

Article-Based Questions

Directions: After reading the article "[A gut check gets personal](#)," answer these questions:

1. What is the main topic of this article?
2. Where does Lawrence David get his inspiration?
3. What is the microbiome and what role does it play in the body?
4. How did Lawrence David study his own microbiome?
5. What are Lawrence David's strengths as a scientist?
6. How does Lawrence David's work on the microbiome inform your thinking about the phrase "you are what you eat"?

Answer Key

1. What is the main topic of this article?

Possible student response: *By tracking his own gut microbiome, Lawrence David gained important insights into how the body's inner environment changes over time.*

2. Where does Lawrence David get his inspiration?

Possible student response: *A Jim Carrey movie inspired him to say "yes" to new experiences. He gets inspiration by opening himself to new experiences, exploring science outside his area of expertise and partnering with other researchers on interesting questions.*

3. What is the microbiome and what role does it play in the body?

Possible student response: *A microbiome is the collection of microscopic organisms inhabiting the body, including bacteria and viruses. These microbes help the body digest food, but may also play a role in heart disease, obesity and asthma. Recent studies suggest the microbiome may also influence a person's behavior.*

4. How did Lawrence David study his own microbiome?

Possible student response: *He collected his own feces and saliva for analysis in the lab. He also tracked bowel movements, sleep quality and duration, blood pressure, weight, vitamin use and mood. He recorded what he ate, symptoms of illnesses and medications used. He then analyzed these data to find patterns that he could test further.*

5. What are Lawrence David's strengths as a scientist?

Possible student response: *He is open to new opportunities. He is willing to go outside his comfort zone. He is able to see the essence of a problem and identify a straightforward solution. He takes risks. He can develop computational tools and analyze complex datasets. He incorporates ideas from different disciplines of sciences, including concepts from engineering.*

6. How does Lawrence David's work on the microbiome inform your thinking about the phrase "you are what you eat"?

Possible student response: *Lawrence David's studies show that changing your diet can change your microbiome. Because your microbiome is part of who you are, and integral to your daily functioning, what you eat does influence who you are.*