UNDERSTANDING YOUR FOOD
the ultimate educational resource

TEACHER NOTES

KS3
science and food technology

Timing - 15 - 20 minutes

Two pupil activity sheets I5 accompany this activity.

I5. Reading the label

Pupils read the information and answer the questions.

Answers to Pupil activity sheet I5:

1. Wheatflour
2. Pepper
3. Emulsifier E471, emulsifier E451, antioxidant E301, preservative E250, preservative E251, colour E160(b)

   (There are 10 different modified starches (E1404 - E1450) any one of which may be legally labelled just as 'modified starch'.)

4. Since they are present in small amounts they will be found near the end of the list; mustard, pepper.
5. 20.7 - 1.7 = 19.0g.
6. Starch (of some description), non-starch polysaccharide (NSP)
7. In the storage information; suitable for home freezing
8. Recyclable packaging

By law, food manufacturers must list, on the packet, the ingredients in a food. Usually, the ingredients are listed in descending order by weight (mass). This means that the ingredient that is in the largest amount must be listed first. The ingredient that is in the smallest amount will be last.

There is a lot of other information on packets, for example:

- storage instructions

- a date telling you when you should eat the food

- cooking instructions

- nutritional information, which shows how much of the major nutrients such as **protein**, **carbohydrate** and **fat** are present in the food.

The following is the information found on a packet of -

CHEESE AND HAM PASTIES

INGREDIENTS

WHEATFLOUR; WATER; VEGETABLE MARGARINE (WITH EMULSIFIER - E471); CHEESE (WITH COLOUR - E160(b)); HAM (WITH EMULSIFIER - E451, ANTIOXIDANT - E301, PRESERVATIVE - E250, E251); MILK; ONION; POTATO; CREAM; MODIFIED STARCH; EGG; SALT; MUSTARD; PEPPER.

LESS THAN 10% MEAT/NO ARTIFICIAL FLAVOUR

COOKING

HEATING IN A CONVENTIONAL OVEN- PREHEAT OVEN TO **180 °C, 350 °F, GAS MARK 4**. REMOVE PRODUCT FROM PACKAGING. PLACE ON PREHEATED BAKING TRAY IN OVEN FOR 15 MINUTES.

FOR FAN ASSISTED OVENS HEATING TIME SHOULD BE REDUCED BY APPROXIMATELY 2 MINUTES. **DO NOT REHEAT**.

NUTRITION   (AVERAGE VALUES PER 100g)

ENERGY	1290kJ 310kcal		
PROTEIN	7.7g		
CARBOHYDRATE	20.7g	OF WHICH SUGARS	1.7g
FAT	21.7g	OF WHICH SATURATES	11.5g
FIBRE	1.3g		
SODIUM	0.6g		

STORAGE

SUITABLE FOR HOME FREEZING, FREEZE ON DAY OF PURCHASE. USE WITHIN 1 MONTH. DEFROST THOROUGHLY BEFORE USE.

Look at the **INGREDIENTS** list.

1. What is the ingredient which is present in the largest amount?

2. What is the ingredient which is present in the smallest amount?

3. Find the additives in this food. (These appear as an E - number and, on this packet, the name of the type of additive is given, e.g. EMULSIFIER - E471.)

4. The packet says that there is "no artificial flavour" in this food. Find 2 natural flavours that have been added to the food (clue - they are present in very small amounts).
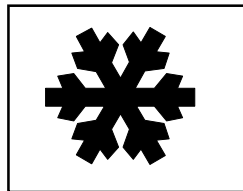
Look at the **NUTRITION** information.

This information tells you that for every 100 g of this food there will be 20.7 g of **carbohydrate**. 1.7 g of this is present as sugars.

5. How much 'other' carbohydrate is present in 100 g of this food?

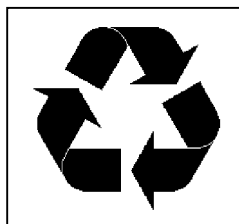6. What might this 'other' carbohydrate be?

There were two symbols on this packet.

7. Where do you think you would have found this one?

What does it mean?

8. This one was found somewhere else on the packet:

What do you think it means?