# Examen integrador

Lengua extranjera INGLÉS

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Alumno:

## The science of bitter vegetables

Scientists around the world are studying why some vegetables taste bitter and how we can improve their flavor without losing their health benefits. Vegetables like broccoli, kale, and Brussels sprouts contain special compounds called glucosinolates. These compounds are responsible for their strong, bitter taste. However, they also provide important health benefits, such as helping our bodies fight inflammation and protecting our cells. Today, researchers use modern genetic tools like CRISPR to reduce the bitterness in some vegetables. For example, they have created mustard greens and blackberries that taste less bitter. The goal is to make healthy vegetables more enjoyable so that more people will eat them. But scientists also warn that removing all the bitterness could reduce the health benefits of these foods. Finding the perfect balance between taste and nutrition is the key. By keeping some of the natural compounds and reducing only the strongest bitterness, we can create vegetables that are both healthy and delicious.

Source: National Geographic. "Bitter Vegetables and the Science of Genetics".

1. Answer the questions:

1. What compounds make vegetables like broccoli taste bitter?

2. Why are these bitter compounds important for our health?

3. What tool do scientists use to change the bitterness of vegetables?

4. Why do scientists want to reduce bitterness?

5. What is the challenge scientists face when modifying the flavor of vegetables?

2.Transform the sentences into the passive voice:

1. Scientists study bitter vegetables. →

2. Researchers use CRISPR to edit genes. →

3. People eat more vegetables when they taste better. →

4. These compounds protect the plant. →

5. Farmers grow these vegetables in many countries. →

6. Consumers buy genetically edited products. →

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7. Companies develop new varieties every year. →

8. Teachers explain the benefits of healthy food. →

3. Conditional Sentences. Complete with the correct form of the verbs:

1. If vegetables ___ (contain) glucosinolates, they ___ (taste) bitter.

2. If we ___ (heat) water, it ___ (boil).

3. Plants ___ (grow) faster if they ___ (receive) enough sunlight.

4. If scientists reduce the bitterness, more people ___ (eat) healthy vegetables.

5. If the government supports research, companies ___ (produce) new crop varieties.

6. If students read the article, they ___ (understand) the topic better.

7. If vegetables ___ (be) sweeter, students ___ (enjoy) them more.

8. If I ___ (have) a garden, I ___ (grow) my own vegetables.

9. People ___ (choose) healthier foods if they ___ (know) more about nutrition.

10. If researchers ___ (not remove) all the bitter compounds, the vegetables ___ (keep) their full health benefits.

4. Translate the following sentences into Spanish and explain which translation technique you used (literal, free, or mixed):

A. "Scientists are trying to make vegetables healthier and more appealing at the same time." Technique: _____

B. "These compounds help the plant defend itself from insects and diseases." Technique: _____

C. "Genetic tools allow researchers to change specific characteristics of a plant." Technique: _____

D. "If people understood the benefits, they would eat more bitter vegetables." Technique: _____

E. "The balance between taste and nutrition is essential for future food innovations." Technique: _____

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