

## Vegetables are losing their nutrients. What can we do about it?

### Level 1: Elementary

#### 1 Warmer

a. Discuss these questions with a partner.

1. How often do you eat vegetables? What are your favourite ones?
2. Do you ever eat frozen or canned vegetables? Are they as healthy as fresh ones?

#### 2 Key words

a. Complete the sentences using these key words from the text.

adapting

alternative

benefiting

boosting

considerable

1. If you are \_\_\_\_\_ from a situation, you are receiving something positive from it.
2. An \_\_\_\_\_ is a different option or choice.
3. \_\_\_\_\_ means *increasing or improving something*.
4. If you are \_\_\_\_\_ to something, you are getting used to it.
5. \_\_\_\_\_ means *significant*.

decline

density

focus

innovation

invest

6. \_\_\_\_\_ means *the number of people or things in a certain place, compared with the size of that place*.
7. \_\_\_\_\_ means *become smaller or less*.
8. If you \_\_\_\_\_ in something, you put money into it hoping to make a profit.
9. An \_\_\_\_\_ is a new idea or way of doing things.
10. If you \_\_\_\_\_ on something, you concentrate on it.

## Vegetables are losing their nutrients. What can we do about it?

### Level 1: Elementary

b. Use some of the key words above to complete these sentences. You may need to change the form of the word.

1. Her \_\_\_\_\_ helped us get better results.
2. I'd like to \_\_\_\_\_ in his new company. I think it's a great idea!
3. It was very difficult to \_\_\_\_\_ on what he was saying with all the noise outside.
4. I don't like her idea. There should be an \_\_\_\_\_ – something else we can do.
5. All your nice comments \_\_\_\_\_ his self-esteem. He left the room feeling great.

## Vegetables are losing their nutrients. What can we do about it?

### Level 1: Elementary

**Miranda Lipton**

**28 March, 2024**

- 1 In 2004, scientists at the University of Texas made a surprising discovery: 43 foods, mostly vegetables, showed a considerable decrease in nutrients between the mid- and late-twentieth century.
- 2 Nutrient loss has continued since that study. Recent research has shown the nutrient value of some vegetables has decreased because of the level of carbon dioxide (CO<sub>2</sub>) in the atmosphere. A 2018 study that tested rice found that higher CO<sub>2</sub> levels reduced its protein, iron and zinc content.
- 3 This has led to the development of a process called biofortification, a strategy to recover lost nutrients or those that foods never had in the first place. Biofortification is an alternative to fortification, which has been part of the US industrial food system since the 1920s when the nation started boosting table salt with iodine to fight health issues associated with a lack of minerals. Biofortification puts nutrients directly into the seed, while fortification adds nutrients to food once it has grown. The World Health Organization (WHO) has set the development of biofortified crops as one of its goals to achieve food security.
- 4 HarvestPlus is an organisation that provides global leadership on biofortification evidence and technology. It works with governments in more than 30 countries, and its biofortified varieties have been planted by more than 100 million farmers worldwide, mostly in developing countries. By 2030, the organisation estimates, 1 billion people will benefit from biofortified foods.
- 5 Malnutrition shows how urgent it is to increase the nutrient density of crops. However, Benjamin Cohen, professor of Environmental Studies, believes biofortification is not a real solution to the problem. He thinks we should support more efficient farming models.
- 6 Davis, who led the University of Texas study, said that biofortification's limitation is that it focuses on one or possibly two nutrients per plant. In contrast, nutrient decline usually affects many nutrients at the same time.
- 7 Peter Kelly, CEO of Grow Further, an organisation that invests in agricultural innovations in developing countries, stated that all their work "is about adapting to climate change. Carbon dioxide levels can affect the nutrient levels in plants; we have to do this to keep up."

© Guardian News and Media 2024

First published in *The Guardian*, 28/3/2024

## Vegetables are losing their nutrients. What can we do about it?

### Level 1: Elementary

#### 3 Comprehension check

a. Choose the correct option to complete the sentences.

1. Research shows CO<sub>2</sub> causes rice to be **less tasty** / **lower quality** / **harder to grow**.
2. Fortification was first introduced **by WHO** / **in the 1920s** / **to improve general health**.
3. As opposed to biofortification, fortification boosts food **before** / **while** / **after** it is grown.
4. HarvestPlus works mostly with **farmers** / **developing countries** / **global leaders**.
5. Cohen believes biofortification isn't the **problem** / **model** / **solution**.

#### 4 Key language

a. Read the sentences below and complete them using the verb in brackets in Present Perfect.

1. Nutrient loss (continue) \_\_\_\_\_ since the 2004 study.
2. Recent research (show) \_\_\_\_\_ the nutrient value of some vegetables (decrease) \_\_\_\_\_.
3. This (lead) \_\_\_\_\_ to the development of a process called biofortification.
4. Biofortification (be) \_\_\_\_\_ part of the US industrial food system since the 1920s.

b. What concept of Present Perfect is each sentence expressing? Write below.

actions that began in the past and continue

actions at an indefinite time in the past

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## Vegetables are losing their nutrients. What can we do about it?

### Level 1: Elementary

#### 5 Discussion

a. Discuss these statements.

- “Biofortification is not a real solution to the problem.”
- “We should support more efficient farming models.”
- “Carbon dioxide levels can affect the nutrient levels in plants; we have to do this (biofortification) to keep up.”

#### 6 In your own words

- a. Prepare a presentation with ideas that could help reduce global hunger. Do some online research and find information to support your views.