Asking Questions about Nutritional Issues

- Obesity
- Diabetes

Obesity 🔲

Description:

- Disease involving an excessive amount of body fat
- Major risk for heart disease, diabetes, high blood pressure and certain cancers
- Typically caused by a combination of genetics, environment, and poor diet/lifestyle

Potential Research Questions:

- How has COVID-19 and the pandemic affected obesity rates in the US?
- Is teenage obesity related to density of gyms and recreational facilities?
- Is there a relationship with obesity and suicide in Pennsylvania?

Diabetes 🧑‍⚕️

Description:

- Condition where the body cannot process sugar – the fuel for your energy
- Specifically, the body can't produce <u>insulin</u>, which is needed for sugar to be used by your body
- Two types of diabetes:
  - Type 1 (childhood diabetes) – you are born with diabetes, linked to genetics/environment
  - Type 2 – you develop diabetes, linked to genetics/environment, obesity, and poor lifestyle
- Since diabetics are bad at blood sugar regulation, emergencies requiring 911 occur frequently

Potential Research Questions:

- Do rates of childhood diabetes correlate with median household income?
- When do diabetic attacks typically happen? Time of day? Seasonal?
- How does hospital quality/density affect diabetic diagnosis rates?

Nutritional Disease Datasets to Explore

Pittsburgh EMS Responses from 2015-present

-1.4 mil+ 911 EMS responses in Allegheny County
-Data gives year and reason for EMS event
-Data organized by city & census block of event

How to use:
Use column *'description_short'* to filter responses by reason for EMS response

- OVERDOSE : 15,596 records in the database
- DIABETIC: 15,747 records in the database

National Health and Nutrition Examination Survey

-CDC project that interviewed and assessed the health of Americans

-Dataset has obesity rates of young adults from 1999-2012

-Data is split by gender and ethnicity

How to use:

-Download combined dataset from link to data.world
-Explore NHANES website to possibly get more data

Obesity Datasets to Explore

CA Weight Loss Surgery Data 2005-2015

-# of Weight Loss Surgeries in CA Hospitals

-Gives Hospital Name, County, Type of Surgery

-Really thorough and easy-to-use dataset

How to use:

-Click Image for link to website

-Click "Go to Resource" for excel file

CA Food Affordability 2006-2010

-Food Affordability by city, county, and region

-Calculates an "affordability_ratio" based on a number of factors

-Combined effort from multiple CA state departments

How to use:

-Click Image for link to website

-Click "Go to Resource" for excel file
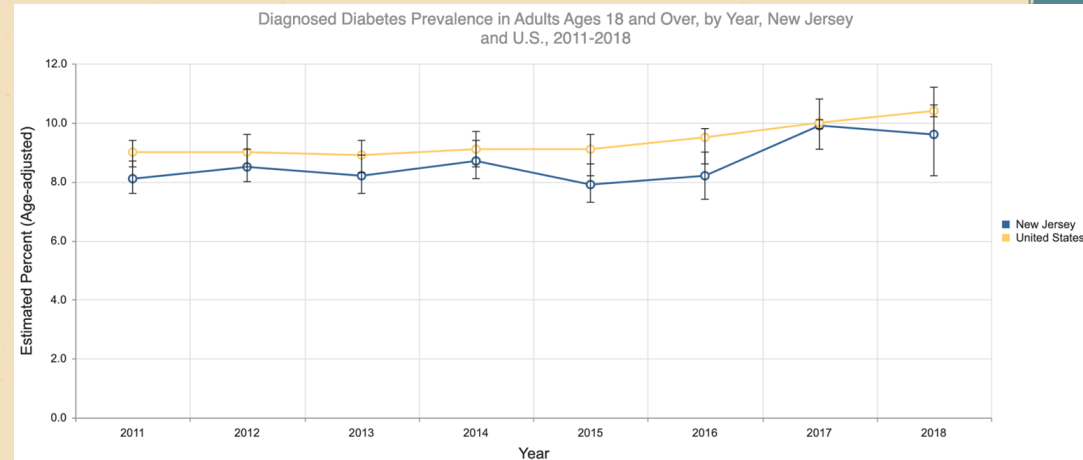
Diabetes Datasets to Explore

NJ Diabetes Prevelance 2011-2018
-County-level Depression rates data
-Based on The NJ Behavioral Risk Factor Survey

How to use:
-Click on image top right to access 2011-2019 data
-Or go to main website -> Health Topics -> Mental Health -> Doctor Diagnoses Depression
- Use filters to specify based on your question

Diagnosed Diabetes Prevalence in Adults Ages 18 and Over, by Year, New Jersey and U.S., 2011-2018

New Jersey
United States

Diabetes Datasets to Explore

Diabetes Insurance Data in Allegheny County

-390 observations (1 for each census tract)

-Includes # of men/women with Diabetes Type 2

-Data from 2015 and 2016

How to use:

Use the metadata (table explaining what each column means)

Data collected from 3 large health insurance providers

- IMPORTANT: this data does not include uninsured patients with heart disease