Introduction:

With the advent of mass-produced antibiotics and the success of nation-wide inoculation campaigns, infectious diseases that were once serious threats to Americans’ health no longer dominate the leading causes of death. Instead chronic diseases; such as heart disease, cancer, and diabetes; have taken their place. Research is ongoing to pinpoint causes for these diseases, but so far the most widely-accepted explanation is lifestyle choices. Data-backed government websites and rumor-based fitness bloggers agree that what we eat and how we move greatly affects the chances of developing chronic diseases.

Yet, past research is heavily skewed towards studying the male body. Maya Dusenbery discusses in her book *Doing Harm* how women are often disadvantaged by data that is mainly collected from men. She argues that many of the conclusions about common symptoms and reactions did not posit the possibility of important difference among genders and sexes, and assumed that the male-dominated model could represent all. While researchers are updating standards to provide more inclusive advice, we still implicitly accept that assumption in most medical situations.

The combination of rising chronic diseases and lack of diverse gender representation in research provides a unique perspective on the NHANES data. We chose to investigate the effect of consumption habits on blood pressure, a known symptom of different chronic diseases, without the assumption that all genders would react the same. Will the factors that are most important in determining blood pressure be different between males the females? We will show in the following analysis that there are certain foods that affect one gender more than the other, and that these foods change depending on the type of blood pressure being measured. (The study only provided answers of ‘male’ and ‘female’ as identifiable genders, so those will be the only ones in this analysis. Also sex and gender will be used interchangeably in this context.)

Leading causes of death: <https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>

Chronic diseases: <https://www.cdc.gov/chronicdisease/about/prevent/index.htm>

Doing Harm by Maya Dusenbery: <https://www.mayadusenbery.com/book>

Updating Gender Inclusivity: <https://www.heart.org/en/health-topics/heart-attack/warning-signs-of-a-heart-attack/heart-attack-symptoms-in-women>

Blood Pressure and Chronic Disease: <https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/blood-pressure/art-20050982> and <https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/symptoms-causes/syc-20373410>