

CGT 270 DATA VISUALIZATION

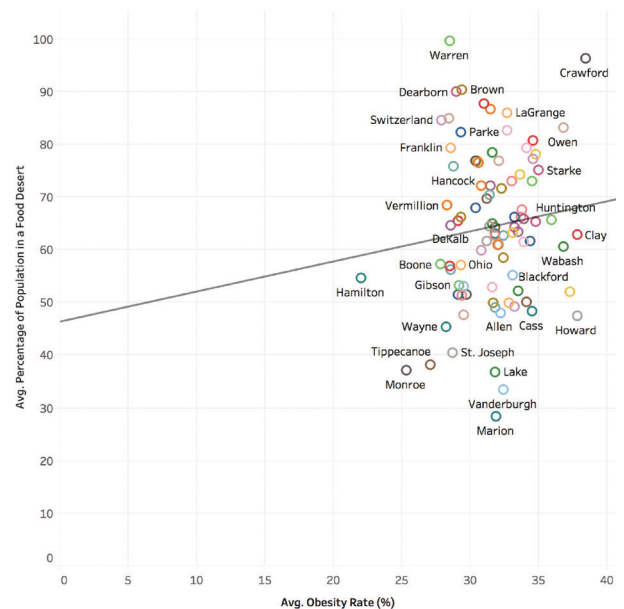
Food Deserts and Their Effect on the Rate of Obesity

Student researcher: Edith R. Mauro, Sophomore

The United States is widely considered as the most obese country in the world. One of the most influential factors on the rate of obesity is the excessive consumption of unhealthy food. America's obesity rate is a significant issue, and has continued to increase since 1990. If this rate continues to rise, the average life expectancy rate will decrease by about 10 years as a direct result. A method of combating the obesity crisis includes identifying the reasons why the crisis is occurring in the first place. This paper focuses on finding a correlation between the rate of obesity and food deserts. Food deserts are communities located outside a one-mile radius of suppliers of fresh whole foods. In other words, these communities are only exposed to processed foods that are usually high in fat, sugar, and carbohydrates.

I extracted data on obesity and food desert communities from the Centers for Disease Control and Prevention and the United States Department of Agriculture Economic Research Service. Using data on Indiana, a state with both a high obesity rate and a large number of food deserts, I looked for a correlation between obesity rates and food deserts. After conducting this research, my analysis revealed no such direct correlation. The lack of correlation provides evidence that old habits die hard when it comes to what people eat. Even though the outcome is unexpected, it is a great contribution to research toward finding solutions to the growth of obesity, by shifting the question of focus from "Where can people buy healthier foods?" to "How can we encourage people to buy more whole foods?" This shift is important because educating the population about the harm of obesity will work towards dissolving the "obese American stereotype."

Byrd writes: "According to The State of Obesity: Better Policies for a Healthier America (released August 2017), Indiana has the 10th highest adult obesity rate in the nation. Edith's research explores food deserts and their effect on the obesity rate for 2010 in the state of Indiana. Edith did a great job exploring this topic."



There is a lack of correlation between areas with low access to healthy foods and the average obesity rate of those areas. This graph shows data in Indiana from 2010.