

Topic: The gut-brain Axis: Is your gut your second brain?



What is the link between the Digestive System, the Brain and the Neurotransmitters?

Purpose: To connect the information you know about the digestive system with a new concept, the gut-brain axis. What connects the brain to your gut? The food you eat fuels your systems. Where are the neurotransmitters synthesized in the human body? Can what you eat to improve your brain function?

Task #: Your task begins with the reading of a research article. The article will give you basic information about the concept. Insert article: <https://bit.do/eGC4X> (Links to an external site.)

Answer the following questions and you may work in groups for this task.

1. What is the gut microbiome? Is it inside every human body? Is it an organ?
2. Which nerve connects the brain and the gut?
3. When a person undergoes gastric bypass surgery, can their hunger, appetite, and satiety cues change?
4. What are short-chain fatty acids? Are they present in any food that contains fat?
5. Why are neurotransmitters referred to as chemical messengers? Who receives these messages and what are their primary roles in the human body?

Criteria for 30 points: You will be successful in this activity if you can:

1. Provide answers to all the 5 questions with clear descriptions.
2. Ask a question and answer your own researched question. Make the question worth something. What are you curious about? Ask your question.

