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# Ecodesign in food packaging

## UNIT 4: The quality of the packaged product and the shelf life

### Quiz and Assignment

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## Quiz

- 1) EU food packaging legislation mainly refers to:
  - A. Disposal of packaged foods
  - B. Materials that come into contact with food
  - C. Food transport across the border
  
- 2) The functions of food packaging are:
  - A. Isolation and protection of the food against the environment
  - B. Protect and ensure the warranty period during storage
  - C. Isolation and environmental protection of the food, protection and assurance of the warranty period during storage, presentation of the products and the usefulness of the packaging.
  
- 3) Regulation (EC) 1935/2004 is a framework regulation laying down rules on materials and articles intended to come into contact with food. The basic principle of this regulation is:
  - A. Any material or object intended to come into direct or indirect contact with foods must be sufficiently inert to prevent the transfer of constituents to foods.
  - B. Any material or object intended to come into direct or indirect contact with foods must be sufficiently inert to prevent the transfer of constituents to foods in quantities greater than the limit from which they would endanger human health or cause an unacceptable change in the composition of the food or an alteration of its organoleptic properties.
  - C. Any material or object intended to come into direct or indirect contact with foods must be sufficiently inert to prevent the transfer of constituents to foods in quantities greater than the limit of which they would endanger human health or cause an unacceptable change in the composition of the food.
  
- 4) Food isolation and protection against the environment - is the basic function of any packaging.
  - A. Isolation against the environment refers to the protection of food from external factors and the obtaining of food in a suitable form for transport, and the protection relates to the preservation of the food so as to prevent significant deterioration of the quality.
  - B. Isolation against the environment refers to the protection of food against environmental microorganisms and the protection relates to the preservation of the food so as to prevent significant deterioration of the quality.



C. Isolation against the environment refers to the protection of food against external factors and the protection relates to the preservation of the food so as to prevent significant deterioration of the quality.

5) Barrier quality

A. Food packaging must act as a barrier, stopping or diminishing to the normal limits mechanical shocks that could damage the packed food.

B. Food packaging must act as a barrier, stopping or diminishing the penetration of light, temperature or other physical, physicochemical and biological agents into the normal range, which could lead to deterioration of the product qualities.

C. Food packaging must be sealed, but act as a barrier against accidental opening.

6) Migration

A. It is the transfer of packaging material to food.

B. It is the flow of food from the packaging due to damage to the packaging.

C. Is the penetration of physical, physicochemical or biological factors from the environment through packaging into food.

7) For most foods, the protection offered by packaging is an essential part of the conservation process. Aseptic packaging is:

A. Filling commercial sterile food in sterile containers under aseptic conditions

B. Filling of commercial sterile food into glass containers and hermetic closure of containers.

C. Filling commercial sterile food in sterile containers under aseptic conditions and hermetic closure of containers such that re-infection is prevented.

8) The main preoccupations in EU legislation to avoid the passage of packaging constituents into packaged food are for:

A. Plastic packaging for unmodified monomers, other substances added to the polymerisation process

B. Cardboard and paper packaging due to the chlorophenols used in the manufacture of these materials.

C. Canned food covered with a layer of epoxy resin.



## Assignment

Develop at least one of the following tasks:

1. Present the functions of the food packaging (see also video unit iv, packaged-product quality-and-shelf-life)
2. Comment on the average-packaging-food interaction (see also video unit 4, a complete scenario)

