GCSE Food Preparation and Nutrition: revision notes

Minerals and water

Your notes

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Key minerals

- **Calcium**: strong bones and teeth, blood clotting and muscle function. Sources: milk, cheese, yoghurt, green vegetables and fortified white bread. Deficiency: **osteoporosis** (weak bones) later in life. It needs vitamin D to be absorbed.
- **Iron**: makes haemoglobin in red blood cells to carry oxygen. Sources: red meat, liver, beans, dark green vegetables and fortified cereals. Deficiency: **iron** deficiency **anaemia** (tiredness, pale skin). Teenage girls need more iron.
- **Sodium** (from salt): controls water balance and nerve function. Too much raises blood pressure, increasing the risk of heart disease and stroke. Adults should eat no more than 6 g of salt a day.
- **Fluoride** strengthens tooth enamel. Iodine is needed for the thyroid gland. Phosphorus works with **calcium** in bones and teeth.

Water

- Water makes up about two thirds of the body. It controls body temperature (sweating), removes waste in urine, helps digestion and keeps skin healthy.
- The Eatwell Guide recommends 6 to 8 glasses of fluid a day, and more in hot weather or during exercise.
- **Dehydration** causes headaches, tiredness, poor concentration and dark urine.

Getting enough

- Pair **iron**-rich plant foods with vitamin C, such as orange juice with breakfast cereal, to help absorption.
- Reduce salt by using herbs and spices for flavour and checking labels for hidden salt in processed foods.

Key terms

Calcium	A mineral for strong bones and teeth.

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Iron	A mineral that makes haemoglobin in red blood cells.
Anaemia	A condition caused by too little iron, causing tiredness.
Osteoporosis	A condition where bones become weak and break easily.
Sodium	A mineral found in salt that controls water balance.
Dehydration	When the body has too little water.
Fluoride	A mineral that strengthens tooth enamel.

Your notes

Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. Which mineral makes haemoglobin?
2. What does a lack of iron cause?
3. What is the maximum amount of salt adults should eat a day?
4. What does too much salt increase the risk of?
5. Which nutrient helps the body absorb calcium?
6. Which is a good source of calcium?
7. How many glasses of fluid does the Eatwell Guide recommend each day?
8. What does fluoride do?

Answers

1. Iron
2. Anaemia
3. 6 g
4. High blood pressure
5. Vitamin D
6. Yoghurt
7. 6 to 8
8. Strengthens tooth enamel

What to do next

Practise 11 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

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