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STAT 410

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SAS Final Project

# Project Idea/Description:

For our project we want to find how age, race/ethnicity, and education level reflect the health and builds of Americans, so we selected the following variables to observe from NHANES datasets:

* Age
* Race/Ethnicity
* Education level
* Weight
* Standing height
* Waist circumference
* White blood cell count
* Red blood cell count
* Hemoglobin

# NHANES Datasets:

#### Variables to study (\*3-4 Must be Demographics\*):

**2017-2020 Demographic Variables and Sample Weights – P\_DEMO**

**RIDAGEYR – Age in years**

**RIDRETH3 – Race/Ethnicity**

DMDEDUC2 - Education level - Adults 20+

**2017-2020 Body Measures – P\_BMX**

BMXWT - Weight (kg) – suggests BMI to show overall health instead of just weight.

BMXHT - Standing Height (cm)

BMXWAIST - Waist Circumference (cm)

**2017-2020 Complete Blood Count with 5-Part Differential in Whole Blood – P\_CBC**

LBXWBCSI – White blood cell count

LBXRBCSI – Red blood cell count

LBXHGB - Hemoglobin

A screenshot of a computer

Description automatically generated

proc format;

value RIDRETH 1 = 'Mexican American'

2 = 'Other Hispanic'

3 = 'Non-Hispanic White'

4 = 'Non-Hispanic Black'

6 = 'Non-Hispanic Asian'

7 = 'Other';

value DMDEDUC 1 = 'Less than 9th Grade'

2 = '9-11th Grade'

3 = 'High School Graduate'

4 = 'Some college'

5 = 'College Graduate or above'

7 = 'Refused'

9 = 'Do Not Know';

run;