



Year 10 AQA Food preparation and nutrition

TERM 1

Year 10 - Aims / Objective:

3.2. Food, nutrition and health

3.2.1. Macronutrients: CHO, Fats and Protein

the functions • main sources • effects of deficiency and excess • related dietary reference values.

3.2.1.1 Protein

3.2.1.2 Fat

3.2.1.3 Carbohydrates

3.2.2 Micronutrients Vitamins and Minerals

• the functions • main sources • effects of deficiency and excess • related dietary reference values.

3.2.2.1 Vitamins

3.2.2.2 Minerals

3.2.2.3 Water

3.2.3 Nutritional needs and health

3.2.3.1 Making informed choices for a varied and balanced diet

3.2.3.2 Energy needs

3.2.3.3 How to carry out nutritional analysis

3.2.3.4 Diet, nutrition and health

3.3.1.2 Selecting appropriate cooking methods

3.5.3 Sensory evaluation

TITLE OF UNIT: Year 10	NC Attainment: Grades 1 to 9	Level(s): KS4
Term: Autumn Term		

Literacy skills:

Reading recipes, charts and tables.

Keywords:

starch (polysaccharides) • sugars (monosaccharides/ disaccharides) • dietary fibre. saturated fats • unsaturated fats (monounsaturated and polyunsaturated).
low and high biological value proteins • protein complementation • protein alternatives eg textured vegetable protein (TVP), soya, mycoprotein and tofu

Fat soluble Vitamins • vitamin A • vitamin D • vitamin E • vitamin K

Water soluble vitamins • B group – B1 (thiamin), B2 (riboflavin), B3 (niacin), folic acid, B12 • vitamin C (ascorbic acid) • loss of water soluble vitamins when cooking (B group and Vitamin C).

Antioxidant functions of vitamins • vitamin A • vitamin C • vitamin E.

Water Hydration and dehydration.

BMR, such as age, gender and PAL.

Nutritional needs for the following life stages: young children, teenagers, adults and the elderly

obesity • cardiovascular health (coronary heart disease (CHD) and high blood pressure) • bone health (rickets and osteoporosis) • dental health • iron deficiency anaemia • Type 2 diabetes.

Sensory Testing. preference tests: paired preference, hedonic. • discrimination tests: triangle. • grading tests: ranking, rating and profiling

Resources:

e book one line access by every student, laminated recourses for vitamins,

Numeracy skills:

Working out weights and measures for ingredients. Doubling recipes and making them smaller.

Use of ICT:

Nutritional analysis, costing on excel, completing NEA on word,

Links with other curriculum areas (including citizenship, SEAL & SMSC):**SMSC:**

These issues underlie all design and manufacturing activities and will be specifically addressed in identifying needs, researching different areas, justifying choices and evaluating outcomes. All of these areas ensure that there is adequate scope for covering these aspects of the course.

Assessment: practical or/both theory assessment every 3 weeks.

<p>Week 1: Lesson 1 Theory Introduction</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Introduction: Give out books folders label these • Go through how to access textbook. • Basic Food Hygiene video 	<p>Specification Coverage (AQA 8585)</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Buy a revision folder to make revision notes</p>	<p>Resources:</p> <p>Folders Dividers Paper Term one outline</p>
<p>Lesson 2: Theory - Eatwell guide and 8 Tips for healthy eating</p> <p>Objectives:</p> <ul style="list-style-type: none"> • To ensure that students have a good understanding of the Eatwell guide the 8 tips for healthy eating. • They are able to design meals that fit these healthy eating guidelines. • Personal hygiene at GCSE level -organisation of desk and areas <p>Key Word: Eatwell guide, sections fruit and vegetables, starchy foods, dairy protein foods, meat and meat alternatives, pulses, legums, fats, sugar and salty foods, water.</p>	<p>3.2.3.1 Making informed choices for a varied and balanced diet</p>	<p>Differentiation:</p>	<p>Homework:</p> <p>To design a day's menu. Template in resources under this lesson</p>	<p>Resources:</p> <p>Laminated eatwell guides Laminated 8 tips for healthy eating.</p>
<p>Lesson 3 and 4: Practical Knife skills</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Finish off any Eat well guide and 8 tips for healthy eating. • Knife skills prepare carrots on chart • Make mire pxi to freeze to use in their spaghetti Bolognese. <p>Key Words: Batons, julienne, slice, dice.</p>	<p>Skill 2: Knife skills Bridge hold, claw grip, peel, slice, dice and cut into even size pieces (ie batons, julienne).</p>	<p>Differentiation</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, sharp knives, tea towles, chopping boards,</p> <p>FOOD: Carrots onions</p>

<p>Week 2: Lesson 1 Theory Nutrients Protein</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Nutrients in the diet hand technique. • Function of protein in the diet. • Structure of protein • Different types of protein. • Excess and Deficiency. • Amount required in the diet. <p>Key Words: Micronutrients and macronutrients, Amino acids, HBV, LBV, essential amino acids, hormones, enzymes, antibodies, 15%</p>	<p>3.2.1 Macronutrients</p> <p>3.2.1.1 Protein</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Complete a brainstorm on protein in the diet for their revision folder.</p> <p>Bring ingredients:</p> <p>Spaghetti or Chilli</p>	<p>Resources</p>
<p>Lesson 2: Practical: Dish that fits the eatwell guide.</p> <p>Objectives: Spaghetti Bolognese or Chilli Con carne</p> <ul style="list-style-type: none"> • A dish that contains all sections of the Eatwell plate • A dish that contains the mire prix that they have chopped and frozen. • Look at presentation of the dish. <p>Key Words: Mire prix, al dente, All sections names on the Eatwell guide,</p>	<p>Skill 1: General practical skills</p> <p>Skill 2: Knife skills</p>	<p>Differentiation</p> <p>Basic: Only onion added no other veg large cuts can see the veg.</p> <p>Medium: Onion and other veg used cut precisely.</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 3: Lesson 1 Theory Protein</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Alternative proteins look at the different types - could taste. • How to cut up a fish and fillet a fish. • Practical piping potato <p>Key Words: Meat alternatives, tofu, soya, piping</p>	<p>3.2.1.1 Protein</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Bring Ingredients to make fish pie.</p> <p>Vegetarians could make a dish using a protein alternative.</p>	<p>Resources</p> <p>Alternative veg products</p> <p>Fish Smash Piping bags</p>

<p>Lesson 2: Practical Fish fingers and</p> <p>Objectives:</p> <ul style="list-style-type: none"> To make a dish high in protein looking at higher level skills. <p>Assessment: Practical assessment</p> <p>Personal hygiene, organisation work area and work space</p>	<p>Skill 1: General practical skills</p> <p>Skill 2: Knife skills Filleting fish</p> <p>Skill 3: Preparing vegetables Mashing, piping</p> <p>Skill 6: Cooking methods boiling, pouching,</p>	<p>Differentiation</p> <p>Basic: Fish is ready prepared.</p> <p>Medium: skin fish</p> <p>Complex: Skin and fillet fish</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 4: Lesson 1 Theory Carbohydrates.</p> <p>Objectives:</p> <ul style="list-style-type: none"> Functions of carbohydrates in the diet. Simple/complex carbohydrates. Simple monosaccharide - glucose, fructose, Galactose Simple disaccharide - maltose, lactose, sucrose. Polysaccharides - starch, pectin, dextrin Polysaccharide - NSP (fibre) Excess and deficiency. How to reduce sugar in the diet. How to increase fibre in the diet. Amount required in the diet. <p>Key Words: All of the above words</p>	<p>3.2.1.3 Carbohydrates</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Complete a brainstorm on CHO for their revision folder</p> <p>Bring ingredients to make a pasta dish that is high in fibre.</p> <ol style="list-style-type: none"> Pasta bake Spaghetti only if they have not made this. Lasagne. 	<p>Resources</p>
<p>Lesson 2 Practical: Carbohydrate dish high in fibre.</p> <p>Objectives:</p> <p>Students must produce a pasta dish with a white sauce lasagne that is high in fibre.</p> <p>Key Words:</p> <p>Complex carbohydrate, NSP Fibre</p>	<p>Skill 1: General practical skills</p> <p>Skill 2: Knife skills</p> <p>Skill 8: Sauce making Roux sauce</p>	<p>Differentiation</p> <p>Basic /Medium: pasta bake</p> <p>Complex Lasagne</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>

<p>Week 5: Lesson 1 Theory Fats in the diet</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Functions of fat in the diet. • Types of fat saturated and unsaturated. • Classification of fat in the diet, visible, invisible • What saturated fats do in the diet to the body - excess • What unsaturated fats do in the diet. • Deficiency of fat in the diet. • How much fat should you have in the diet. <p>Key Words: Glycerol, 3 fatty acids, saturated, unsaturated, visible, invisible, polyunsaturated, obesity, CHD, high cholesterol, 35%</p>	<p>3.2.1.2 Fats</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Complete a brainstorm on fas.</p> <p>Differentiated questions on macronutrients.</p>	<p>Resources</p>
<p>Lesson 2: Practical Quiche low fat.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Should be able to work with the ingredients and to change them to a low fat e.g. full fat milk semi skimmed milk, Cheddar cheese, feta or use less cheese. • Introduction to making pastry. <p>Key Words: Rubbing in, savoury custard.</p>	<p>Skill 1: General practical skills Skill 2: Knife skills Skill 5: Use of equipment food processor to make pastry Skill 10: Dough pastry Skill 12: Setting mixtures coagulation</p>	<p>Differentiation</p> <p>Quicker students might be able to blind bake their pastry.</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 6: Lesson 1</p> <p>Objectives:</p> <p>Vitamins in the diet</p> <ul style="list-style-type: none"> • To learn the 2 different groups of vitamins. Fat soluble and water soluble. • To learn the function of the following vitamins, A, B group, C, D, E and K 	<p>3.2.2 Micronutrients</p> <p>3.2.2.1 Vitamins</p>	<p>Differentiation</p>	<p>Homework:</p> <p>Revision for end of module test</p>	<p>Resources</p> <p>Printed tables for them to fill in. These are in resources.</p>

<ul style="list-style-type: none"> • To learn their excess and deficiency. • To learn what an antioxidant is ACE • To learn about the DRVs <p>Key Words: Fat soluble A, D, E K retinol, colexcalciferol, tocopherol, phyolloquinone, Water soluble, B B1 thiamine, B2, Riboflavin, B9 Folate, B12, cobalamin, and C ascorbic acid, night blindness, rickets, osteoporosis, scurvy, Anti oxidant</p>			Bring ingredients for coronation chicken. Look up how it was invented and different presentation techniques.	Laminated vitamins cards (on the wall in F5)
<p>Lesson 2: Practical - Coronation Chicken or ceser salad</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Learn how to prep fruit and vegetables. • Learn to pouch. • Learn to do a reduction sauce or an emulsion dressing • Look at presentation <p>Key Words: Pouching, reduction sauce.</p> <p>Assessment: <u>Practical assessment</u></p> <p><u>Personal hygiene, organisation work area and work space and knife skills</u></p>	<p>Skill 1: General practical skills Skill 2: Knife skills Skill 3: Preparing fruit and vegetables - mangos and de seed chillies Skill 6: Cooking methods pouching, boiling Skill 8: Sauce making reduction</p>	<p>Differentiation</p> <p>Basic: little though in presentation. No rice. Medium: Some thought to presentation good knife skills Complex: Presentation of a high standard. Excellent knife skills.</p>	<p>Homework: Revision</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 7: Lesson 1 Minerals in the diet</p> <p>Objectives:</p>	3.2.2.2 Minerals	Differentiation	<p>Homework: Revision</p>	Resources

<ul style="list-style-type: none"> To learn the different types of minerals essential minerals and trace minerals. To understand the functions of Essential minerals. Calcium, Iron and Sodium Memory Technique: Can I Sew Can= Calcium I= Iron S= Sew To understand the functions of Trace minerals fluoride, phosphorous, Iodine. Memory Technique: It's the FPI F=fluoride, P=phosphorous, I=iodine To learn the excess and deficiency of these nutrients. To go through the DRV <p>Key Words: Essential minerals, Calcium, Iron and Sodium, Trace minerals fluoride, phosphorous, Iodine,</p>			Bring ingredients for salad niciose	Laminated mineral cards on the wall in F5
<p>Lesson 2 Practical - Salad Niciose</p> <p>Objectives:</p> <ul style="list-style-type: none"> Learn how to blanch and work with vegetables. Think about presentation Making a salad dressing. focus on presentation <p>Key Words: Blanching, boiling, skinning tomatoes</p>	<p>Skill 1: General practical skills Skill 2: Knife skills Skill 3: Preparing fruit and vegetables de skinning, tomatoes, Skill 6: Cooking methods boiling and simmering; blanching; frying Skill 8: Sauce making emulsions dressing</p>	<p>Differentiation</p> <p>Basic: help given presentation week. Medium: Little help presentation good. Complex: Worked independently and high standard of presentation.</p>	<p>Homework: Revision</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 8: Lesson 1 - Water in the Diet + Test</p> <p>Objectives:</p> <ul style="list-style-type: none"> To learn the function of water in the diet. 	3.2.2.3 Water	Differentiation	Homework:	Resources Test papers.

<ul style="list-style-type: none"> • To learn the sources of water in the diet • To learn the deficiency and excess of water in the diet. • Be able to think of ways to increase water in the diet. • To learn why fizzy drinks are bad for you. <p>Key Words: Hydrated, dehydrated,</p>			<p>Bring ingredients to make shepherd's pie or cottage pie.</p>	
<p>Lesson 2 Practical - Cottage Pie or Shepherd's pie</p> <p>Objectives:</p> <ul style="list-style-type: none"> • To work on knife skills. • To work on a more complex dish • Work on piping skills <p>Key Words:</p>	<p>Skill 1: General practical skills</p> <p>Skill 2: Knife skills</p> <p>Skill 8: Sauce making reduction meat sauce</p>	<p>Differentiation</p> <p>Basic: Only chopped onion no piped mash. Medium: other vegetables that show knife skill attempted piping. Complex: very good knife skill and piping.</p>	<p>Homework:</p>	<p>Resources</p> <p>Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 9: Lesson 1 Life stages</p> <p>Objective:</p> <ul style="list-style-type: none"> • To learn what a life stage is and the different type of life stages. • Students need to be able to list the nutrients each life stage require. <p>Key Words: Life stages, preschool children, primary school children, teenagers, adults, elderly.</p>	<p>3.2.3.1 Making informed choices for a varied and balanced diet</p> <p>3.2.3.4 Diet, nutrition and health</p>	<p>Differentiation</p>	<p>Homework:</p>	<p>Resources</p>

<p>Lesson 2: Time plans, costing, and Nutrient Analysis Book a computer room.</p> <ul style="list-style-type: none"> • Demonstrate how to use food in focus or food fact for life nutritional analysis. • To learn how to complete a timeplan correctly students will be writing out a time plan for a meal for a preschool child fish fingers or chicken nuggets with sides that meet the needs of the eatwell guide. <p>Key Words: Nutritional analysis, time plan, costing.</p> <p>Assessment: theory assessment with practical element.</p>	<p>3.2.3.3 How to carry out nutritional analysis</p>	<p>Differentiation</p> <p>There are time plan templates these are in the resources folder.</p>	<p>To complete the costing for homework.</p>	<p>Resources</p> <p>Computer room</p>
<p>Week 10: Lesson 1 Sensory Evaluation:</p> <ul style="list-style-type: none"> • To learn what sensory evaluation is and how and why it is carried out. • To learn how to set up a sensory tasting panel • To understand how you set up fair testing. • To learn the different types of sensory tests. <p>Key Words: Sensory analysis, preference test, discriminatory tests, Grading tests, fair testing.</p>	<p>3.5.3 Sensory evaluation</p>	<p>Differentiation:</p>	<p>Homework:</p> <p>Bring recipe for fish fingers or chicken nuggets</p>	<p>Resources:</p> <p>Crisps plain 2 different makes Yoghurt one low fat and 1 full fat. Biscuits chocolate digestive 2 different types Cheese straws.</p>
<p>Lesson 2: Practical dish for a young child. Fish fingers or chicken finger/nuggets Objective:</p> <ul style="list-style-type: none"> • To follow their time plan they have made to produce a dish for a young child that also fits the needs of the eatwell guide. 	<p>Skill 1: General practical skills</p>	<p>Differentiation:</p> <p>Basic: Just chicken or fish fingers.</p>	<p>Homework</p>	<p>Resources:</p> <p>Trolleys, knives,</p>

<ul style="list-style-type: none"> • Photo dish <p>Key Words: Battons.</p>	<p>Skill 3: Preparing fruit and vegetables</p> <p>Skill 7: Prepare, combine and shape - coating</p>	<p>Medium: Comes with veg. Complex: Meets the needs of the Eatwell guide.</p>		<p>Tea towels, dish clothes, oven gloves.</p>
<p>Week 11: Lesson 1 Task Analysis <i>Book a computer room if you can.</i></p> <ul style="list-style-type: none"> • To introduce year 10 students to NEA 2 - study of a diet or cuisine. • Go through how to write a Task Analysis 	<p>4.3.1 Setting the tasks 4.3.2 Taking the tasks</p> <p>3.3.1.2 Selecting appropriate cooking methods</p>	<p>Differentiation:</p>	<p>Homework</p> <p>Type up the task analysis for homework. Complete research on teenagers diet.</p>	<p>Resources</p> <p>Booklets.</p>
<p>Lesson 2: Design Ideas and Time plan. <i>Book a computer room</i></p> <ul style="list-style-type: none"> • <i>Come up with design ideas for their NEA</i> • <i>To write a time plan for the dish that they are going to cook.</i> <p>Key Words: Research , Design Ideas, Time plan</p>		<p>Differentiation</p>	<p>Homework</p> <p>To complete their time plan.</p>	
<p>Week 12: Lesson 1 Energy in the Diet Objective:</p> <ul style="list-style-type: none"> • To understand the bodies energy needs • To learn how energy is measured • Learn what BMR and PAL are • To understand how they work together to determine how much energy we need every day. • To understand the effect of excess and deficiency of energy • To be able to list energy dense foods . <p>Key Words:</p>	<p>3.2.3.2 Energy needs</p>	<p>Differentiation</p>	<p>Homework</p> <p>Bring ingredients for fish cakes</p>	<p>Resources</p> <p>Energy Balance work sheet blown up to A5Lesson</p>

<p>Energy, Kcals, joules, Basic Metabolic rate, Physical, activity level. Energy dense foods</p>				
<p>Practical: Lesson 2 Practical dish for the elderly. Fish Cakes possible practical ? Objective:</p> <ul style="list-style-type: none"> To produce a dish that is suitable for the elderly. To look at shaping and coating. <p>Key Words: Shaping, coating</p> <p>Assessment: theory time plan to be produced</p>	<p>Skill 1: General practical skills</p> <p>Skill 3: Preparing fruit and vegetables</p> <p>Skill 7: Prepare, combine and shape - shaping and coating</p>	<p>Differentiation:</p> <p>Basic: Did not skin fish, help, uneven shape and coating. Medium: Complex: Skinned fish same shape evenly coated.</p>	<p>Homework:</p>	<p>Resources: Trolleys, knives, Tea towels, dish clothes, oven gloves.</p>
<p>Week 13: Lesson 1 Special Diets</p> <ul style="list-style-type: none"> To learn the definition of a special diet. To understand the 4 different special diets. Be able to alter or design a meal for these diets. <p>Key Works: Vegetarian, lacto-ovo, lacto, vegan, low fat diets, high fibre diets, low salt diets. Religious diets.</p>	<p>3.2.3.1 Making informed choices for a varied and balanced diet</p>		<p>Homework: Bring ingredients to make their practical for their NEA</p>	<p>Resources Print out work sheets</p>
		<p>Differentiation:</p> <p>Basic: Dish is contains little or no skill and presentation is weak. Much help given, not following time plan</p>	<p>Homework: To write up their evaluation.</p>	<p>Resources: Trolleys, knives,</p>

	<p>Medium:</p> <p>Complex: Dish is of a high skill level fits the eatwell guide and well presented. Time plan is followed well.</p>			Tea towels, dish clothes, oven gloves.
<p>Week 14: Lesson 1 Dietary Diseases the Big 6.</p> <p>Objective:</p> <ul style="list-style-type: none"> To understand the relationship between diet, nutrition and health. To be able to describe the big 6. To understand the risk factors that increase the big 6. Be able to give advice to be able to stop dietary diseases. <p>Key Words: Malnutrition, risk factors, CHD, Hypertension, strokes, skeletal disease-rickets, osteoporosis, tooth decay, Anaemia, Bowel cancer, Diabetes type 2, Obesity.</p>	3.2.3.4 Diet, nutrition and health	Differentiation:	Homework: Bring ingredients to make swiss roll.	Resources To print out the booklet.
<p>Lesson 2: Practical Swiss Roll or Yule log.</p> <p>Objective:</p> <ul style="list-style-type: none"> To look at air as a raising agent. Learn how to make a whisked sponge. <p>Key Words: Whisked sponge</p>	<p>Skill 4: Use of the cooker - oven baking</p> <p>Skill 5: Use of equipment Hand held mixer</p> <p>Skill 7: Prepare, combine and shape - rolling the Swiss Roll</p> <p>Skill 11: Raising agents eggs as a raising agent</p>	Differentiation: Higher level students will be making their own butter cream to add to the centre of their swizz Roll.	Homework: Students must complete their NEA over the holidays and hand it in the first lesson back.	Resources: Trolleys, knives, Tea towels, dish clothes, oven gloves. Swizz Roll trays Grease proof paper.

