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Undergraduate



Do the Types of Food You Eat Influence Your Happiness?

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Keywords: Processed foods, positive and negative emotions, healthy choices, happiness



Abstract

One's daily individual diet can have substantial effects on alleviating negative emotions. Researchers have established that certain types of foods help produce positive emotions in individuals, whereas others can produce negative emotions. Foods that primarily consist of fruits, vegetables, complex carbohydrates, proteins, and good sources of fat have been associated with producing positive emotions that are lasting in individuals. Additionally, foods high in fat and carbohydrates, or highly processed foods, though they may help dissipate negative emotions in the short term, research has suggested that they do not promote happiness in the long term and can even be detrimental to one's happiness. A survey study was conducted on students from the University of California, Merced to assess whether certain types of foods produce positive emotions among students. Results suggested that foods high in carbohydrates and fats helped students attenuate negative emotions such as stress, and these types of foods tended to be the first choice when students experienced negative emotions. Students primarily chose processed foods to rid themselves of negative emotions and promote happiness, whereas healthier choices were not a popular choice.



Literature Review

Do the Types of Food You Eat Influence Your Happiness?

There are many aspects in life that are out of our control, but the nutrients that we fuel our bodies with is something that we can easily manipulate to improve well-being. Being able to manipulate our surroundings to foster happiness in our lives through voluntary intentional activities is only one of the three major factors that influence our happiness (Lebon, 2014). In fact, understanding the relationship between the types of food we eat and how these foods influence our happiness can play a critical role in our daily lives. We based our research topic around how food influences mood and happiness because food is a factor is not only necessary to our survival, it is also one aspect of our lives we can control. If the types of food we eat can promote happiness in our lives, then it is essential for our greater well being to understand this relationship between food and happiness.

Literature Analysis

An array of research has been conducted linking food to mood, and while there are still many ongoing studies, researchers have come to a few conclusions on how one's diet can affect their state of being. Food and mood have a reciprocal relationship, with one factor affecting the other. Researchers have established that negative emotions can act as triggers for consumption of certain types of foods, and interchangeably, one's mood can also influence the foods that they decide to consume (White et al., 2013). Specific types of diets and single food items have also been studied, with certain diets and food items having higher mood-enhancing benefits than others (Blanchflower et al., 2012). Across the vast array of studies that have been conducted on



how food choices interact with individual happiness, the data has provided enough evidence to support the claim that the secret to happiness may in fact lie in what we eat.

A prime example of how food influences our mood is the comfort foods we decide to consume when experiencing negativity. Even though the phrase comfort food was introduced in the 1970's, this terminology was well known before then, and is still common. Comfort food describes foods that meet not only physical needs, but emotional needs as well (Troisi et al., 2011) have demonstrated that people often consume these comfort foods when they experience negative emotions, and current research is investigating how the consumption of comfort foods specifically affects one's mood. Particularly focusing on the negative emotion of loneliness, an experiment deciphered whether comfort foods remediated the feeling of loneliness in individuals (Derrick et al., 2009) proposed the idea that when faced with loneliness, people tend to seek out non-human targets to reduce the discomfort associated with being alone.

Moreover, researchers interested in the relationship between food and mood hypothesized that comfort food is one way that individuals find a sense of belonging in the midst of their loneliness. Through a series of experiments, these researchers accumulated ample evidence to prove that comfort foods do exist, and they do alleviate feelings of loneliness (Troisi et al., 2011). Food not only helps alleviate the discomfort of loneliness, but it also aids in relieving other negative emotions such as anxiety, stress, and depression. A growing number of evidence points to particular foods, primarily those high in fats and carbohydrates, that aid in reducing negative emotions (Roohafza et al., 2013). Researchers have even discovered biochemical evidence that shows foods higher in carbohydrates boost serotonin levels, the "happiness hormone", in the brain, leading to a reduction in negative effect (White et al., 2013). Research in



the area of food and happiness is increasingly suggesting that the food people consume plays an integral role in their overall levels of happiness by helping reduce negative emotions and bringing well-being into one's daily life.

In a study done to decipher what types of foods made individuals feel happier, researchers employed a method of dietary analysis by having their participants keep records of what they were consuming on a daily basis. They found that on days when people ate more fruits and vegetables, they reported feeling happier and energetic. They also reported that these feelings of happiness were felt the next day as well, and not just on the days when they ate healthier. Experience of negative effects on the other hand, was associated with unhealthy eating patterns. On days when individuals felt less happy, they reported consuming smaller servings of fruits and vegetables and greater servings of processed foods consequentially. Research has also suggested a correlation between depression and a lack of fruits and vegetables in the diet (Tsai et al., 2012). In another publication, (White et al., 2013) have found an explanation for the positive effect is associated with healthy eating patterns. They report that foods higher in complex carbohydrates, such as fruits and vegetables, improve mood, whereas refined or processed carbohydrates tend to worsen mood. Data from this study suggests that a daily intake of approximately 7-8 fruits or vegetables is associated with mood enhancement. Researchers have also begun to find results in their research that suggest a correlation between depression and a lack of fruits and vegetables (Blanchflower et al., 2012). Further research has suggested that the Mediterranean diet is a prime example of a healthy diet that can promote greater wellbeing for the body and the mind (Banjari et al., 2014). The Mediterranean diet is, in fact, rich in foods with complex carbohydrates, protein, healthy fats, fruits, and vegetables; all food items that have been proven to produce positive affect and well-being. According to research, the Mediterranean diet



is a perfect combination of nutrients needed for wellbeing. Although foods high in fats and carbohydrates may keep negative emotions at bay for a short while, researchers have suggested that the solution to long-term happiness is a diet that keeps us physically and mentally healthy.

Methods

To decipher whether the diets of students at the University of California, Merced impacted their happiness, we conducted a survey study asking students what they ate when experiencing negative emotions. The survey also asked demographic questions such as age, major, personal level of happiness, stress levels measured by hours of workload, and specific types of dietary patterns. A total of 60 participants responded to the survey, and the gender demographic of participants was primarily female, with 45 female respondents and 15 male respondents. The survey was distributed through social media, specifically through a Facebook page primarily for students at the University of California, Merced. The age of participants in this study ranged between the ages of 19 and 32. The survey entailed 21 questions and was subjective to the participant's discretion as to where their happiness stood based on the types of foods they consumed within the past week. The survey also asked other questions to find any other factors that correlated with the likelihood of the types of food intakes that may potentially interfere with the correlation between happiness and types of food consumed.

Results

According to the data collected from our survey, a majority of the participants reported feeling positive emotions within the past week. On a scale of 1-5, 40% of participants reported a 4 in positive emotions, 25% percent reported feeling a 3, 20% reported a 5, 11.7% reported a 2, and 3.3% reported a 1. About 43% of the participants in this survey were social science majors,



40% were natural science majors, and the remaining groups fell within engineering or undeclared. *Figure 1* depicts how likely students were to eat when they were feeling negative

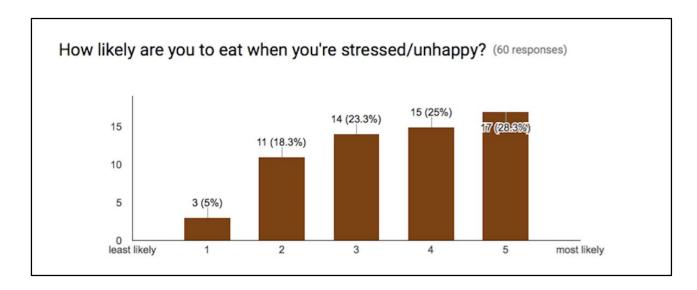


Figure 1: Survey results show that students tend to eat more when feeling negative emotions such as stress.

emotions, with a majority of students reporting that they tend to eat when experiencing negative emotions. On a scale of 1-5, 28.3% of students reported a 5 in likelihood of eating when experiencing negative emotion, 25% reported a 4, and 23.3% reported a 3. When asked what types of tastes are preferred when experiencing negative emotions such as stress, 61.7% of students preferred food that tasted sweet, 26.7% of students reported preferring savory foods, and 8.3% reported other taste preferences. When asked what types of foods they consumed when experiencing negative emotions such as stress, 68.3% of students reported consuming baked goods or desserts, 23.3% of students reported consuming fruits, 25% of students reported eating a whole meal, 16.7% of students reported eating other types of foods, and 3.3% of students reported consumption of vegetables. When asked if the types of food chosen when facing negative emotions made them happier, 63.3% of students reported that they did feel happier when eating their chosen foods, whereas 36.7% of students reported that they did not feel any



happier. Students were also asked whether they were generally happier after grabbing their go-to food on a scale of 1-5, and 41.7% of students reported a 3, which is a decrease from previously reported levels of happiness. When asked whether they would describe their dietary habits as healthy within the past week, 66.7% of students reported that they did not follow healthy dietary patterns, whereas 33.3% of students reported that they did follow healthy dietary patterns. To assess amounts of negative emotions experienced such as stress, students were asked how many hours of schoolwork they had per week, and 53.3% of students reported having more than seven hours of work per week, 26.7% of students reported 5-7 hours of schoolwork per week, and 20% of students reported 3-5 hours of schoolwork per week. When asked how many hours students worked per week, 65% of students reported working 0-10 hours, 20% reported working 10-18 hours, and 10% reported working 18-24 hours.

Discussion

It is evident that the types of food we ingest on a daily basis does more than stave off our appetites. The foods we choose to eat can have an affect on how we feel in our daily lives. We hypothesized that certain foods do play an important role in individual happiness, and that foods that are primarily unprocessed are what promote greater positive emotions. We also hypothesized that students at the University of California, Merced consumed primarily processed foods, especially when faced with negative emotions, and because of this, and their overall levels of happiness would be low. The results of our study illustrated that students at the University of California, Merced do primarily eat processed foods when facing negative emotions such as stress, but they also reported high overall levels of positivity, regardless of their diet. A surprising finding from this study also supports our hypothesis that happiness is positively



correlated with unprocessed foods intakes. When asked whether they were happier overall after consuming their go-to foods, students reported feeling less happy when grabbing their go-to food compared to their normal levels of happiness. This illustrates the fact that even though processed foods can alleviate negative emotions in the short term, they do not promote happiness in the long-term. This research is not a fully accurate representation of the campus as a whole, and therefore cannot be extrapolated to the entire population of students at the University of California, Merced. The gender distribution of the participants is also unrepresentative of the University campus, with a majority of respondents being female. Many students also do not have access to certain foods such as fruits and vegetables due to an array of reasons, including socioeconomic factors, which can interfere with their daily food choices.

Further research to decipher the connection between diet and happiness is necessary, primarily to answer the question as to why certain diets promote positive emotions, and why others fail to do so. Research on how to implement diets that promote greater happiness, especially among college-aged students would also help improve the lives of these individuals.

Conclusion

The types of foods individuals eat can play an important role in their experience of happiness. Research has suggested that diets that promote lasting happiness are those abundant in fruits, vegetables and other unprocessed foods. Even though processed foods can alleviate the discomfort associated with negative emotions in the short term, research evidenced that lasting happiness lies in a healthy diet. Although students at the University of California, Merced chose processed foods to produce happiness and alleviate their negative emotions, our research



suggests that the feelings of happiness associated with processed foods was short lived, and that long-term positive emotions can only be promoted through healthy eating habits.



References

- Banjari, I., Vukoje, I., & Mandić, M. L. (2014). Brain food: How nutrition alters our mood and behaviour. *Hrana u Zdravlju i Bolesti*, *3*(1), 13-21.
- Blanchflower, D. G., Oswald, A. J., & Stewart-Brown, S. (2013). Is psychological well-being linked to the consumption of fruit and vegetables? *Social Indicators Research*, 114(3), 785-801.
- Derrick, J. L., Gabriel, S., & Hugenberg, K. (2009). Social surrogacy: How favored television programs provide the experience of belonging. *Journal of Experimental Social Psychology*, 45(2), 352-362.
- LeBon, T. (2013). Achieve your potential with positive psychology. *Teach Yourself*.
- Rogers, P. J. (2001). A healthy body, a healthy mind: Long-term impact of diet on mood and cognitive function. *Proceedings of the Nutrition Society*, 60(01), 135-143.
- Roohafza, H., Sarrafzadegan, N., Sadeghi, M., & Rafieian-Kopaei, M. (2013). The association between stress levels and food consumption among iranian population. *Archives of Iranian Medicine*, 16(3), 145.
- Troisi, J. D., & Gabriel, S. (2011). Chicken soup really is good for the soul: "comfort food" fulfills the need to belong. *Psychological Science*, 22(6), 747-753. doi:10.1177/0956797611407931
- Tsai, A. C., Chang, T. L., & Chi, S. H. (2012). Frequent consumption of vegetables predicts lower risk of depression in older Taiwanese–results of a prospective population-based study. *Public Health Nutrition*, *15*(06), 1087-1092.



White, B. A., Horwath, C. C., & Conner, T. S. (2013). Many apples a day keep the blues away—Daily experiences of negative and positive affect and food consumption in young adults.

*British Journal of Health Psychology, 18(4), 782-798.