3. Processing food

3.3 Food labels

#### 3.3.1

### Information about the product

#### WHY ARE LABELS NECESSARY?

In the 19<sup>th</sup> century, industrial and technological developments completely transformed the food sector. This was seen through new products such as tinned food and powdered food. The issue with these new industrial products was that it was hard for the consumer to know what the contents were. They needed some explanations and this is why food labelling became essential.

#### What should a food label include?

Current labelling must include a product description such as 'powdered milk' or 'blossom honey'. This is the product name, which is also known as the sales description. The label must also include the net amount, for example 200 g, and the use-by date.

### WHAT IS THE USE-BY DATE?

What is the use-by date? This can refer to two types of date.

When on a product you see 'To be used before', this is called the use-by date. After this date, the food product is likely to be risky in terms of health.

Maybe you have also seen on a product 'Best before...'. In this case, this is an optimal date before which the food should be consumed, meaning that after that date, the quality of the food is not guaranteed, although it does not actually pose a health risk. For example, the quality may refer to taste, texture or nutritional value. Even if a product is over this date limit, it can often still be eaten.

#### LIST OF INGREDIENTS

As you know, the label must also include the list of ingredients. You should be aware that the ingredients are listed by descending weight order. The first ingredient listed is therefore the one that comprises the largest proportion of the food. The list especially includes food additives and allergens. This somewhat complicates matters.

### WHAT IS A FOOD ADDITIVE?

What is a food additive? An additive is a fairly wide term because it refers to several substances, for example colourings, preservatives, or acidifying agents. These substances can be natural or synthetic. Additives aim to improve the product somehow. This can be the product's appearance, how well it keeps, or its flavour or texture. Additives must be named according to category, then either their scientific name or their European symbol.

In Europe, if you see a substance in the list of ingredients beginning with the letter E followed by a 3-figure number, this denotes a food additive. The letter E stands for Europe and the 3 figures refer to a category of additives.

There are several categories of additives.

### **FOOD COLOURINGS**

### Keywords > E100 to E199 (colouring)

In Europe, the first category is colourings. The letter E is followed by the figure 1 to indicate the relevant category of colourings. The next 2 figures indicate the shade. For example E120 is a red food colouring.

### Keywords > E120 (red colouring)

The colour of food is a very important factor in whether or not we choose to eat it. In industrial food production, colourings are used for a range of reasons. They may be to reproduce a colour which has disappeared during the manufacturing process, or to highlight an existing colour, or to colour a foodstuff without any colour of its own, to make it more appealing.

#### PRESERVATIVES AND ANTIOXIDANTS

Keywords > E200 to E299 (preservatives) Keywords > E300 to E399 (antioxidants)

The E200 series corresponds to preservatives and the E300 series corresponds to antioxidants. An antioxidant, as its name suggests, neutralises the action of oxygen. Consequently, food can be kept and consumed for longer periods of time. The E400 series improves the texture of food thanks to emulsifying agents and stabilisers, thickeners and gelling agents. As you can see, there are many different additives, each one playing a specific role.

#### **ALLERGENS**

The most risky allergens are listed in legislation and it is mandatory for them to be stated on food labels. For example, you will see after the ingredients a statement such as 'Contains soya'. Soya is an ingredient which can be potentially allergenic. There are other allergens. For example, fish, seafood, peanuts, eggs, milk, nuts and sulphites will all be indicated on the list of ingredients. Therefore, you need to be observant. You should also be aware that, if a product is manufactured, stored or transported with another one, it is possible to find traces of allergens. In that case, if it is impossible to avoid them or eliminate them completely, the label must include comments such as 'May contain traces of nuts' or 'Soya may be present'. These comments can be found after the list of ingredients.

### OTHER INFORMATION

A food label can also mention the product's origin, for example its country of origin. It may also provide quality assurances. For example 'Organic' refers to organic farming practices and AOC means *Appellation d'Origine Contrôlée* (a term controlling the geographical origin of a product). There are others like the Red Label or *Indication Géographique Protégée* (Protected Geographical Origin). Sometimes labels will also include instructions for use, to make it easier to use the product. You will also find the manufacturer's name and address, or something indicating the factory and the production batch.

### Information about the product

#### When was food first canned?

- O In the 18th century
- O in the 19th century
- O In the 20th century

### Which of the following is not compulsory on a food label?

- O A picture
- O The net weight
- O The use-by date

### The use-by date means...

- O that the product has to be sold before that date.
- O best before...
- O to be consumed before...

### After the 'best before' date, the product may be...

- O dangerous
- O of lesser quality
- O sold at a lower price

#### A product label lists ingredients...

- O by their weight
- O by their fat content
- O alphabetically

### Food colouring is an additive.

- O True
- O False

#### Food additives are...

- O natural
- O synthetic
- O either natural or synthetic

## What do we call food that can cause allergies?

- O Allergic
- **O Allergising**
- O Allergens

## Which of the following is not a common allergen?

- O Nuts
- O Soya
- O Lettuce

#### What does AOC mean?

- O An Original Concept
- O Controlled Designation of Origin
- O Any Origin of Contents

### **Answers**

#### When was food first canned?

O In the 18th century

Wrong! It was later than that.

● In the 19th century

Well done! That's right!

O In the 20th century

Wrong! It was earlier than that.

### Which of the following is not compulsory on a food label?

A picture

Well done! A picture of the contents is not compulsory.

O The net weight

Wrong! This information is compulsory.

O The use-by date

Wrong! This information is compulsory.

#### The use-by date means...

O that the product has to be sold before that date.

Wrong! That is the sell-by date.

O best before...

Not quite! Try again!

• to be consumed before...

Well done! That's right.

### After the 'best before' date, the product may be...

O dangerous

Wrong! That's not the right answer.

of lesser quality

Well done! That's right, but it is not a certainty.

O sold at a lower price

Wrong! That's not the right answer.

#### A product label lists ingredients...

by their weight

Well done! That's right.

O by their fat content

Wrong! That's not the right answer.

O alphabetically

Wrong! Try again!

### Food colouring is an additive.

● True

Well done! Additives are added to enhance food.

O False

Wrong! That's not the right answer.

#### Food additives are...

O natural

Wrong! Your answer is incomplete.

O synthetic

Wrong! Your answer is incomplete.

either natural or synthetic

Well done! Additives can be natural or synthetic.

### What do we call food that can cause allergies?

O Allergic

Wrong! That is not the right answer.

O Allergising

Wrong! Try again!

Allergens

Well done! That's right.

### Which of the following is not a common allergen?

O Nuts

Wrong! Nut allergy is a common food allergy.

O Soya

Wrong! Soya allergy is a common food allergy.

Lettuce

Well done! That's right.

#### What does AOC mean?

O An Original Concept

Wrong! Try again!

● Controlled Designation of Origin

Well done! That's right. AOC stands for Appellation d'Origine Contrôlée, which is the Controlled Designation of Origin.

O Any Origin of Contents

Wrong! But a good try!

### ACTT03C03L01\_A

I he list of ingredients
[11-13 years old and 14-16 years old]
Here is the list of ingredients for flaky cheese biscuits.  Ingredients: wheat flour, vegetable margarine, vegetable fats and oils (palm, coconut, rapeseed), water, emulsifying agent E471, acidifying agent E330, cheese (10%), skimmed milk powder, yeast, salt, barley malt flour, sugar. Contains gluten and milk.
Question 1: Does this food contain more salt than sugar? How do we know this?
Question 2: Does this food contain food additives? If yes, which ones?
Question 3: Does this food contain allergens? If yes, which ones?
We may see this printed on a product. Best before 06.10.2019 Question 4: What type of date is this?

#### Answers

### The list of ingredients

[11-13 years old and 14-16 years old]

Here is the list of ingredients for flaky cheese biscuits.

Ingredients: wheat flour, vegetable margarine, vegetable fats and oils (palm, coconut, rapeseed), water, emulsifying agent E471, acidifying agent E330, cheese (10%), skimmed milk powder, yeast, salt, barley malt flour, sugar. Contains gluten and milk.

Question 1: Does this food contain more salt than sugar? How do we know this?  We can see that this food contains more salt than sugar because a food label lists ingredients according to their weight.
Question 2: Does this food contain food additives? If yes, which ones?  Yes, because emulsifying and acidifying agents are food additives
Question 3: Does this food contain allergens? If yes, which ones?  Yes, because gluten and milk are allergens.

We may see this printed on a product.

Best before 06.10.2019

Question 4: What type of date is this?

The 'Best before date', is the optimal after which the flavour of the food is no longer guaranteed. It is not the same as the 'use-by date' ('To be used before:') which is the expiry date of the food. After this date, it may pose a risk to health.

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### Food labels

[14-16 years old]

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	the gaps. ves, allergen, carbohydrate, claim, portion, quality, sodium, saturated, sweetener
•	Gluten is considered to be an
•	Colourings are food that are part of the E100 series.
•	Labelling food as 'organic' is a guarantee of
•	Nutritional values are shown in amounts of 100 g, 100 ml, or per
•	fatty acids are a type of fat especially found in food of animal origin.
•	Dietary fibre is a kind of complex
•	Food labels frequently list in the nutritional information rather than salt, which is shown in the list of ingredients.
•	Food labels must indicate the presence of such as aspartame.
•	A is an indication that the product may have specific nutritional properties.

#### Answers

### Food labels

[14-16 years old]

Fill in the gaps.

additives, allergen, carbohydrate, claim, portion, quality, sodium, saturated, sweeteners

- Gluten is considered to be an <u>allergen</u>.
- Colourings are food additives that are part of the E100 series.
- Labelling food as 'organic' is a guarantee of quality.
- Nutritional values are shown in amounts of 100 g, 100 ml, or per portion.
- <u>Saturated</u> fatty acids are a type of fat especially found in food of animal origin.
- Dietary fibre is a kind of complex <u>carbohydrate</u>.
- Food labels frequently list <u>sodium</u> in the nutritional information rather than salt, which is shown in the list of ingredients.
- Food labels must indicate the presence of sweeteners such as aspartame.
- A claim is an indication that the product may have specific nutritional properties.