

The big idea: can what you eat change your mind?

Level 2: Intermediate

1 Warmer

a. Discuss the following questions in pairs.

- How do you think the food you eat affects your health and how you feel?
- Have you ever noticed that food changes your mood or energy levels? Can you give an example?
- People often talk about 'superfoods'. What do you think they are? Why do people say they are healthy?

2 Key words

a. Match the words below with their definitions. Then find and highlight them in the article to read them in context.

- | | | |
|------------------------|-------|--|
| 1. bacteria | _____ | a. focusing on or noticing something carefully |
| 2. benefits | _____ | b. foods that are considered very healthy |
| 3. food trends | _____ | c. a feeling of being sick |
| 4. genetics | _____ | d. changes, depending on the situation |
| 5. gut | _____ | e. describes foods that contain chemical additives or ingredients which make them unhealthy |
| 6. immune system | _____ | f. the digestive system, especially the stomach |
| 7. microbiome | _____ | g. the part of the human body that fights illnesses and diseases |
| 8. nausea | _____ | h. popular eating habits or diets that change over time |
| 9. paying attention to | _____ | i. food or drink that contains yeast or bacteria that is good for your digestive system |
| 10. probiotics | _____ | j. the study of how characteristics are passed from parents to children through DNA |
| 11. superfoods | _____ | k. the advantages or positive effects of something |
| 12. ultra-processed | _____ | l. tiny living organisms in the body – some can make us ill, but others can be good for our health |
| 13. varies | _____ | m. a collection of organisms that live in a specific environment |

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b. Complete the sentences with words from the previous activity.

1. The effect of diet and exercise on your body _____ from person to person.
2. _____ the road signs when you are driving in a foreign is important for your safety.
3. If I eat too much fried food, my _____ hurts a lot.
4. The smell of fish gave Sasha a feeling of _____.
5. Your _____ can help protect you from winter colds and flu.
6. One of the latest _____ is eating more vegetarian food for health reasons.
7. Scientists are studying how changes in our gut's _____ can affect diseases like obesity and diabetes.
8. Blueberries and spinach are often called _____ because they contain many different vitamins.
9. Try to avoid eating too many _____ snacks, such as crisps and high-calorie biscuits.
10. _____ can grow in many places of the body, including in the mouth and on the skin.
11. Eating _____, such as yoghurt, can be good for your stomach.
12. One of the _____ of learning a new language is that it can help improve your memory.
13. _____ plays a key role in determining a person's eye and hair colour and height.

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From designer drinks to dodgy leftovers, our brain responds to food in surprising ways

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- 1 Probiotics, superfoods and gut-healthy snacks – everywhere we look, we're told what to eat and what to avoid. But food trends are confusing. Some foods are called healthy by some but unhealthy by others. For example, if a gut-friendly snack bar is ultra-processed, does it lose its benefits? We often feel that our food choices have effects on our health, including our brain. But is that really true?
- 2 There is some science behind these ideas. Studies show that people with mental health issues, like depression or anxiety, often have different bacteria in their gut. This happens because the gut sends signals to the brain through the vagus nerve and the immune system. An unhealthy gut microbiome might lead to mental health problems. But could eating gut-friendly foods help?
- 3 Possibly, but the gut microbiome is very complex. It is affected by many factors, such as genetics, medicine, and even social interactions. A person with poor mental health may have an unhealthy gut microbiome because of a limited diet, fewer social experiences or use of medicines. While probiotics can improve gut health, it isn't clear if they actually affect mental health for most people.
- 4 Additionally, the brain doesn't just receive signals from the gut – it filters them out. The brain's main concern is survival. It picks up on signals from the body to decide how to respond. When it comes to food, two things matter most: does the food provide energy, and could it be harmful?
- 5 For example, when you drink something sugary, your brain processes the taste and feel. But after swallowing, your digestive system informs the brain that the drink has calories and stops you feeling thirsty. This encourages you to drink it again in the future. This is a basic form of reward-based learning that helps us find foods and drinks that we like or dislike. It happens automatically, based on past experiences. However, different people react differently to these signals, adjusting their eating and exercise habits in unique ways.
- 6 Just as the brain learns what is rewarding, it also learns what to cut out. Some people are more sensitive to signals like nausea. If a certain food makes you sick, your brain will quickly put you off eating it again. This kind of learning is powerful and difficult to change. In fact, disgust is such a strong emotion that it can lead to food phobias and even post-traumatic stress. While gut signals are important for health, sometimes they can be too strong, causing unnecessary fear of certain foods.
- 7 So, can food really change your mind? In some ways, yes. The gut and brain constantly interact, and food can influence mood and well-being. A bad meal or a special drink designed to improve gut health could have an effect. However, how food impacts the brain varies from person to person. There is no universal answer, so strong claims about diet and mental health should be viewed with caution. What we do know is that it all comes down to your brain constantly paying attention to your gut.

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3 Comprehension check

a. Are these sentences True (T) or False (F) according to the article? Correct any that are false.

1. Probiotics can have a positive effect on a person's mental health. _____
2. The vagus nerve helps the gut communicate with the brain. _____
3. Your genes don't affect the health of your gut's microbiome. _____
4. When you drink a fizzy drink, your gut sends signals to the brain about it. _____
5. Different individuals respond to food-related signals in different ways. _____
6. Disgust is a powerful emotion that can influence the food you dislike. _____
7. The brain only learns from positive food experiences and not from the negative ones. _____

4 Key language

a. Find the verbs in the text and match them with a preposition from the box.

up on off down to out out to

1. come _____
2. cut _____
3. filter _____
4. lead _____
5. pick _____
6. put _____

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b. Read the definitions and then complete the examples with a phrasal verb in the correct form.

1. to cause something to happen

A poor diet can _____ serious health problems over time.

2. to make someone dislike something, often because of a bad experience

*The strange smell of the food _____ me
_____ eating it.*

3. to remove something that is unwanted or unnecessary, often from the body

Our brain can _____ background noise, so we can understand what people are saying.

4. to be the main reason for a decision or situation

When you choose a university, it often _____ the cost and location.

5. to stop eating, drinking or doing something, usually for health reasons

Emma decided to _____ sugar from her diet to improve her energy levels.

6. to notice or become aware of something

Dan quickly _____ his girlfriend's mood and asked if she was okay.

5 Discussion

a. Discuss these questions.

- Do you think taking care of your gut health is the best way to improve mental health, or are there more important factors?
- The text says that our brains learn to avoid foods that have made us feel sick. Can you think of a time when you stopped eating a food because of a bad experience?

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6 In your own words

- a. Write a short advertisement (about 100-150 words) to explain, in an interesting way, why people should pay attention to their gut health and how it relates to physical and mental well-being. Include:
- information about how the gut communicates with the brain (e.g. via the vagus nerve and the immune system).
 - tips on foods that can support both gut health and physical and mental well-being.
- b. Share your advertisements with your class.