Clinical Reading Questions #6

HST 190: Introduction to Biostatistics

These discussion questions are based on Turner et al. (2020).

- 1. Identify the main research question of the study.
- 2. Who are the "subjects" in this study, and how many are included?
- 3. What are the "outcomes" of interest in this study? What independent variables are measured for association with the outcomes.
- 4. Do the authors find an association between state-level Smart Snacks policy and students' total daily energy intake from solid fats and added sugars? If so, summarize the finding.
- 5. The authors indicate that this study is cross-sectional, in that it includes data on just 24 hours of dietary information for each of the sampled students. What limitations arise because of this design? (e.g., compared to a design that followed the same students over a longer period of time)
- 6. The authors define states as having implemented Smart Snacks policy if they have specific policies implemented using certain binding language. Despite this careful definition, is there any concern that this "policy" might be different in different states? What do the authors have to say about this possibility?
- 7. The study performs multivariate regressions both on the full sample, and also on the subset of students who purchase snacks at school. Why do the authors focus on this subgroup? Can we compare the results from this subgroup analysis to the analysis of the complete sample?

References

Turner, Lindsey, Julien Leider, Elizabeth Piekarz-Porter, and Jamie F Chriqui. 2020. "Association of State Laws Regarding Snacks in US Schools with Students' Consumption of Solid Fats and Added Sugars." JAMA Network Open 3 (1): e1918436. https://doi.org/10.1001/jamanetworkopen.2019.18436.