Year 10 Term: 2

Commodity: Milk, cheese and yoghurt

KEY POINTS TO COVER PER COMMODITY

KEY TERMS	APPLICATION OF KEY TERMS
Provenance	• **Debate** local versus nationally distributed and also imported • Bring in cost and impact on milk prices for farmers livelihood Link in food miles, why consumers may chose organic • Food wastage and sustainability
How commodity is grown/reared and processed	• ***Discuss*** how animals are reared, fed and milked • ***List*** animal sources of milk • ***Research and discuss*** different methods of preserving milk (drying, UHT, pasteurisation, etc.) –link to convenience foods • ***Discuss*** the importance of hygiene for effective food safety (heat treatment) • ***Explain*** the effect on nutritional content from processing • ***Define and discuss*** 'Secondary processing' – milk to cream, yoghurt, cheese, etc.
Classification	• Different animal sources (also link in non-dairy milk – e.g. nut, soya, coconut; alternatives to non-dairy cream) Link secondary processing – to cream, yoghurt, cheese, etc. • Different types of milk – skimmed, semi-skimmed, etc. • Different types of cream – whipping, soured, etc. (link to fat content) • Different types of cheese – hard, soft, etc. (link to fat content
Nutritional values (include sources, functions, deficiencies, excess, daily requirements)	• Nutrient requirements (linked to different life stages) • Protein – HBV and discuss amino acids • Fats – saturated

	• Recap on vitamins and minerals (cover vitamins A and D and calcium), and include complementary actions of the nutrients vitamin D and calcium Fat soluble vitamins A and D Trace element – iodine Effect on nutritional content from processes
Dietary considerations	Link to bone health: Calcium and vitamin D Link to allergies: Lactose intolerance from cow milk (why?) What are the alternatives? Link to heart health: Fat content and type
Food science	Chemical and physical structure of dairy based products • **Emulsion** – explain why milk is an emulsion **Denaturation and coagulation** of milk proteins Making cream, butter, yoghurt – the science behind it • Making cheese – use of **rennet** (curds and whey). **Benefits of bacteria** in the making of yoghurt, cheese, etc. • Effect of heat on cheese
NEA Assessment 1 practise investigation	• **Demonstrate and explain** how an emulsion is formed when making butter. • **Explain the changes** that take place in milk when it is heated. • Make yoghurt and **explain the food science** behind it. • Make cheese and explain the food science behind it. • Why is UHT milk slightly less white? • Compare the flavour of UHT milk with fresh milk and discuss (tasting milk products sensory analysis)
Food hygiene and safety	• Concept of high risk foods (dairy being a category)

	• How bacteria multiplies How to avoid cross-contamination • Why heat treating raw milk is important – link to food science • How should dairy based products be stored? Temperatures?
Storage	Link to dried, cartons, unopened and opened cans, fresh, frozen, etc. **What are suitable conditions for storage? Why?**

Tips: Don't forget that the KEY TERMS are always the same when it comes to COMMODITY. It is the actual commodity that is different.

TEST YOURSELF

You should be able to recall and comfortably discuss each KEY TERM above. You should be able to apply each KEY TERM to any COMMODITY.

- Can you define all of the COMMODITY groups ***(list them)***?
- How many COMMODITY groups are there ***(state)***?
- Can you link back each COMMODITY to the EAT WELL GUIDE ***(Research, mind map and describe)***?

Useful links:

www.foodafactforlife.co.uk

www.educas.co.uk (GCSE Food Preparation and nutrition)