# Wasteless

Against Food Wastage

Workbook







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## Dear Student,

You must have already read the colourful publication of Wasteless campaign written for students and enriched your knowledge by learning about many interesting and informative facts.

Now it is time to test your knowledge! Let us see how much information you could acquire.

Do not be discouraged if you feel like you could not answer all of the questions. In the end of the workbook, you can find the solutions to every question, so we hope this will remove any doubt from your mind.

If you do the tests with a teacher, always follow his request, so you can facilitate his work and compare your knowledge with your classmates.

Good luck to the playful learning:

Wasteless Team

National Food Chain Safety Office

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## Crossword

Answer key

## 1. Introduction to the world of food waste

## 1. True or false? Write T next to the true statements and F to the false ones.

a. Foodstuff: Every product that is intended and suitable for human consumption.

b. Food waste: Every foodstuff or raw material of foodstuffs that is not consumed by humans.

c. Food chain: Jewellery made out of dry pasta.

d. Expiration date: Until this date, it is safe to consume perishable foodstuffs.

e. Best before date: The date until foodstuffs retain its characteristics established by the manufacturer under the correct storage conditions, but it can also be consumed after this date.

f. Best before date: One day after this date foodstuffs are not suitable for consumption.

g. Best before date: Foodstuffs retain their characteristics regarding quality until this date, but its consumption is not safe anymore.

h. Best before date: The date until foodstuffs can be consumed safely even if the packaging has been opened.

# 2. Group the following foodstuffs. Which foodstuff has use-by date and which one has best before date?

- dry pasta	- cold cuts	
- yoghurt	- cooking oil	
<ul> <li>mineral water</li> </ul>	- sour cream	
- canned bean	- chocolate	
<ul> <li>minced meat</li> </ul>	- frankfurter	

# 3. Which one of the listed foodstuffs does not pose a risk even after its expiration? Explain your answer.

- a. yoghurt
- b. canned corn
- c. foam cake
- d. cottage cheese

#### Explanation:

4. What are the three groups of food waste? Write 3 examples to each group.

1.	•••	 •••	•	•••	• •	•••	• •	 	•	• •	•••	 •••	• •	 •••	•	•••	• •	• •	 • •	• •	• •	• •	• •	• •	•	•••	•••	•••	 • •	• •	•••	• •	 •••	 ••	•••	•••	 	• •	• •	• •	•••	• •	•••	• • •	•••	
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3.		 						 				 		 					 										 				 	 			 									

5. Which group of food waste do the following foodstuffs belong? Connect food waste with its correct group.

e. nutshell

f. parsley

a. chicken bone	d. mouldy jam
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- b. breadcrust
- c. mouldy bread roll

Avoidable food waste	Potentially avoidable food waste	Unavoidable food waste

6. Where do we store the followings? Connect foodstuffs to the place where you would store them.

## refrigerator / freezer / pantry / garbage can

quick-frozen peas: there are still 4 months until its best before date.

yoghurt: it can be used for 2 more weeks.

dry pasta: it expired 1 week ago

minced meat: it can be consumed for 3 more days.

sour cream: it expired 5 weeks ago.

quick-frozen turkey nuggets: there are 6 months until its best before date.

one bar of chocolate: it expired 1 week ago.

**cold cuts**: it can still be consumed today.

## 7. Which category means actually wasted food? Explain your answer.

- a. Avoidable food waste
- b. Potentially avoidable food waste

c. Unavoidable food waste

## Explanation:

## 8. Rank the steps of waste hierarchy. Write the answer to the corresponding place.

- a. Reuse
- b. Other utilisation
- c. Prevention
- d. Recycling
- e. Disposal

## 2. The reasons behind food waste generation

- 1. Quiz questions. Circle the correct answer.
- 1.) How much of the produced foodstuffs is wasted according to estimations?
- a. one tenth
- b. one fifth
- c. one third
- d. half

2.) According to estimation, approximately 46.5 million tonnes of food waste are generated in the households of 28 member states of the European Union per year. How many pyramids of Giza are equivalent to this amount if one pyramid weights 5 million tonnes?

- a. less than 5
- b. approximately 6-7
- c. approximately 9

# 3.) At which actor of the food chain is the most food waste generated in developed countries?

- a. households
- b. trade
- c. hospitality industry
- d. during production

## 4.) How many kilograms avoidable food waste is generated in Hungary per year?

- a. 451 kg
- b. 68 kg
- c. 33 kg
- d. 2 kg

## 5.) Which event results in food waste especially in developing countries?

- a. The grandmother stores too many foodstuffs in the pantry.
- b. The harvested produces are stored in a crowded place at too high temperature.
- c. The mother forgot about the opened sour cream, so it expired.
- 2. List three actors of the food chain where food waste could be generated.

3. Food waste can be generated because of a variety of reasons at any stage of the food chain. At which stage of the food chain do the following incidents occur? In some cases, more than one answer is acceptable. Do you know which ones? Write the corresponding letter under the appropriate stages.

a. Unharvested, overripe tomatoes on arable lands

- b. Wrong label on the package of yoghurt
- c. Dented can
- d. Overstocking in warehouse
- e. Open kefir forgotten in the refrigerator
- f. Cherry dried on the tree, in the orchard
- g. Plaited loaf still on the shelf of the shop at closing time
- h. Leftover that cannot be packed

Primary production	Processing	Trade	Hospitality industry	Households

# 3. The effect of food waste on the environment and economy

## 1. Calculate how much money you spend on the following foodstuffs per year:

- bakery products
- fruits, vegetables
- dairy products
- meat products

## Discuss it at home how much of this is the value of products that are not consumed.

## 2. How many percent of the world's freshwater use is indirect water use?

- a. 20%
- b. 50%
- c. 70%

## 3. Homework: Draw!

Draw an illustration of one of the topics and make sure to include the relationship between the concept and food waste.

## 4. True or false?Write T next to the true statements and F to the false ones.

- a. The amount of carbon dioxide generated by the degradation of food waste that has been placed in the landfill is low.
- b. The largest emission of pollutants derives from the degradation of animal products.
- c. Biowaste is now recycled in every municipalityin the world.
- d. Consumers demand increasing quantities of agricultural products.
- e. The biggest cost of food waste arises in the beginning of the food chain, at the producer.

## 5. If we ranked the countries based on their carbon dioxide emissions and food waste itself would be included in the list as well, on what place would it be?

- a. First place
- b. Second place
- c. Third place
- d. Fourth place

## 6. List what losses emerge if we throw foodstuffs out.

## 4. How can we act against food wastage

1. Group them. Food waste prevention or management? Write P if it is prevention, M if it is management to the beginning of each line.

- a. making a shopping list
- b. composting
- c. new recipes to use leftovers
- d. buying smaller packages
- e. donation
- f. freezing
- g. constant control of refrigerator and freezer

2. You are preparing dinner for three people. How many cups (250 ml) of rice do you need to avoid surplus?

.....

3. If there is still some leftover of rice, what food can you prepare with it? List three new meals.

1.	 •••
2	
3.	

#### 4. How is the expiration date indicated on the label of foodstuffs?

- a. year/month/day
- b. month/day/year
- c. day/month/year

#### 5. Fill in the gaps with the appropriate words.

a. You should fill your plate ......with less food.

b. According to the FIFO principle, you should eat first what you put in the refrigerator/pantry.....

c. Freezing is an excellent .....process.

d. The temperature of the refrigerator must be set .....

e. Ugly vegetables and fruits are just .....the regular ones.

## 6. What foodstuffs are not suitable for freezing? Why do you think they are not?

7. List three options that you can do against food waste in the kitchen.

1	
2	
3	

# 5. Conscious shopping can also help to preserve your health

## 1. True or false? Write T next to the true statements and F to the false ones.

- a. We can save time and money with making a shopping list.
- b. Foodstuffs with damaged packaging do not impose food safety risks.
- c. Foodstuffs can be placed in the shopping trolley without packaging too.
- d. Frozen products should be left to the end of the shopping.
- e. Use water and soap to wash your hands thoroughly.
- f. Use the same cutting board to the chopping of every ingredient, so there are less dishes to wash.
- 2. What do you need to do after shopping?

.....

## 3. Choose the correct shopping order from the following. Explain your answer.

- a. Dry pasta, bulk cheese, frozen vegetable mix
- b. Ice cream, fruit yoghurt, wafer
- c. Tray of chicken breast, frozen chestnut, salty sticks, vacuum-packed sliced ham

Explanation:.....

**4. Can you defrost frozen foodstuffs after thawing? Explain why.** Explanation:

.....

## 5. Fill in the gaps.

'Food can only be considered safe if its core temperature reaches 75 °C for at least two minutes during cooking, since the dangerous zone is between \_\_\_\_\_ and \_\_\_\_°C, and 75 °C is already in the \_\_\_\_\_ zone.'

## 6. Make a list of the necessary steps (from planning to packing out).

Accompany your parents to the shop and check your list to see if they execute the given points.

## 6. Alternative solutions to reduce food waste

1. Who can contact the Hungarian Food Bank Association if they would like to donate foodstuffs?

.....

2. Who does the workers of Food Bank help?

.....

## 3. Which can be donated from the following foodstuffs? Underline the correct answers.

a. Pasta with incorrect label

b. Dented canned corn

- d. Yoghurt after its use-by date
- e. Canned bean within its best before date
- c. Opened package of biscuits
- f. Leftover from a restaurant

## 4. Sort out. What can be composted and what cannot?

- a. fruit peel
- b. coffee grounds
- c. withered potted plants
- d. content of a dust bag
- e. metal
- f. oil and grease residues
- g. eggshell
- h. glass
- i. hair, nail
- j. leaf litter
- k. grass clippings, weed
- I. withered flowers
- m. content of tea bag
- n. plastic
- o. chemicals, cosmetics
- p. vegetable peel
- q. leftover meal
- r. bread
- s. branches, twigs
- t. bones
- u. candle residue
- v. diaper
- w. paint

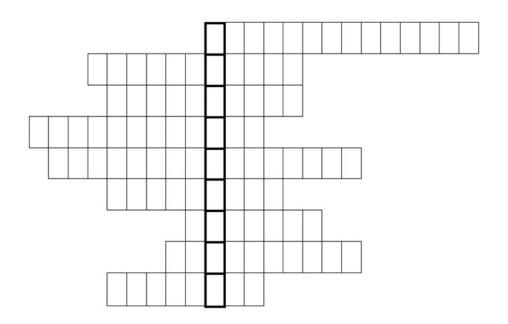
## 5. With what can we feed our dogs from the following? Circle the correct answers.

- a. eggs
- b. chocolate
- c. offal
- d. yoghurt
- e. raw potato

## 6. With what can we feed our cats from the following? Circle the correct answers.

- e. cow milk
- f. cooked carrot
- g. raw pork and venison
- h. boiled egg
- i. sweets

## Crossword



- 1. Shows the extent of water use in relation to consumption by people.
- 2. A good support that you can download to your cell phone.
- 3. Part of the food chain, in which agricultural products are transformed into food.
- 4. You have to check the temperature of this kitchen equipment quite often.
- 5. A \_\_\_\_\_ might occur if you eat some spoiled food.
- 6. You shouldn't feed your pet with this type of food.
- 7. The action of raising the temperature of a product in food processing to kill pathogen microorganisms.
- 8. This information on the label tells you that the food is no longer in its perfect shape from that date, but it can be consumed safely.
- 9. The worst step of the waste hierarchy that we have to endeavour to prevent.

## **Answer key**

## **1. Introduction to the world of food waste**

1. True or false? Write T next to the true statements and F to the false ones.

a. True	e. True
b. True	f. False
c. False	g. False
d. True	h. True

2. Group the following foodstuffs. Which foodstuff has use-by date and which one has best before date?

**Foodstuffs with use-by date**: b. yoghurt, e. minced meat, f. cold cuts, h. sour cream, j. frankfurter

**Foodstuffs with best before date**: a. dry pasta, c. mineral water, d. canned bean, g. cooking oil, i. chocolate

# 3. Which one of the listed foodstuffs does not pose a risk even after its expiration? Explain your answer.

b. canned corn <u>Explanation</u>: Canned corn has best before date.

## 4. What are the three groups of food waste? Write 3 examples to each group.

Avoidable food waste: mouldy bread, expired yoghurt, deteriorated ham Unavoidable food waste: apple core, banana peel, coffee grounds Potentially avoidable food waste: chicken skin, apple peel, juice of sour cherry compote

# 5. Which group of food waste do the following foodstuffs belong? Connect food waste with its correct group.

- a. Unavoidable food waste
- b. Potentially avoidable food waste
- c. Avoidable food waste
- d. Avoidable food waste
- e. Unavoidable food waste
- f. Potentially avoidable food waste

# 6. Where do we store the followings? Connect foodstuffs to the place where you would store them.

refrigerator: yoghurt, minced meat, cold cuts

freezer: quick-frozen peas, quick-frozen turkey nuggets, minced meat

pantry: dry pasta, a bar of chocolate

garbage can: sour cream

## 7. Which category means actually wasted food? Explain your answer.

a. Avoidable food waste

Explanation: We can prevent the generation of this group of food waste.

## 8. Rank the steps of waste hierarchy. Write the answer to the corresponding place.

1. c, 2. a, 3. d, 4. b, 5. e

## 2. The reasons behind food waste generation

## 1. Quiz questions. Circle the correct answer.

1. c, 2. c, 3. a, 4. c, 5. b

## 2. List three actors of the food chain where food waste could be generated.

For example, households, consumers, hospitality industry, trade.

3. Food waste can be generated because of a variety of reasons at any stage of the food chain. At which stage of the food chain do the following incidents occur? In some cases, more than one answer is acceptable. Do you know which ones? Write the corresponding letter under the appropriate stages.

## a. primary production

- b. processing
- c. processing/trade
- d. processing/trade/hospitality industry
- e. household
- f. primary production/household
- g. trade
- h. hospitality industry

# 3. The effect of food waste on the environment and economy

**1. Calculate how much money you spend on the following foodstuffs per year:** Own answer.

2. How many percent of the world's freshwater use is indirect water use? c-70%

3. Homework: Draw! Own solution 4. True or false? Write T next to the true statements and F to the false ones.

- a. False
- b. True
- c. False
- d. True
- e. False

# 5. If we ranked the countries based on their carbon dioxide emissions and food waste itself would be included in the list as well, on what place would it be?

- c. Third place
- 6. List what losses emerge if we throw foodstuffs out. Losses: money, water, arable land, workforce, energy, etc.

## 4. How can we act against food wastage

1. Group them. Food waste prevention or management? Write P if it is prevention, M if it is management to the beginning of each line.

<u>Prevention</u>: a. making a shopping list, c. new recipes to use leftovers, d. buying smaller packages, f. freezing, g. constant control of refrigerator and freezer <u>Management</u>: b. composting, e. donation

2. You are preparing dinner for three people. How many cups (250 ml) of rice do you need to avoid surplus?

One cup of rice.

# 3. If there is still some leftover of rice, what food can you prepare with it? List three new meals.

Arancini (riceball), rice-pudding, milk rice, rice salad, rice soup, rice doughnut, etc.

## 4. How is the expiration date indicated on the label of foodstuffs?

c - day/month/year

## 5. Fill in the gaps with the appropriate words.

a. You should fill your plate more times with less food.

b. According to the FIFO principle, you should eat first what you put in the refrigerator/pantry first.

c. Freezing is an excellent preservation process.

d. The temperature of the refrigerator must be set between 0-5 °C.

e. Ugly vegetables and fruits are just as delicious as the regular ones.

## 6. What foodstuffs are not suitable for freezing? Why do you think they are not?

Cream, egg, and meals made of potato. Their freezing results in loss of quality.

## 7. List three options that you can do against food waste in the kitchen.

- I only fill my plate with the amount I can eat.

- I call my parents' attention to the fact that if they prepared more food than necessary, they can preserve it with freezing.

- I regularly check the temperature of the refrigerator
- I call my parents attention to the fact that they can make new meals from leftovers.
- I eat the less beautiful vegetables and fruits as well.
- I can make bread crumbs from the remaining bread rolls.

# 5. Conscious shopping can also help to preserve your health

## 1. True or false? Write T next to the true statements and F to the false ones.

- a. True
- b. False
- c. False
- d. True
- e. True
- f. False

## 2. What do you need to do after shopping?

We must go home right after shopping. At home, after washing our hands thoroughly, we can pack the foodstuffs away. First the frozen products, then the chilled products are put away. After this, we can put the other products away.

## 3. Choose the correct shopping order from the following. Explain your answer.

a. Dry pasta, bulk cheese, frozen vegetable mix

Explanation: During shopping, we put products that do not require cooling in the basket first, then chilled products and frozen products.

## 4. Can you defrost frozen foodstuffs after thawing? Explain why.

You cannot, because their consumption imposes too high food safety risk.

## 5. Fill in the gaps.

'Food can only be considered safe if its core temperature reaches 75 °C for at least two minutes during cooking, since the dangerous zone is between 5 and 63 °C, and 75 °C is already in the safe zone.'

## 6. Make a list of the necessary steps (from planning to packing out).

- 1. Making a list
- 2. Check the shopping trolley
- 3. Collect products that do not require cooling
- 4. Pack food that has no packaging
- 5. Collect chilled products
- 6. Collect frozen products
- 7. Separate foodstuffs appropriately during transportation
- 8. Wash your hands after getting home
- 9. Place frozen products in the freezer
- 10. Place chilled products in the refrigerator
- 11. Put products that do not require cooling away

## 6. Alternative solutions to reduce food waste

## 1. Who can contact the Hungarian Food Bank Association if they would like to donate foodstuffs?

Shops, factories, processing units have the option to donate foodstuffs that remained on their shelves. Private individuals need to find another organisation if they would like to donate.

## 2. Who does the workers of Food Bank help?

The Hungarian Food Bank Association send the collected donations to families in need, older people, and the homeless through charitable organisations.

# 3. Which can be donated from the following foodstuffs? Underline the correct answers.

- a. Pasta with incorrect label
- b. Dented canned corn
- e. Canned bean within its best before date

## 4. Sort out. What can be composted and what cannot?

Compostable foodstuffs:

- a. fruit peel
- b. coffee grounds
- c. withered potted plants
- g. eggshell
- i. hair, nail
- j. leaf litter
- k. grass clippings, weed
- I. withered flowers
- m. content of tea bag
- p. vegetable peel
- s. branches, twigs

#### Non-compostable foodstuffs:

- d. content of a dust bag
- e. metal
- f. oil and grease residues
- h. glass
- n. plastic
- o. chemicals, cosmetics
- q. leftover meal
- r. bread
- t. bones
- u. candle residue
- v. diaper
- w. paint

## 5. With what can we feed our dogs from the following? Circle the correct answers.

- a. eggs
- c. offal
- d. yoghurt
- 6. With what can we feed our cats from the following? Circle the correct answers.
  - b. cooked carrot
  - d. boiled egg

## Crossword

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				A	Ρ	Ρ	L	I	С	A	т	I	0	N									
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# One third of the food produced worldwide gets lost or wasted.

Quality over quantity!

http://maradeknelkul.hu/en/