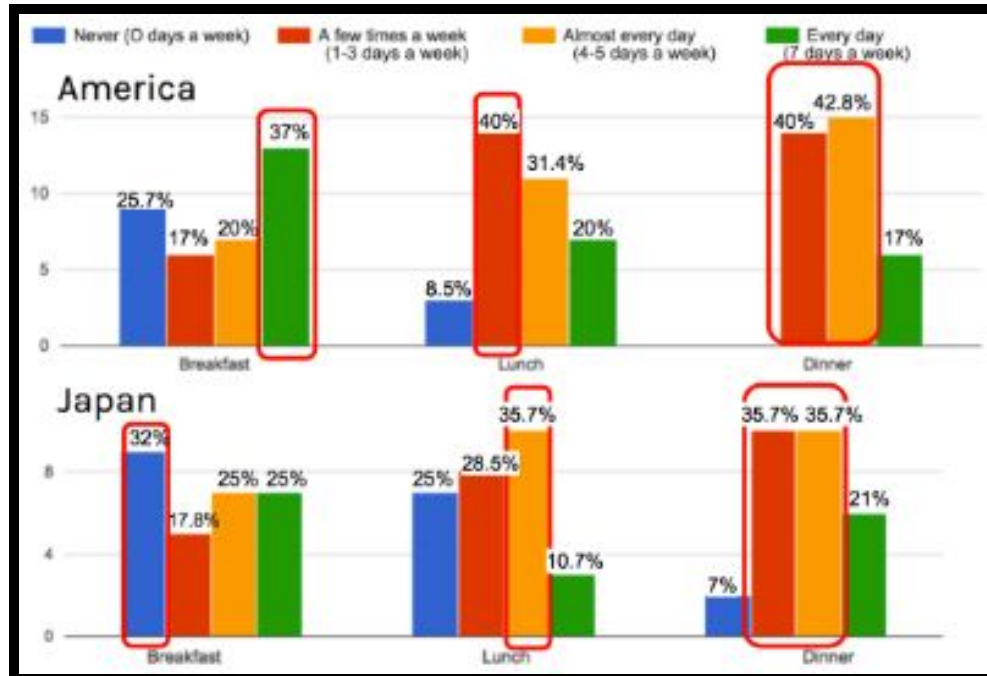
Both groups of students agree that fast food offers little to no nutritional value, however, calorie information on these foods is easier to find in the US. American students spend more on average than Japanese students, and feel like American fast food advertisers target their age group more. Each group has different beliefs on what fast food establishments are more unhealthy, however, there is a consensus that subway is the most healthy possibly due to the fact that high amounts of vegetables are more common among their sandwiches.

5.10 Research Question 2: How does fast food influence university students' eating habits and diet?

5.11 Frequency of Eating Home-Cooked Meals

Japanese students tend not to eat home-cooked meals for breakfast, however, both American and Japanese students eat home-cooked meals with about the same frequency for lunch and dinner (See Graphic 18).

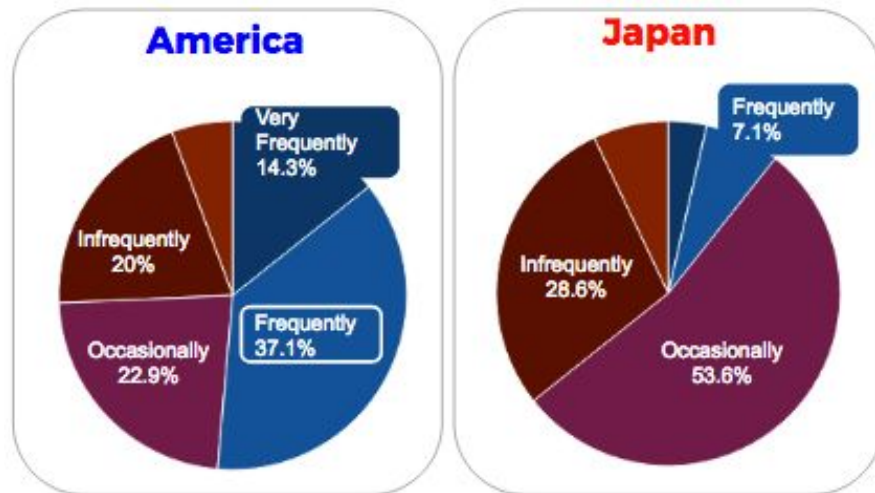
Graphic 18: How many times in a week do you eat home-cooked meals?



5.12 Frequency of Fast Food Consumption

American students eat fast food more often than Japanese students (See Graphic 19).

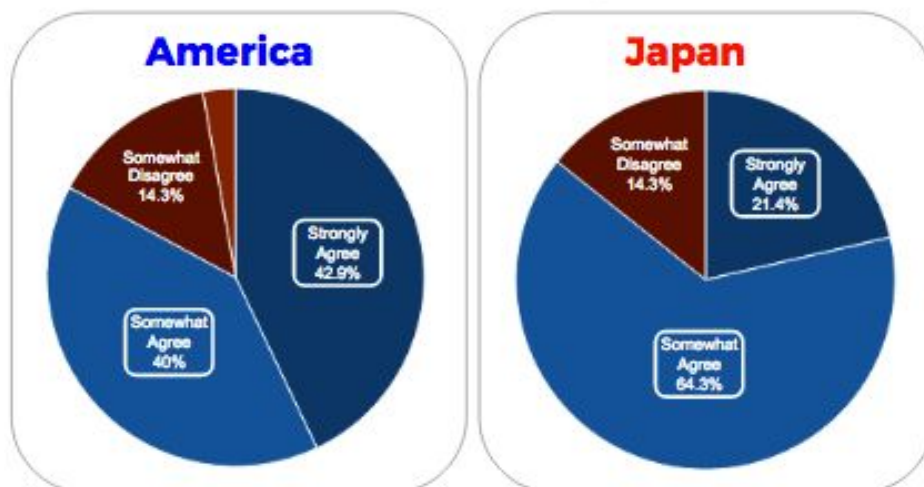
Graphic 19: How often do you eat fast food?



5.13 Effect on Diet and Body Image

Both American students and Japanese students feel that fast food affects their diet and body image, but Japanese students feel more strongly that it affects them (See Graphic 17 and 18).

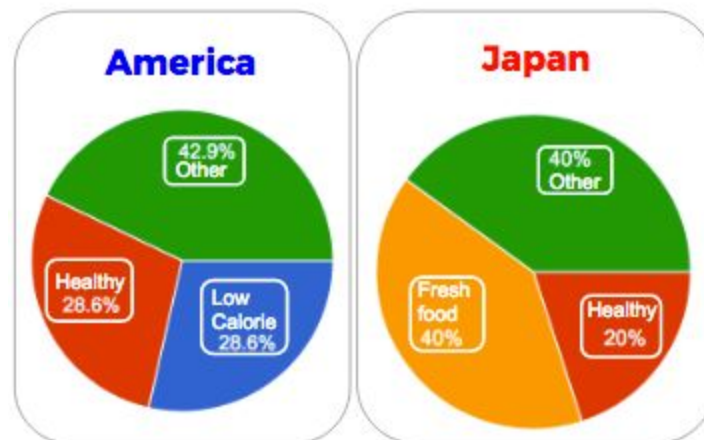
Graphic 20: Please rate how you feel about this statement: "I eat fast food and it directly affects my diet and body image."



5.14 If you chose "somewhat disagree" or "strongly disagree" in regards to the statement in the previous question, please indicate why.

American students believe that healthy and low calorie options are available, while Japanese student believe that healthy and fresh options are available (See Graphic 21). However, it is important to note that there were very few responses to this question from both Japanese and American students. Also, a major portion of responses from both groups of students were "Other" answers, and these answers were written in. These responses indicate that both American students and Japanese students believe moderation can counteract the negative effects of fast food (See Graphic 22).

Graphic 21: If you chose "somewhat disagree" or "strongly disagree" in regards to the statement in the previous question, please indicate why.



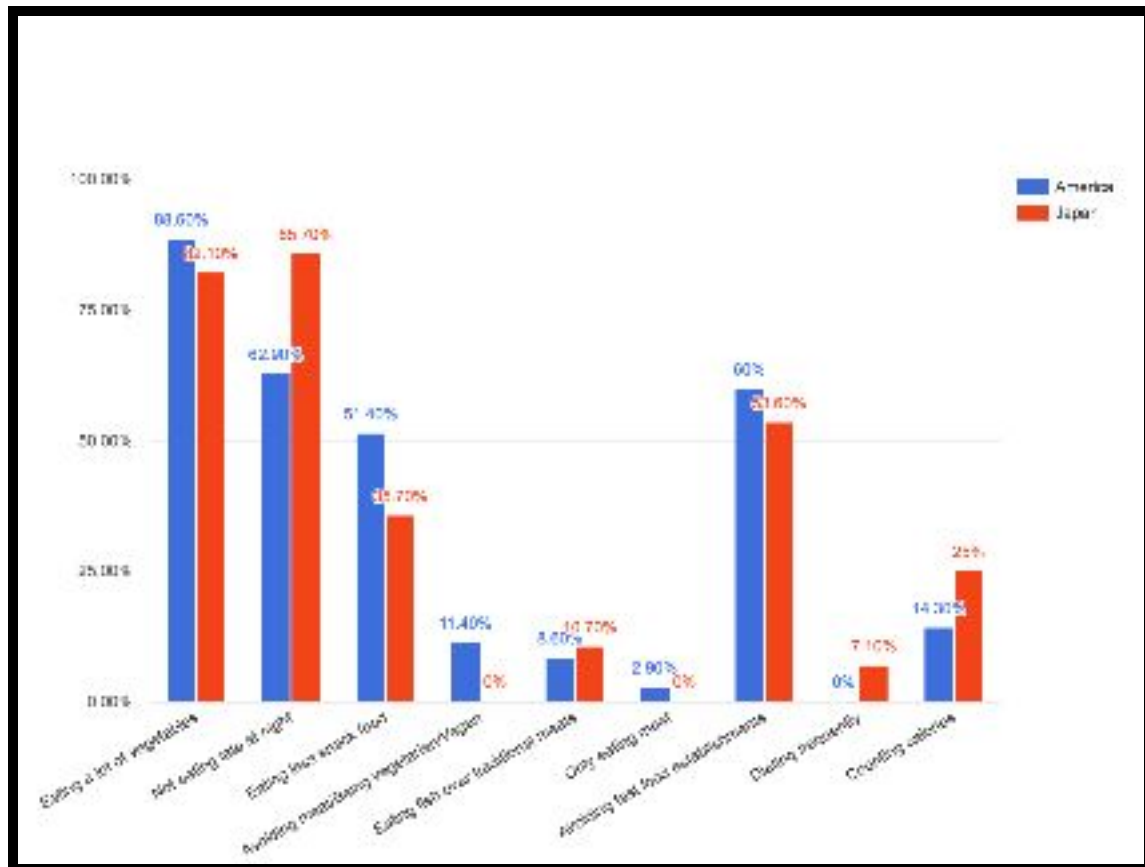
Graphic 22: If you chose "somewhat disagree" or "strongly disagree" in regards to the statement in the previous question, please indicate why ("Other").

America	Japan
"As long as it is sparingly, I think there is no problem."	"I am careful about what I eat for other meals."
"My fast metabolism"	"Because I do not think it will affect me if I eat fast food in moderation."

5.15 Concepts of Health

American students and Japanese students both believe that eating a lot of vegetables, not eating late at night, and avoiding fast food are ways of being health conscious (See Graphic 23).

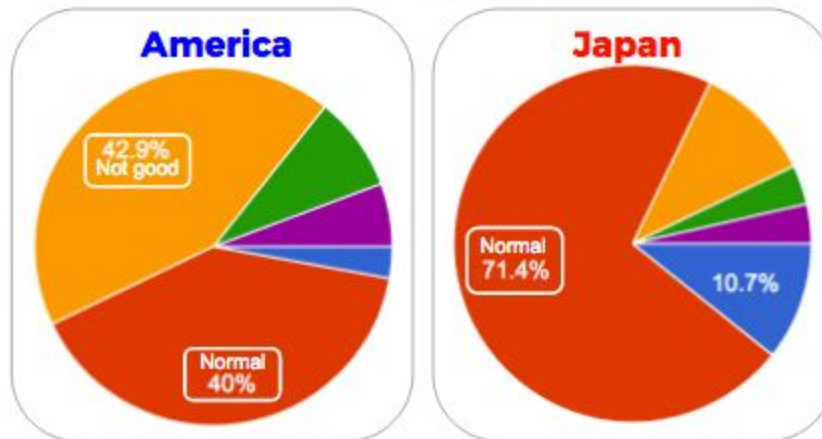
Graphic 23: What do you consider as being healthy?



5.16 Physical Effects of Fast Food

American students physically feel worse after eating fast food than Japanese students (See Graphic 24).

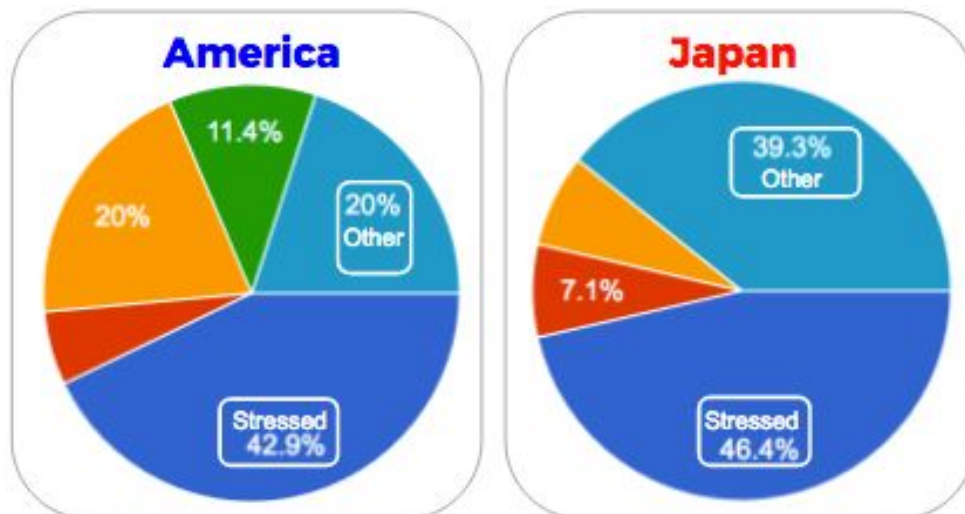
Graphic 24: How do you physically feel after eating fast food?



5.17 Psychological Effects on Fast Food Consumption

American students and Japanese students most want to eat fast food when they're stressed (See Graphic 25). 20% of American respondents and 39.3% of Japanese respondents chose "Other" and wrote in responses. These responses indicate that time and access are very important to Japanese students, while American students value that they do not have to cook themselves (See Graphic 26).

Graphic 25: When do you want to eat fast food the most? When I'm:



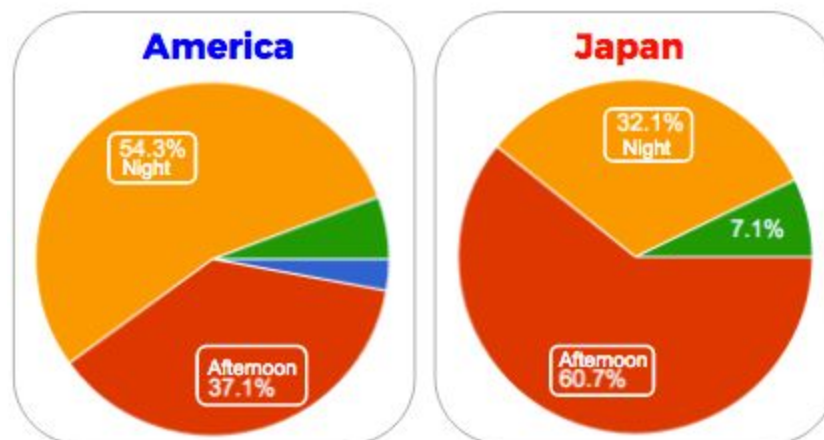
Graphic 26: When do you want to eat fast food the most? When I'm: ("Other").

America	Japan
"Don't want to cook" "When I'm too sick to cook"	"When I have no time." "When I want to finish eating quickly while I'm out."
"Lazy" "Tired"	"When I am hungry/very hungry"

5.18 Time of Day and Fast Food Consumption

American students are more likely to eat fast food at night, while Japanese students are more prone to eat it in the afternoon (See Graphic 27).

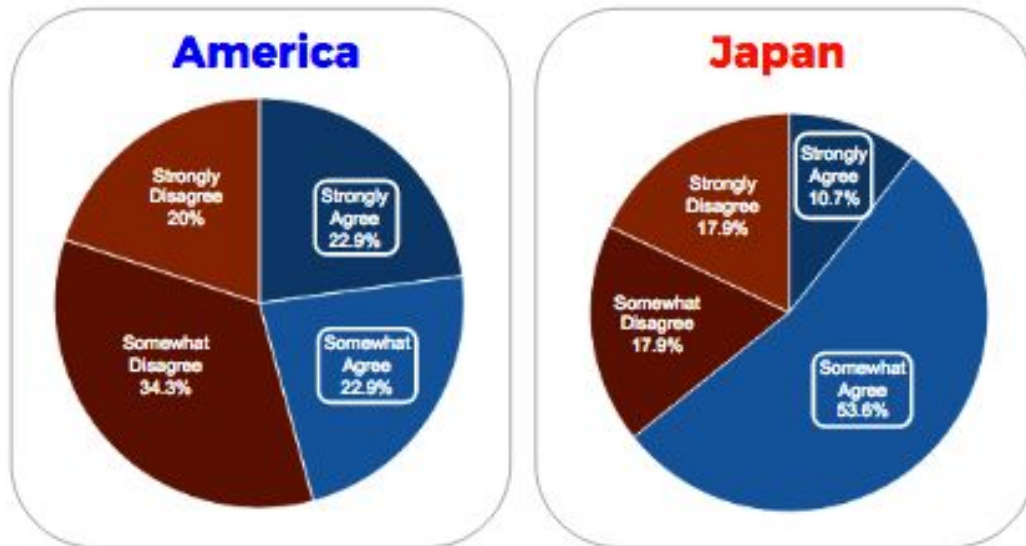
Graphic 27: When, over the course of a day, are you most likely to eat fast food?



5.19 Scenario: Cost, Health, and Taste

Japanese students are more willing to pay more for healthier fast food options than American students (See Graphic 28).

Graphic 28: If there was a better tasting and healthier option to the typical fast food restaurants listed in this survey, I would frequent those establishments more often even if it cost me 50% more than typical options.



5.20 Summary of Findings: Research Question 2

American and Japanese students both believe that fast food affects their eating habits, diet, and body image. Japanese students believe it affects their bodies more, but American students claim that they physically feel worse after eating it. Japanese and American students' views on health are similar, however, moderation seems to be the key in regards to lessening the effects of fast food on the body. Stress is the main motivator for fast food consumption in both groups of students.

6. Conclusion

American students eat fast food more often, but both Japanese and American students agree that fast food has negative health effects. However, both groups continue to eat fast food despite its negative aspects; most likely due to stress. Japanese students are more likely to pay more for healthier fast food options. Cost is the most significant factor when choosing to eat fast food for both groups of college students. Concepts of healthiness are similar among both groups of students, but concepts of things that are unhealthy are quite different. This is likely due to the prevalence of sugar in the American diet, and vegetables in the Japanese diet. Due to these

factors, American students may view more sugary foods and the most unhealthy, while Japanese students may view foods that lack vegetables to be the most unhealthy.

7. Limitations of the Study

Most of our respondents were female, so it would be beneficial to equalize the number of male and female respondents. Our respondent groups were also both fairly small, and the Japanese group was smaller than the American group by a significant margin. This makes it difficult to generalize the results.

8. Future Research

Future continuations of this study would include many more health-related questions, and ask more detailed questions. In particular, we would like to find out why the groups believed Krispy Kreme and McDonald's to be the least healthy restaurants respectively. We would also like to find out why American students feel worse after eating fast food than Japanese students.

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