



Food Webs and Ecosystem Energy

OBJECTIVE

Understand how different food choices influence the use of energy and natural resources, by comparing **food webs** with different positions in the food chain.

YOUR MISSION

Draw **two food webs** and compare the energy impact of each.

Web A - Predominantly vegetable

Based mainly on:

- vegetables
- Fruit
- Whole grains
- Pulses

Web B - Near the top of the chain

Based on:

- Meat and fish
- larger portions of animal foods



Step 1-Designs the food webs

Web A (plant products):

- It identifies **producers, consumers, and decomposers.**
- Use arrows to show the flow of energy.

Web B (top of the chain):

- It identifies the same trophic levels.
- It clearly shows the various "steps" to the final consumer.

(Uses white space, extra sheets, or digital tools for drawings)

Step 2 - Analyse and respond

Based on your drawings, answer the following questions:

1. Which of the webs uses the least "energy steps"?

2. In which of them is there less energy loss at each trophic level?

3. Which one requires more ecosystem resources
(water, soil, energy, nutrients)?



Justification

Uses as a visual reference:

- the **energy pyramid**;
- the scheme of **producers, consumers and decomposers**.

Explain how these images help justify your answers.

FINAL REFLECTION

What these food webs tell you about:

- More energy-efficient food choices?
- The impact of food on the sustainability of ecosystems?
