

Year 10 Food Technology Overview

Unit	Learning Objectives/Outcomes
Principles of Nutrition	<ul style="list-style-type: none"> • definition of macro and micro nutrients re visit and the relationship to human nutrition and the role of these in human nutrition • definitions of over and under nutrition and the consequences of these to diet and wellbeing • protein - including amino-acids in relation to nutritional requirements (histidine, isoleucine, lysine, leucine, methionine, phenylalanine, threonine, tryptophan, valine) and non-essential (alanine, asparagine, aspartic acid glutamic acid) • carbohydrates - monosaccharides, disaccharides and polysaccharides • fats, oils and lipids, saturated fats, monounsaturated fats, polyunsaturated fats and essential fatty acids
Diet and good health	<ul style="list-style-type: none"> • RDI - different nutrient needs for different groups • life stages and dietary needs toddlers - teenagers • life stages early - late adulthood • dietary needs - coeliac disease, diabetes (type 2 only), dental caries, iron deficient anaemia, obesity, cardiovascular disease (CVD), calcium deficiencies, nut or dairy intolerances • dietary needs - vegetarians - lacto-ovo, lacto, vegan. Religious beliefs that affect diet • how nutrients work together including the complementary actions • basal metabolic rate (BMR) and physical activity (PAL) and their importance In determining energy requirements • Jenny Ridgewell calculations and discussion of nutrients, improvements etc.
Autumn Practical	<ul style="list-style-type: none"> • quiche or fruit pie, lemon tart, using protein to set a mixture on heating such as denatured protein in eggs, quiche or crème patisserie • doughnuts - deep fat frying • bagels - poaching and baking • hedonistic charts, star diagrams, how to use the information to improve a dish • use of Quorn - meal for a vegetarian • plan a balanced diet for a person from a different religion • compare the two diets • identify cooking skills, preparation skills, • seasonal treat

<p>Food Commodities</p>	<ul style="list-style-type: none"> • cereals - (flour, bread, oats, rice, potatoes and pasta). value in diet, features, storage, working characteristics. Origins of ingredient • potatoes - different ways of cooking - boiling, roasting, frying, baking - choice of recipes • dairy food (milk, cheese and yoghurt) value in diet, features, storage, working characteristics. Origins of ingredient - taste different cheeses • meat and poultry value in diet, features, storage, working characteristics. Origins of ingredient • protein alternatives - soya and tofu, beans, nuts, pulses • fish and eggs • fats and sugars (butter, oils, margarines, sugar and syrup)
<p>Science of Food</p>	<ul style="list-style-type: none"> • what makes food spoil - enzymes, moulds, yeast and bacteria, growth conditions, prevention control, mould growth and yeast production. Signs of food spoilage • storing food correctly - refrigeration/freezing, dry/cold storage/packaging/covering food • date marks, labelling of food products to identify storage and preparation • direct and indirect contamination role of temperature, pH, moisture and time in the control of bacteria • food preservation • keeping food for longer, jam making, pickling, freezing, bottling, vacuum packing • the effects of food waste on the environment and the financial implications of waste
<p>Summer Practical</p>	<ul style="list-style-type: none"> • yoghurt - useful use of bacteria • useful yeast use in food production • jams and chutneys • chutney - preservation of ingredients, sterilising jars • use of leftovers - practical - range of basic ingredients