

# What effect does exercise have on the muscles?

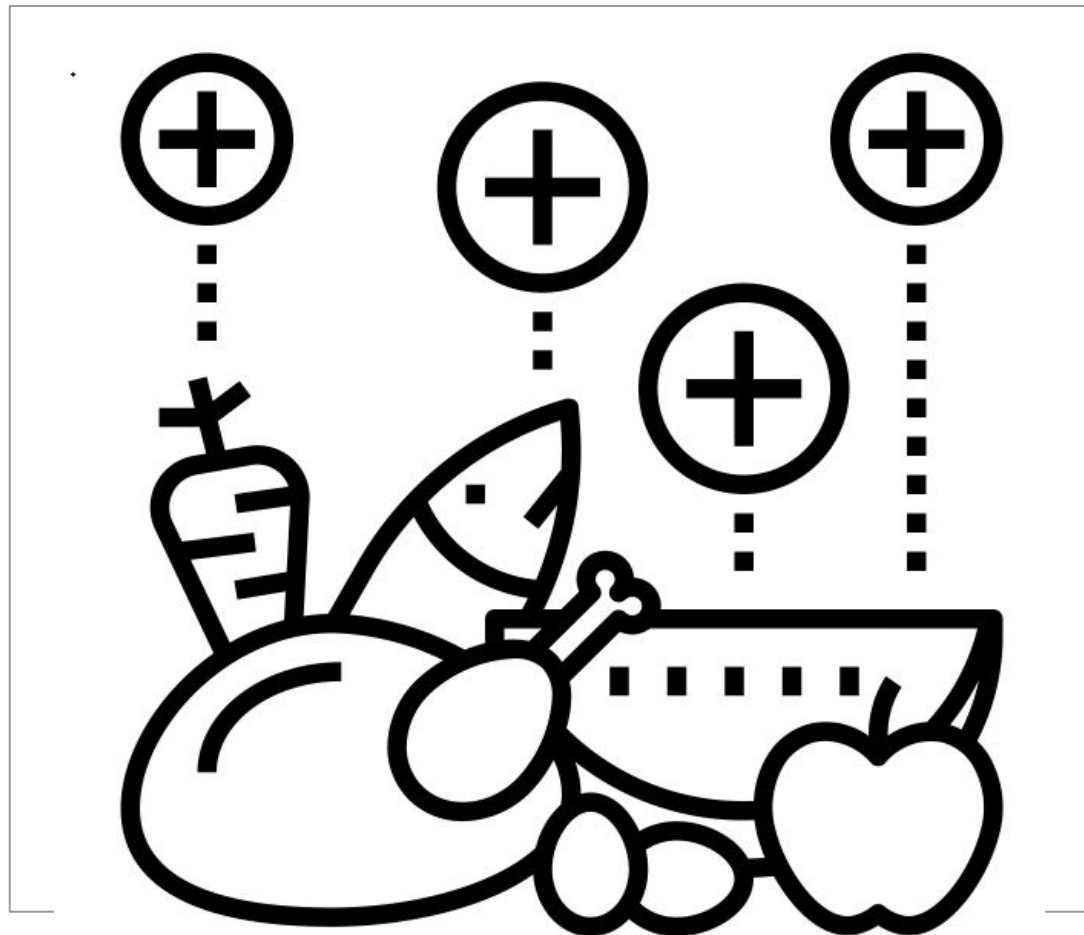
Science- Lifestyle

Miss Hummel



# Fill in the gaps: What do we need in a balanced diet?

## Nutrient



There are 7 essential nutrients needed by the body. These are:

- C \_\_\_\_\_
- F \_\_\_\_\_
- P \_\_\_\_\_
- F \_\_\_\_\_
- W \_\_\_\_\_
- M \_\_\_\_\_
- V \_\_\_\_\_

Credit: Nutrition by Nithinan Tatah from the Noun Project



# Match up the nutrient to its role in your diet:

Protein	Release energy when broken down.
Fibre	Growth and repair.
Carbohydrates	Stores energy, keeps you warm and protects your organs.
Fat	Keeps food moving through the gut.



# Activity: What is a balanced diet?

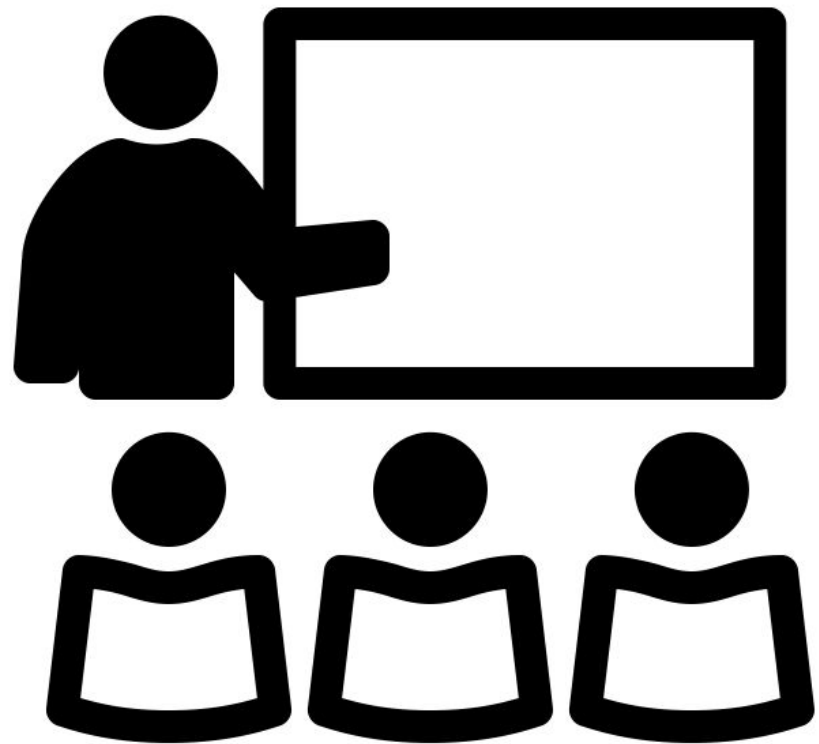


Credit: NHS - Eatwell plate



# Activity: Who needs the most energy?

**A teacher**



**An office worker**



**A builder**

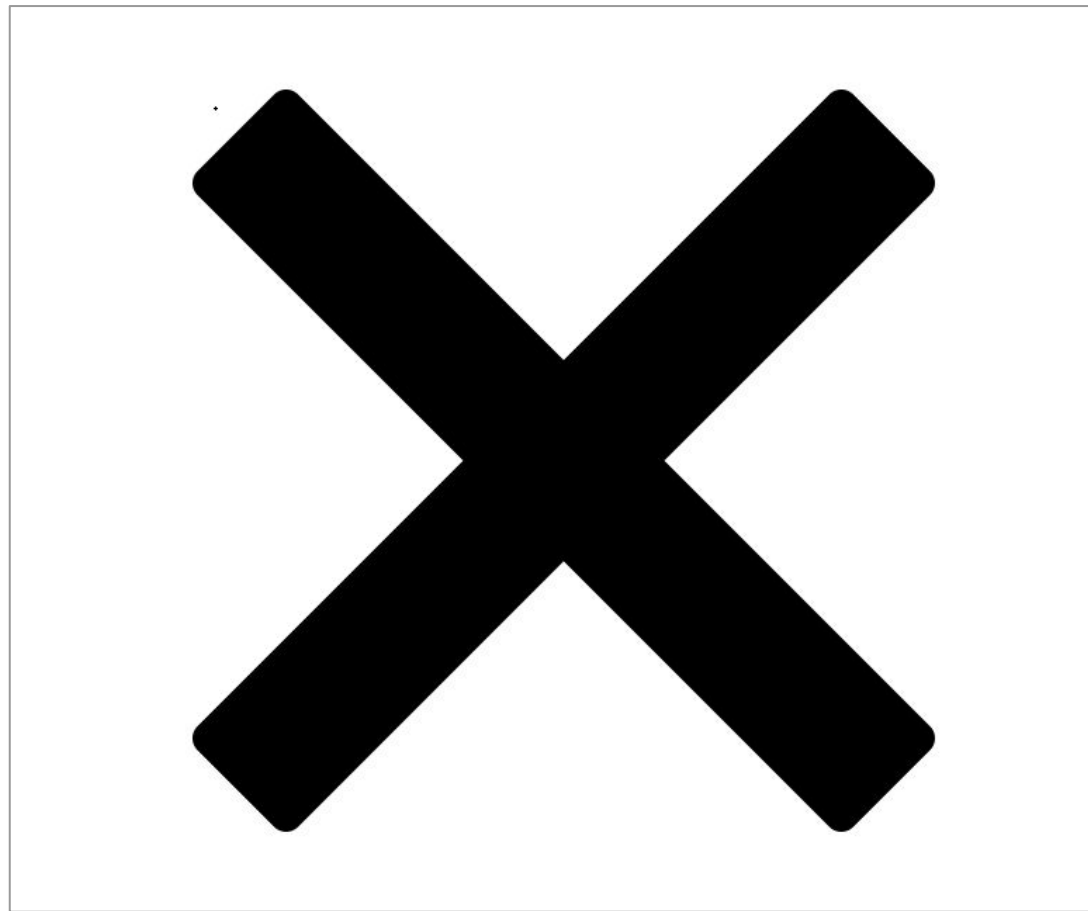


Credit: Teacher by Arif Fajar Yulianto from the Noun Project; Office worker by Mundo from the Noun Project; builder by Wilson Joseph from the Noun Project



# Activity: What is nutritional deficiency?

## Nutritional deficiency



Credit: Cross by alvianwijaya from the Noun Project



## Answer these questions:

1. How many muscles are there in the body?
2. What must a muscle do to pull on a bone?
3. When one muscle in a pair contracts, what does the other do?



## Answers:

1. The human body contains more than 650 muscles.
2. To pull on a bone a muscle must contract.
3. When one muscle is contracting the other is relaxing.





## Answer these questions:

4. Describe the appearance of contracted muscles.
5. Describe the appearance of relaxed muscles.



# Answers:

4. Contracted muscles are shorter and fatter.
5. Relaxed muscles are longer and thinner.



## Answer this question:

What happens to the fibres in our muscles when they are used a lot or they need to create a large force?



# Answer these questions:

1. What happens to muscle fibres when they are used a lot?
2. Which phrase means 'tightness' of muscles?
3. Which food group is needed to provide the material to repair muscles?



# Answers:

1. When muscle fibres are used a lot they tear a little.
2. The phrase muscle tone means 'tightness' of muscles.
3. Proteins are required to repair muscles.



# *Thinking Task:*

*For muscles to contract they need energy.*

*Energy comes from the food we eat –  
how does it get to our muscles?*

