

Authentic Data Integration Assignment

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Data Source:

Fast Food Intake Among Adults in the United States, August 2021-August 2023

National Center for Health Statistics

https://www.cdc.gov/nchs/data/databriefs/db533.pdf?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fnchs%2Fupdates%2Ffeature-2.html

Lesson Enhancement:

I plan to use this NCHS data brief (published June 2025) to enhance instruction in human anatomy, a course for 11th and 12th graders. The data will be used in the first two weeks of school to support our discussion of scientific methods. The concepts and vocabulary in the data brief will also allow us to preview concepts and vocabulary that will be taught later in the year including digestive system, body composition, fat tissue, metabolism, diseases/disorders, and health metrics.

In our introduction to scientific methods, we'll be focusing on writing scientific questions. This data brief provides rich opportunities to identify research questions the scientists were attempting to answer and for students to develop their own questions that may be answered by the same data set. Questions for discussion might include:

- What scientific questions were the researchers trying to answer?
- Identify the independent variable, the dependent variable, the study group(s), and controls used in the research.
- Did the researchers answer their questions?
- Describe the confidence with which their researchers presented their findings.
- What scientific questions can you write concerning this issue?
- What could the researchers focus on next time to extend their understanding?

I am currently trying to use data to enhance student engagement in my classroom. But I'm better at using online data resources in my environmental science course when compared to human anatomy. There are so many

opportunities for using real health data, especially with all the NCHS resources out there. I hope to use data from federal agencies more in my anatomy instruction in the future.

Interdisciplinary Context:

This data could easily be used in creating interdisciplinary lessons, especially through cooperation with other departments in our school. Our AP Statistics teacher would really enjoy teaming up on this effort as we share a lot of the same kids. Our students might discuss questions like:

- What connections do you observe between socioeconomics and fast-food consumption?
- Were the methods used in this research valid and reliable?
- Would a modification in the definition of fast food change the findings presented by the NCHS?
- What is a food desert? How do fast food companies choose where to put their restaurants?

Many interesting activities could be created using this data source as a hook. Some examples include:

- Have students keep a weekly log of caloric intake. Students then assess the factors that influence their diet and discuss how they might improve their diet in the future.
- Interview with family and friends. What factors influence their diets? Are there health problems that correlate with fast food consumption in your own community?
- Identify the areas of our city where the density of fast-food restaurants is highest. Where is the highest density of grocery stores? How might we redesign our city to make sure everyone has access to quality food?