

1. Energy costs

CONCEPT 1

TEST YOURSELF

ENERGY FROM FUEL AND FOOD



- Q1 What is a fuel?
- Q2 Name three fuels that might be used in the home.
- Q3 What unit is used to measure energy?



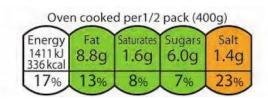
- Q4 Why is food a vital fuel for our body?
- Q5 What energy is stored in food?

The energy in food is measured in **1000s of joules** which we call **kilojoules**. We write **1000 J** as **1 kJ**. An older unit to measure energy in food is called the 'Calorie' and its unit is written as **kCal**.

Q6 Look at the following food labels and calculate how many kilojoules equals 1 Calorie. Round your answer to 1 decimal place.

Each grilled burger (94g) contains

Energy Fat Saturates Sugars Salt 924kJ 13g 5.9g 0.8g 0.7g 11% 19% 30% <1% 12%



EXTEND

- Q7 A mars bar contains 1873 kJ per 100 g. A mars bar has a mass of 58 g. How many Calories are in a mars bar?
- Q8 Give two examples of changes taking place that involve energy transfer, and explain where you think the energy has been transferred to.