

The Associations Between Obesity, Income, and Race

Research Questions

- Is obesity positively associated with poverty?
- Does race moderate the association between obesity and income?

Significance

- Obesity has steadily increased over the past 50 years in United States.
- Obesity leads to other serious and fatal health problems including heart disease (The State of Obesity).
- Rates of obesity are lower for whites and higher for minorities. Whites tend to have higher incomes than minorities.

Background

- Whites experience obesity at a lower rate (37.9%) than do Black (46.8%) and Latinx people (47.0%) (Drewnowski 2009).
- Eating a healthy diet costs about \$2,000 more a year than an unhealthy diet.

Hypotheses:

- Families with lower income will tend to be more obese than families with high income, no matter their race or ethnicity.
- White Families will tend to be less obese than families of color because of disadvantages in income.

Data and Sample

- National Longitudinal Study of Adolescent to Adult Health (Add Health)
- Public Use Data
- Wave 1
- N = 6490

Dependent Measure

Perceived Obesity

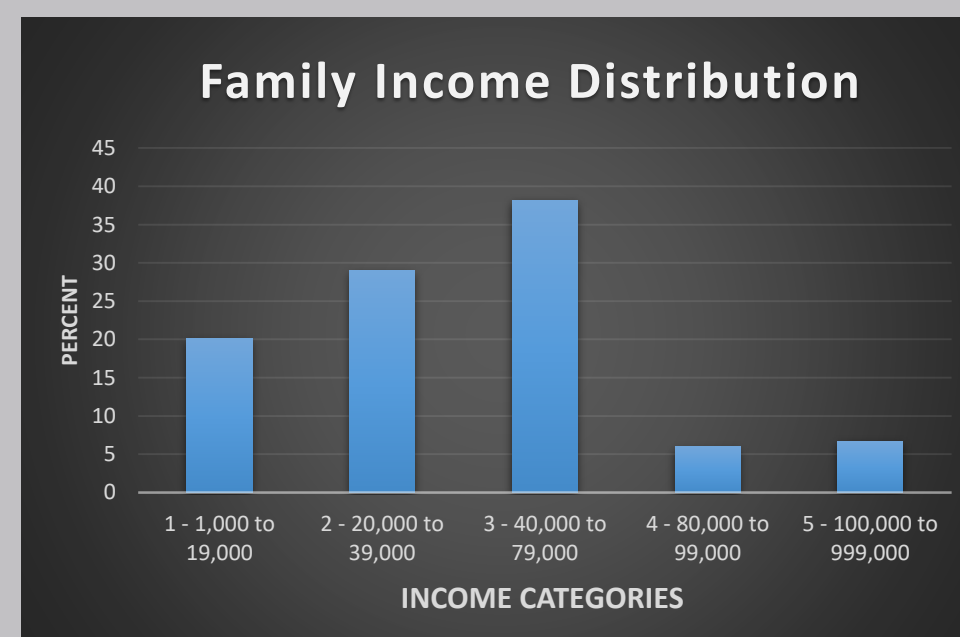
How do you view yourself in terms of weight?

- slightly or very underweight (16.4%)
- about the right weight (52.1%)
- slightly or very overweight (31.5%)

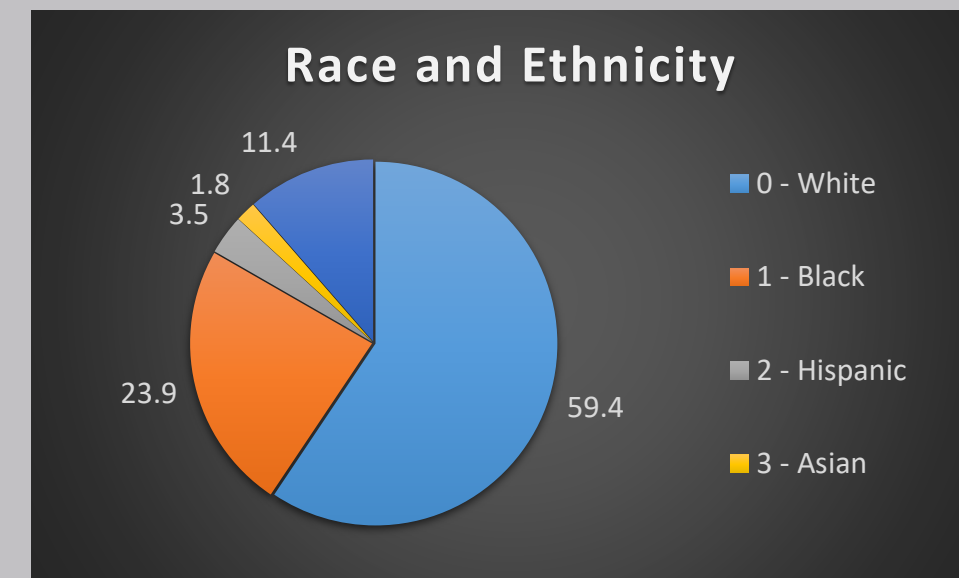
Independent Measure

Family Income

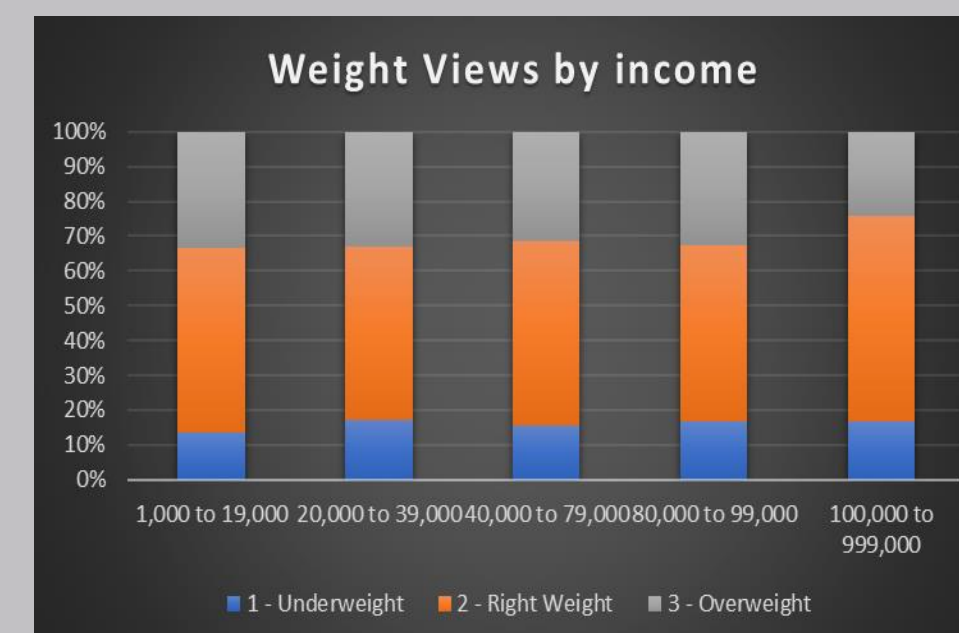
About how much income, before taxes, did your family receive in 1994?



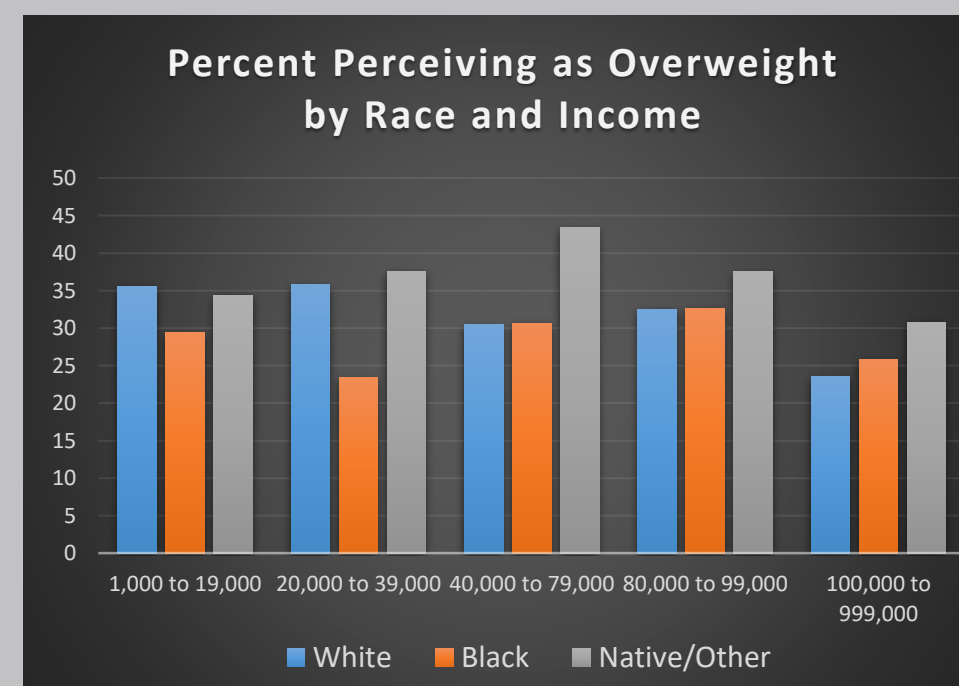
Moderator Variable



Results



Note: Chi-square test not statistically significant.



Note: Chi-square test significant at $p < 0.001$ for whites.

Summary and Conclusion

- Not a strong association between income and perceived obesity.
- Low-income youth were slightly more likely to perceive self as overweight.
- Relationship appears to vary by race and ethnicity.
- Whites more likely to perceive as overweight within lower income families.
- Black youth are more likely to perceive self as overweight within middle class families.

References

- "Obesity Rates & Trend Data." The State of Obesity, <https://stateofchildhoodobesity.org/data/>.
- "Eating Healthy vs. Unhealthy Diet Costs about \$1.50 More per Day." News, 13 Jan. 2014, <https://www.hsph.harvard.edu/news/press-releases/healthy-vs-unhealthy-diet-costs-1-50-more/>
- Drewnowski, Adam. "Obesity, Diets, and Social Inequalities." Nutrition Reviews, vol. 67, 2009, doi:10.1111/j.1753-4887.2009.00157.x