Your notes

GCSE Food Preparation and Nutrition: revision notes

Food processing and production

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Primary and secondary processing

- **Primary processing** turns raw food into a form that can be eaten or used: cleaning, sorting and grading vegetables, milling wheat into flour, and pasteurising milk.
- **Secondary processing** turns primary processed foods into other products: flour into bread, pasta or cakes; milk into cheese or yoghurt.

Preserving food

- **Pasteurisation** heats milk to about 72°C for 15 seconds, then cools it quickly. It kills most harmful bacteria, with little change in taste.
- UHT (ultra heat treatment) heats milk to about 135°C for 1 to 2 seconds; it keeps unopened for months but tastes slightly different.
- **Sterilisation** and canning heat food in a sealed container to kill all micro-organisms.
- Chilling, freezing, drying, and **modified atmosphere packaging** (MAP, changing the gases in the pack) all slow spoilage.
- Heat processing can destroy some water-soluble vitamins, such as vitamin C and B1.

Changing nutritional value

- **Fortification** adds nutrients to foods: UK law requires white flour to have calcium, iron, thiamin (B1) and niacin (B3) added, and many breakfast cereals are fortified with vitamins and iron.
- Some foods are modified to be lower in fat, sugar or salt.
- Processing can add salt, sugar and fat, so highly processed foods should be eaten in moderation.

Key terms

Primary processing	Changing raw food into a form that can be eaten or used.
Secondary processing	Turning primary processed foods into other products.
Pasteurisation	Heating to about 72°C for 15 seconds to kill harmful bacteria.
UHT	Ultra heat treatment: heating to about 135°C for 1 to 2 seconds.
Fortification	Adding nutrients to a food.
Modified atmosphere packaging	Changing the gases in a pack to slow spoilage.
Sterilisation	Heating to kill all micro-organisms.

Quick questions

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

1. Which is an example of primary processing?
2. Which is an example of secondary processing?
3. How is milk pasteurised?
4. What is UHT milk?
5. What is fortification?
6. Which nutrients must be added to white flour in the UK?
7. Which vitamin is easily destroyed by heat processing?
8. What does modified atmosphere packaging do?

Answers

1. Milling wheat into flour
2. Turning flour into pasta
3. Heated to about 72°C for 15 seconds, then cooled quickly
4. Milk heated to about 135°C for 1 to 2 seconds
5. Adding nutrients to a food
6. Calcium, iron, thiamin and niacin
7. Vitamin C
8. Changes the gases in a pack to slow spoilage

What to do next

Practise 10 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

Free revision for GCSE and KS3 at lycolearn.co.uk. Some notes are for one exam board only, and say so in brackets.

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