Soda Tax Effect on Health Outcomes
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Background
- Sugar-sweetened beverages (SSBs), also called sugary drinks, are drinks that have added sugar or other sweetener.
- Consumption of SSBs is a risk factor for chronic diseases like diabetes and obesity.
- Food deserts are areas that lack access to affordable healthy foods and drinks.
- Americans living in food deserts lack essential nutrients in their diets.
- Previous research has shown that SSBs increase the risk for chronic diseases like diabetes, obesity, and cardiovascular disease for all people.
- Previous research has also shown that food deserts is associated to high consumption of SSBs.
- The paper will be a review of the soda tax laws and also attempt to measure soda consumption with certain health outcomes by using food deserts as a proxy variable, as maybe the soda consumption-food desert measure can be used in the future to evaluate the impact of the soda tax in jurisdictions that have enacted that legislation.

Methods
- To research the soda taxes in the United States, the paper analyzed the data for health effects in two different ways:
  1. the direct health effects on diabetes and obesity
  2. variations in the various health laws
- Statistical data was gathered from the CDC and Feeding America. It was analyzed using IBM SPSS ver. 25 and ArcGIS ver. 10.6.1.

Results
- The legislations were worded very similarly, and the definitions of what is taxed and what is not taxed is very similar too.
- Based on the maps, the incidence rate of diabetes and the prevalence rate of obesity overlapped with the food desert data. Most of the overlap was found in the south of the United States.
- Statistically, the chronic diseases compared with the food deserts were found to be significant. When the chronic diseases were compared to the hotspots, the data was found to be not statistically significant.

Discussion
- Based on the results, the data did not show significant data when being compared to the health outcomes and hotspots.
- A possible reason for the chronic diseases and hotspots not being statistically significant is because the tax is only one part of the many factors of health.
- In a recent Berkeley study, researchers found that the city’s SSB consumption had decreased by 55% over the past three years. The money collected from the tax has been used to fund a community garden at a local middle school.
- It is still early to tell whether or not the soda tax works as a health policy prevention.

References
- County data indicators | county data | data and statistics | diabetes | CDC. (2016).
- Food insecurity by county | Feeding America. (2016).
- Imposing a general tax on the distribution of sugar-sweetened beverage products; TaxU.S.C (2014).

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