## Lesson 3

### Lesson plan

<table>
<thead>
<tr>
<th>Lesson theme</th>
<th>Know your food</th>
<th>Grade</th>
<th>6</th>
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<tbody>
<tr>
<td>Duration</td>
<td>30 - 40 minutes</td>
<td>Date/week</td>
<td></td>
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</table>

### Context
- Making healthy food choices
- The benefits of leading a healthy lifestyle.

### Linking with previous lesson
- Learning how to lead a healthier lifestyle.

### Linking with next lesson
- Learning how to read food labels.

### Core knowledge
- Understand food labels:
  - The ingredients list
  - The nutrition information table
  - Nutrient claims
- Know the functions of nutrients.

### Learning activities and assessment

#### Group work:
- Discuss food labels and the importance of the information contained on them
- Learners analyse food labels to understand and gather particular information from them

#### Individual work:
- Introduce the worksheet for lesson 3.

#### Forms of assessment
- Discussion
- Worksheet.

#### Resources
- Scissors and glue
- Food labels or packaging with food labels
- Worksheets.

### Expanded opportunities
- Encourage learners to check food labels so they can determine the quality or health benefits of the food.

### Teacher reflection
- Learners learn how to read food labels and develop an understanding of why this is important.
Lesson 3: Know your food (30 to 40 minutes)

1. **Outcomes**

   By the end of this lesson learners should be able to:
   - Interpret a food label
   - Discuss the health effects of the listed ingredients.

2. **Teacher’s corner**

   The aim of this lesson is to teach the learners the importance of food labels and to help learners to understand them. The focus is not on current and future legislation – we have merely included this as background information.

Making healthy food choices is central to living a healthy lifestyle. Food labels can play a valuable role in providing us with useful, reliable information to make informed decisions about healthy food options. The challenge in South Africa is that even the most basic nutrition information on food labels is not compulsory, which means that food manufacturers do not have to provide nutrition information about their products.

Food labels in South Africa need to comply with the current regulations on the Advertising and Labelling of Foodstuffs (R 2034), in terms of the Foodstuffs, Cosmetics and Disinfectants Act (Act 54 of 1972). Although these regulations are currently the law and can be legally enforced, they have become outdated.

The Department of Health is in the process of reviewing these regulations in order to increase their effectiveness. The new regulations will include developments in scientific research and international standards. In July 2007, draft regulations relating to the labelling and advertising of foodstuffs were published by the Minister of Health for public comment. Until the draft regulations are accepted, the current legislation still applies.

According to current legislation, the following information must be present on a food label:

- The name of the food
- The name and address of the manufacturer, packer or seller, or person on whose behalf the food is packed
- The list of ingredients
- Storage conditions.

It is not compulsory to include nutrition information on food labels yet, but the new regulations should address this. If nutrition information is listed on the food label, it must be printed in a specific format.
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The most important aspects of a food label to understand are:

**Ingredients list**

Current food labelling legislation states that all food products have to show a list of ingredients that they contain. The ingredients must be listed in decreasing weight, which means that the ingredient present in the largest quantity appears first on the list and the ingredient in the smallest quantity appears last on the list. If a food label does not contain a nutrition information table, the ingredients list can offer a guide as to what the product contains in relative amounts. For example, if low-fat milk is listed first, you know that low-fat milk is the main ingredient in the product. If sugar is listed second on the ingredients list, the product contains a high quantity of sugar. If sugar is listed at the end of the ingredients list, then the product is low in sugar.

Food additives must be listed and must be approved by the Department of Health. There are different types of additives and each one has a specific purpose. As many of them have complicated names, the category name for a class of additive may be used. Examples of these are colourants, flavourants, emulsifiers, antioxidants and stabilisers.

**Nutrition information table**

A nutrition information table is not currently compulsory and companies can decide whether to include this information or not. Companies often display a nutrition information table when they make a health claim about their product.

A nutrition information table provides values for energy, protein, carbohydrate, fat, salt (sodium), fibre and sometimes vitamins and minerals.

- Energy is measured in kilojoules (kJ)
- Protein, carbohydrate, fat (and the different types of fat: monounsaturated, polyunsaturated, saturated and trans fat), sugar and fibre are measured in grams (g)
- Sodium and cholesterol are measured in milligrams (mg)
- Vitamins and minerals are measured in various units such as micrograms (mcg).

The values are either obtained from scientific analysis in a laboratory or they can be calculated from food composition data. Values are often also shown as a percentage of the Recommended Dietary Allowance (RDA). An RDA is a guideline amount of nutrients that should be eaten daily to avoid deficiencies. These values differ by age group and stage of the lifecycle – age group refers to how old the person is and life cycle refers to the stage of a person’s life, such as being pregnant or breastfeeding. The most commonly used RDAs on food labels are those for people 13 years or older.
Grade 6

A nutrition information table usually shows values for the amount of nutrients contained in 100 grams (g) or 100 millilitres (ml) of the product. Since many products have different serving sizes, the values for every 100g will allow you to compare 2 different brands of the same type of food or product. For example, if you wanted to compare the fat content of 2 different brands of yoghurt, you could look at the values for every 100g to see how the fat content differs between the products.

Nutrient claims
A nutrient claim tells you something specific about the nutrient in a food, for example if the quantity of a nutrient in a food is high or low according to legislated levels. Nutrient claims can also help us weigh up products that could address a particular health concern that we may have. For example, if I am concerned about my fat intake, I would look for products that are low in fat to use as part of a healthy, balanced diet.

If a product makes a nutrient content claim, that nutrient must be listed on the nutrition information table. The table below shows the level of nutrients allowed to make a nutrient claim.

<table>
<thead>
<tr>
<th>Nutrient claim</th>
<th>Level of nutrient required for nutrient claim</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fat</strong></td>
<td></td>
</tr>
<tr>
<td>Low fat</td>
<td>Solids: Less than 3 g of fat per 100 g</td>
</tr>
<tr>
<td></td>
<td>Liquids: Less than 1.5 g of fat per 100 ml</td>
</tr>
<tr>
<td>Low saturated fat</td>
<td>Solids: Less than 1 g per 100 g</td>
</tr>
<tr>
<td></td>
<td>Liquids: Less than 0.75 g per 100 ml</td>
</tr>
<tr>
<td>Fat-free</td>
<td>Solids and liquids: Less than 0.1 g per 100 g/ml</td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
<td></td>
</tr>
<tr>
<td>Low cholesterol</td>
<td>Solids: Less than 20 mg per 100 g</td>
</tr>
<tr>
<td></td>
<td>Liquids: Less than 10 mg per 100 ml</td>
</tr>
<tr>
<td>Cholesterol-free</td>
<td>Solids and liquids: Less than 5 mg per 100 g/ml</td>
</tr>
</tbody>
</table>

Functions of nutrients
The different nutrients we take in though our food have different health benefits.
- Fats provide a concentrated source of energy (kilojoules) and supply essential fatty acids and fat soluble vitamins. There are different types of fats: saturated, monounsaturated, polyunsaturated and trans fats. Each type of fat plays a different role in the body
- Cholesterol helps the body make and structure cell walls, steroid hormones (such as cortisone) and other important hormones (such as oestrogen and testosterone)
- Carbohydrates provide energy (kilojoules) to the cells
- Fibre helps with digestion, controls blood sugar and cholesterol levels and reduces the risk of some types of cancer
• Protein is needed to grow and repair body tissues, for example muscle plays a role in most biological processes in the body. Enzymes (essential to the metabolism) and hormones are proteins.

• Sodium helps to keep the concentration of body fluids at correct levels. It also plays a central role in the transmission of electrical impulses in the nerves and helps cells to take up nutrients.

Optional further reading
Should you wish to read the food labelling legislation in more detail, you can refer to the following websites:

• The current regulations relating to the Labelling and Advertising of Foodstuffs: http://web.capetown.gov.za/eDocuments/Regulations_-_Governing_the_Labelling_and_Advertising_of_Foodstuffs

• Draft regulations relating to the Labelling and Advertising of Foodstuffs (R 642) http://www.doh.gov.za/docs/regulations/2007/reg0642.html

Activities
For lesson 3 you’ll need the following equipment:

• Scissors and glue

• Ask the learners to bring food labels or packaging with food labels

• Bring extra food labels (in case any of the learners forget theirs).

Activity 1: Understanding food labels (30 to 40 minutes)

Activity part 1: Introduction (10 minutes)

• Discuss what food labels are and the information contained on them

• Discuss the importance of the information on food labels

• Explain why the different types of information are included on the label.

Activity part 2: Using the food labels (20 to 30 minutes)

Ask the learners to look for the following on their food or labels:

• The product name

• Name of the manufacturer

• Physical address of the manufacturer

• Customer care number or other contact number

• Ingredients list

• Nutrition information table

• Nutrient claim(s)

• Health claim(s)

• Instructions for use

• Storage instructions
Grade 6

- Quantity or weight
- Country of origin
- Batch identification
- Use-by date.

Instruct the learners to complete the worksheet for lesson 3.

Wrap up (5 minutes)
- Ask the learners which types of information they did not find on their food label
- Revise the importance of reading food labels and the most important information to understand about nutrition.
Worksheet: Grade 6, lesson 3

Task 1: Food labels

- Paste your food label in the space next to the table
- Draw a line matching the information required (on the right-hand side) to your own food label.

<table>
<thead>
<tr>
<th>Product name</th>
<th>Product brand</th>
<th>Name of manufacturer</th>
<th>Manufacturer’s contact details</th>
<th>Instructions for use</th>
<th>Net contents</th>
<th>Country of origin</th>
<th>Batch identification</th>
<th>Use by date</th>
<th>Nutritional Information table</th>
<th>Nutrient claims</th>
<th>Health claims</th>
<th>Storage instructions</th>
<th>List of ingredients</th>
</tr>
</thead>
</table>
Grade 6

Task 2: Your product’s information

Answer the following questions about your product’s label.

1. How many grams are in 1 serving size of your product?

2. Is the nutrition information given per serving size or per 100 g or 100 ml or both?

3. What are kilojoules?

4. Why do we need carbohydrates in our diet?

5. Why do we need protein in our diet?

6. Why do we need fat in our diet?