

## **Eduqas Food Preparation and Nutrition**

| Exam                                 | Duration             |   | % of<br>GCSE | Topics/ content  |
|--------------------------------------|----------------------|---|--------------|--|
| Food<br>Preparation<br>and Nutrition | 1 hour 45<br>minutes | Section A: questions<br>based on stimulus<br>material. Section B:<br>structured, short and<br>extended response<br>questions to assess<br>content related to food<br>preparation and<br>nutrition | 50%          | Food, Nutrition and Health<br>Food Science<br>Food Safety<br>Food Choice<br>Food Provenance            |
| NEA 2                                | 20 hours             |   | 50%          | Food Preparation – Students plan,<br>prepare, cook and present a three-<br>course menu in three hours. |

Before revising, students should complete personal learning checklists for their subjects. These ask students to RAG rate both the topics/ content of their exams and also the skills they are required to use. Doing this will help them to identify priorities and make effective use of their revision time.

| Topic (what I need to know) Food, Nutrition and Health                                  | R | Α | G |
|---|---|---|---|
| Eat Well Guide: Importance. How it is made up.  |   |   |   |
| Knowledge of each section:  |   |   |   |
| Fruit and Vegetables.   |   |   |   |
| Starchy Carbohydrates.  |   |   |   |
| Dairy and Alternatives  |   |   |   |
| Protein and Alternatives.   |   |   |   |
| Fats and Oils.  |   |   |   |
| Dietary Guidelines for Healthy Eating:  |   |   |   |
| Reasons for:  |   |   |   |
| Eat Breakfast.  |   |   |   |
| Drinking 6-8 glasses of water.  |   |   |   |
| Cut down on saturated fat and sugary foods.   |   |   |   |
| Eating less than 6g of salt a day.  |   |   |   |
| Base meals on starchy carbohydrate  |   |   |   |
| Eating lots of fruit and vegetables.  |   |   |   |
| Get active and be a healthy weight.   |   |   |   |
| Macronutrients:   |   |   |   |
| Understand sources and functions of protein, carbohydrate and fats                      |   |   |   |
| Sources – which foods provides the nutrient? E.g meat provides protein.                 |   |   |   |
| Function - What does that nutrient do in the body? E.g. protein helps the body grow and |   |   |   |
| repair.   |   |   |   |
| Micronutrients:   |   |   |   |
| Understand sources and functions of fat soluble vitamins,                               |   |   |   |
| A, D, E, and K  |   |   |   |
| Micronutrients:   |   |   |   |
| Understand sources and functions of water soluble vitamins,                             |   |   |   |
| B1, B2, B3, B9, B12, and Vitamin C  |   |   |   |
| Micronutrients:   |   |   |   |

| Understand sources and functions of minerals, Calcium, Iron, Sodium, Fluoride, Iodine,     |  |  |
|--|--|--|
| Phosphorus   |  |  |
| Other:   |  |  |
| Understand the contribution of water and dietary fibre to the diet.                        |  |  |
| Meal planning:   |  |  |
| Understand the nutritional requirements of different age groups.                           |  |  |
| Understand how to plan meals for different diets:  |  |  |
| Lacto-ovo vegetarian, lacto vegetarian, vegan, coeliac, lactose intolerant                 |  |  |
| Nutritional Analysis:  |  |  |
| Be able to use a computer programme to carry out a nutritional analysis.                   |  |  |
| Most foods contain more than one nutrient.   |  |  |
| Nutritional Analysis means finding out how much of each nutrient is in a quantity of food. |  |  |

| Topic (what I need to know) Food Science  | R | Α | G |
|---|---|---|---|
| Cooking of food and heat transfer:  |   |   |   |
| Why is food cooked?   |   |   |   |
| How is heat transferred?  |   |   |   |
| Convection, Conduction and Radiation.   |   |   |   |
| Cooking methods:  |   |   |   |
| Moist methods using water.  |   |   |   |
| Boiling,  |   |   |   |
| Braising,   |   |   |   |
| Poaching,   |   |   |   |
| Simmering,  |   |   |   |
| Steaming,   |   |   |   |
| Stewing.  |   |   |   |
| Cooking methods:  |   |   |   |
| Methods using oil.  |   |   |   |
| Sauteing,   |   |   |   |
| Shallow pan frying,   |   |   |   |
| Roasting,   |   |   |   |
| Deep fat frying   |   |   |   |
| Cooking methods:  |   |   |   |
| Dry heat transfer.  |   |   |   |
| Baking,   |   |   |   |
| Grilling,   |   |   |   |
| Toasting,   |   |   |   |
| Dry frying  |   |   |   |
| Cooking methods:  |   |   |   |
| Microwaving   |   |   |   |
| Protein:  |   |   |   |
| Denaturation (chains of amino acids are broken down) Coagulation (trapping air or water   |   |   |   |
| e.g. eggs scrambled, ,  |   |   |   |
| Gluten formation  |   |   |   |
| (Breadmaking).  |   |   |   |
| Foams (Whisking, meringues and swiss roll)  |   |   |   |
| Carbohydrate:   |   |   |   |
| Sauce-making gelatinisation,  |   |   |   |
| Dextrinisation (browning of dry foods e.g. toast) and caramelisation in sugar (sugar plus |   |   |   |
| liquid when heated turns to syrup, gets thicker and changes colour)                       |   |   |   |
| Fats:   |   |   |   |

| Plasticity (spreadable)  |  |  |
|--|--|--|
| Shortening (when rubbing-in)   |  |  |
| Aerate (trap air in cake-making)   |  |  |
| Emulsification   |  |  |
| (oil and water don't mix, need an emulsifier e.g. egg yolk to help mix to an emulsification) |  |  |
| Raising Agents:  |  |  |
| Mechanical,  |  |  |
| Whisking in air  |  |  |
| Folding in air   |  |  |
| Using steam.   |  |  |
| Beating eggs   |  |  |
| Chemical   |  |  |
| Examples of when raising agents are used.  |  |  |
| Baking powder,   |  |  |
| Bicarbonate of soda  |  |  |
| Cream of tarter  |  |  |
| Biological   |  |  |
| Production of CO2 – through activation of Yeast  |  |  |

| Topic (what I need to know) Food Safety                         | R | Α | G |
|---|---|---|---|
| Micro-organisms:  |   |   |   |
| Bacteria,   |   |   |   |
| What are they?  |   |   |   |
| Where do they come from?  |   |   |   |
| What they do to food?   |   |   |   |
| What makes them grow and multiply?                              |   |   |   |
| Why they make food unsafe and unfit to eat?                     |   |   |   |
| Enzymes:  |   |   |   |
| What are they?  |   |   |   |
| Where do they come from?  |   |   |   |
| What they do to food?   |   |   |   |
| What makes them work?   |   |   |   |
| Why they change food and make it unfit to eat?                  |   |   |   |
| Moulds:   |   |   |   |
| What are they?  |   |   |   |
| Where do they come from?  |   |   |   |
| What do they do to food to make it unsafe and unfit to eat?     |   |   |   |
| What makes them grow and multiply                               |   |   |   |
| Yeasts:   |   |   |   |
| What are they?  |   |   |   |
| Where do they come from?  |   |   |   |
| What do they do to food to make it unsafe and unfit to eat?     |   |   |   |
| What makes them grow and multiply                               |   |   |   |
| Micro-organisms in Food Production:                             |   |   |   |
| Yeast in Bread-making   |   |   |   |
| Bacteria in cheese and yogurt making                            |   |   |   |
| Bacteria and Food Poisoning:                                    |   |   |   |
| What is food poisoning?   |   |   |   |
| Symptoms of food poisoning.                                     |   |   |   |
| Why bacteria cause food poisoning.                              |   |   |   |
| The most common type of bacteria that can cause food poisoning. |   |   |   |

| High-risk foods.                                  |  |  |
|---|--|--|
| What makes bacteria grow. and multiply            |  |  |
| Food Poisoning Bacteria:                          |  |  |
| Campylobacter                                     |  |  |
| Escherichia Coli                                  |  |  |
| Salmonella  |  |  |
| Listeria  |  |  |
| Staphylococcus Aureus.                            |  |  |
| Buying and Storing Food:                          |  |  |
| Where food is bought                              |  |  |
| What to look for when buying food.                |  |  |
| What to look for when buying fresh fish and meat. |  |  |
|   |  |  |
| Why should food be stored properly?               |  |  |
| Dry food storage.                                 |  |  |
| Refrigerated food storage.                        |  |  |
| Frozen food storage.                              |  |  |
| Food Safety Rules and Cross-Contamination:        |  |  |
| Preventing cross-contamination                    |  |  |
| Food and Cooking:                                 |  |  |
| 75c to kill bacteria.                             |  |  |
| Temperature probe.                                |  |  |
| Danger Zone 5 – 63c                               |  |  |

| Topic (what I need to know) Food Choice | R | Α | G |
|---|---|---|---|
| Factors affecting what we eat:          |   |   |   |
| Life Stage                              |   |   |   |
| Physical Activity Level (PAL)           |   |   |   |
| Lifestyle,                              |   |   |   |
| Income,                                 |   |   |   |
| Availability,                           |   |   |   |
| Occasion,                               |   |   |   |
| Eating habits.                          |   |   |   |
| Diet,                                   |   |   |   |
| Nutrition and Health:                   |   |   |   |
| How what we eat affects our health.     |   |   |   |
| How diet related diseases develop.      |   |   |   |
| Religious dietary laws:                 |   |   |   |
| Buddhism                                |   |   |   |
| Christianity                            |   |   |   |
| Hinduism                                |   |   |   |
| Islam                                   |   |   |   |
| Judaism                                 |   |   |   |
| Rastafariansim,                         |   |   |   |
| Sikhism                                 |   |   |   |
| Ethical and Moral Choices:              |   |   |   |
| Animal Welfare,                         |   |   |   |
| Organic Food,                           |   |   |   |
| Genetically Modified Food,              |   |   |   |
| Fairtrade,                              |   |   |   |
| Buying local                            |   |   |   |

| Food Intolerance:  |  |  |
|--|--|--|
| Symptoms of food intolerance,  |  |  |
| Lactose Intolerance,   |  |  |
| Coeliac Disease (gluten intolerance)   |  |  |
| Food Allergies:  |  |  |
| How does the body react if a person has a food allergy?                          |  |  |
| Note the difference between allergy and intolerance.                             |  |  |
| Allergens.   |  |  |
| Food Labelling and Marketing:  |  |  |
| Reasons for food labelling.  |  |  |
| What must go on a food label.  |  |  |
| Traffic Light Food Labelling   |  |  |
| Types of Food Marketing  |  |  |
| British and International Cuisine:   |  |  |
| Influence of traditional cuisines around the world. How they affect food choice, |  |  |
| ingredients, preparation.  |  |  |
| Sensory Evaluation:  |  |  |
| How the senses influence food choice.  |  |  |
| Sensory testing methods.   |  |  |
| Avoiding bias in testing   |  |  |

| Topic (what I need to know) Food Provenance and Production   | R | Α | G |
|--|---|---|---|
| Food Provenance:   |   |   |   |
| How plant foods are grown - Intensive and Organic methods.   |   |   |   |
| How animal foods are reared – Intensive and Organic methods. |   |   |   |
| Hunting and gathering food from the wild.                    |   |   |   |
| Genetically Modified:  |   |   |   |
| Food (GM)  |   |   |   |
| Pros and Cons of GM Food.                                    |   |   |   |
| Seasonal Foods:  |   |   |   |
| What does seasonality mean?                                  |   |   |   |
| Advantages of using foods in season.                         |   |   |   |
| Environmental Issues associated with Food Production:        |   |   |   |
| Production.  |   |   |   |
| Processing and Manufacture.                                  |   |   |   |
| Packaging.   |   |   |   |
| Transportation.  |   |   |   |
| The Carbon Footprint of Food:                                |   |   |   |
| Packaging  |   |   |   |
| Food Waste   |   |   |   |
| Food Security and Sustainability:                            |   |   |   |
| What do the terms mean?                                      |   |   |   |
| Examples of food security and sustainability.                |   |   |   |
| Food Processing:   |   |   |   |
| Primary Processing   |   |   |   |
| Secondary Processing.  |   |   |   |
| Examples of Primary and Secondary Processing.                |   |   |   |
| Nutritional Modification and Fortification:                  |   |   |   |
| Why do we fortify or modify foods?                           |   |   |   |
| The use of additives in Food                                 |   |   |   |