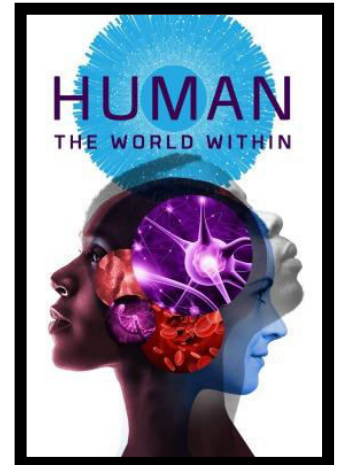


NAME: _____

PERIOD: _____

DATE: _____

HUMAN: THE WORLD WITHIN SEASON 1 ~ EPISODE 3: "FUEL"



Introduction

1. What is the one ritual that happens in every corner of the world and has become part of our culture?
2. The need for fuel is most apparent than when you are doing what?

Scene One: "Cortez, Colorado ~ Shaun Martin"

3. When Shaun runs every morning, why does he head to the east?
4. How is an ultramarathon different from a marathon?
5. What does everyone of our nearly 40 trillion cells need in order to power on?
6. What is the digestive system more commonly known as?
7. What did cooking food allow us to do with food? How much more than raw food?
8. What is the stomach basically a vat of?
9. What does glucose need in order to be carried through the blood?
10. Marathoners have to face "hitting the wall", which happens when?
11. What is the record for the longest continuous run? (*Circle one.*)
250 Miles 300 Miles 350 Miles 400 Miles

Scene Two: "Queens, New York ~ Deepti Sharma"

12. As a Hindu, what does Deepti Sharma do as part of her religious practice?
13. How has research suggests that fasting can help with?
14. What does the liver act as?
15. After about 8 hours of no food, the liver runs out of sugar to burn. What does the body tap into next?
16. Digestion begins long before the food actually hits the gut. The thought or smell of food can stimulate the release of what?
17. Scientists estimate that we have over how many bacteria in our gut?

Scene Three: "Orlando, Florida ~ Ava"

18. List *three* foods that Ava is allergic to.

19. How does Ava describe the experience of going into anaphylactic shock?
20. What is one special type of immune cell that starts an allergic reaction?
21. **True or False:** Without the trillions of foreign organisms living inside us, we're more susceptible to disease.
22. What is one of the main factors as to why so many people have food allergies today?
23. How much gut bacteria will be removed with a broad spectrum antibiotic?

Scene Four: "Limonade, Haiti ~ George Frantzdy & Joasil Luckny"

24. The microbiome that separates the gut from the rest of our body is controlled by how many genes?
25. If we deprive our microbiome for too long, what happens to the bad bacteria in our gut?
26. To protect his crops, George uses Konpos Lakay, which is treated with what?
27. As assistant supervisor at SOIL, Joasil Luckny is responsible for collecting what from people's homes?
28. **True or False:** 99% of human waste in Haiti is being recycled as fertilizers for fields.
29. When gut bacteria breaks down fiber, what does it release that helps strengthen the lining of the colon?
30. What do we refer to the gut as (because it reflects everything about us and is the hub/center)?