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# The Influence of Parental Knowledge of Nutrition Labels on Child BMI

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# The Influence of Parental Knowledge of Nutrition Labels on Child BMI

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**Background/Hypothesis** The purpose of this study is to better understand parental knowledge of nutrition labels and how this knowledge affects their child's BMI. A large proportion of US parents have limited health literacy skills on how to read and use labels<sup>1</sup>. Socioeconomic status and other demographics may affect this knowledge. We predict that children of parents who lack nutrition label knowledge will have higher BMIs than children whose parents have nutrition label knowledge.

**Methods:** Parents were discretely approached and asked to take our survey after their child's pediatrician appointment. Only parents with children ages 4 to 18 were asked. Parents listed their child's height and weight, which were measured at their appointment. Each child's BMI percentile was calculated using these values. We then conducted statistical analyses including t-tests in order to determine the relationship between parental nutrition knowledge and child BMI.

**Results:** The majority of parents we approached were female (85.9%) and/or identified as white (81.3%). The majority of children who visited the office with their parent were male (65.6%). We did not find a statistically significant relationship between parental nutrition label knowledge and child BMI.

**Conclusion:** Because there was no significant relationship between parental nutrition label knowledge and child BMI, we have good reason to suspect that our survey did not adequately capture parental nutrition knowledge. Parents may not use nutrition labels at all and instead use other sources of information like the internet or social media. Future studies should investigate where exactly parents report obtaining their nutrition knowledge. Additionally, instead of producing our own survey, future studies should use a valid vetted survey designed and tested to determine parental knowledge of nutrition. This will ensure valid assessment of parental knowledge. Due to our insignificant results, we also reconsidered our hypothesis. We initially thought that parents with increased nutrition knowledge would have children with lower BMIs.

FIGURE 1: Child BMI Percentile

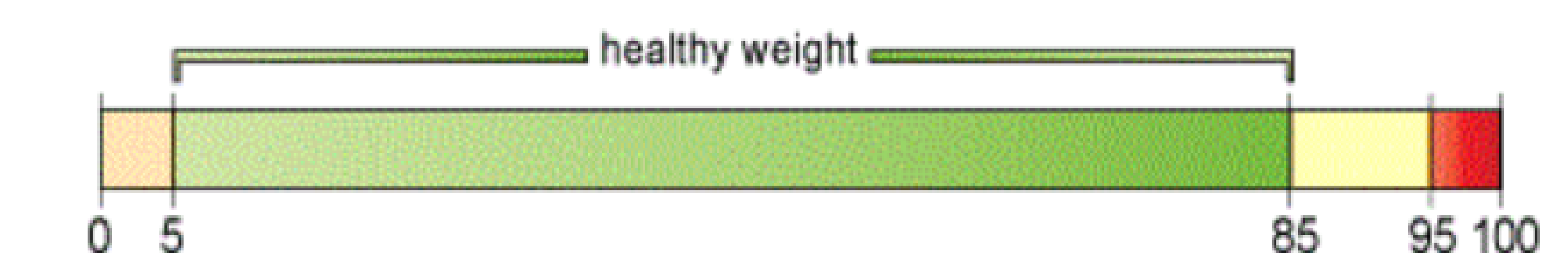
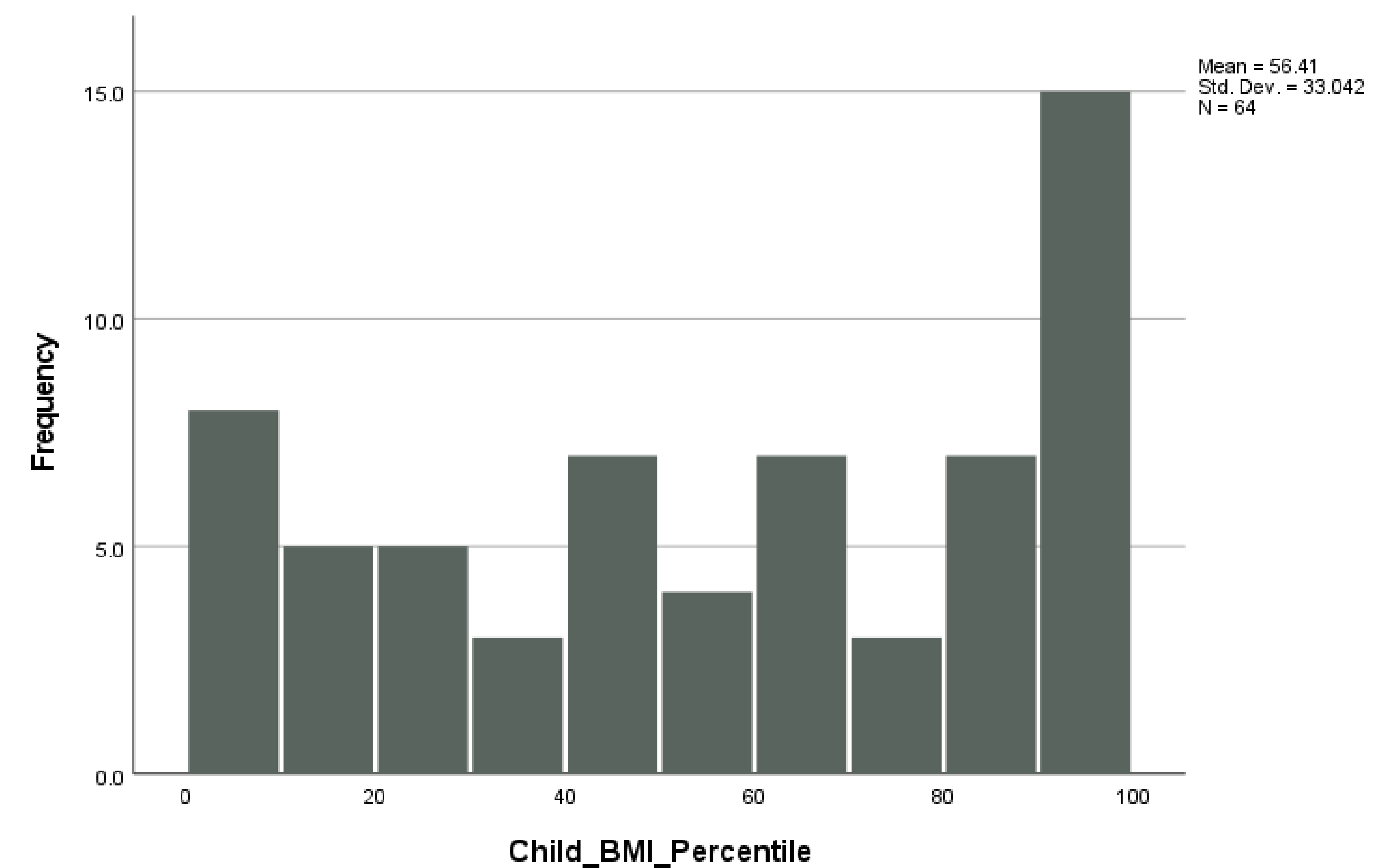


Figure 2: CDC.gov

However, it is plausible to consider that parents of children with higher BMIs know more about nutrition because they are more cautious of what their child can eat in order to lower their BMI.

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## REFERENCES:

<sup>1</sup>Yin HS, Johnson M, Mendelsohn AL, Abrams MA, Sanders LM, Dreyer BP. The Health Literacy of Parents in the United States: A Nationally Representative Study. *Pediatrics*. 2009;124(Supplement 3):S289. doi:10.1542/peds.2009-1162E