Subject Curriculum Overview for Academic Year 2022/2023

Subject: Food Preparation & Nutrition	Subject Leader: Mr Oaten	Year Group: 10	AUTUMN TERM

Topic	Key Learning Points	Key Vocabulary	Assessments
Half term 1 Provenance Growing and processing Classification Nutrition Dietary considerations Food science Storage Food Hygiene and Safety	**Half term 1** •Students will understand how/where fruit and vegetables are grown, linked to climate and soil types. •Students will know the differences between organic verses non-organic. •Students will know the health implications of using of pesticides and herbicides. •Students will understand about customer choices linked to cost, food miles, and seasonality. •Students will have an understanding of growing, harvesting, storage and primary and secondary processing. •Students will know the different methods of preservation •Changes to texture, colour and flavour due to cooking. •Students will know the difference between fruits and vegetables and be able to label the leaves, stems, roots, tubers, bulbs, etc. •Students can clearly describe the benefits of the '5 a day' theory and the 'eatwell plate.' •Students will understand the benefit of fibre within the diet – soluble and insoluble. •Students will know the difference between vitamins and minerals – specifically fat and water soluble vitamins. •Students will understand the effects of oxidation and heat on vitamin contents of fruit and vegetables. •Students will be able to explain the vitamin and mineral content of fruit and vegetables. •Students will understand the different nutrient requirements linked to different life stages. •Students will understand the dietary requirements of vegetarians (lacto/lacto-ovo/vegan). •Students will understand that bone health is linked with vitamin D and calcium. • Students will understand that healthy blood is linked with vitamin C and iron. •Students will know how composition of fruits and vegetables occurs - Oxidation/enzymic browning. •Students will understand the meaning of 'ambient' – loss of nutrient content over time. •Students will know the importance of chilling – storage areas. •Students will understand the why some foods are canned foods. •Students will understand the different freezing factors – temperatures, home freezing, large scale. •Students will consistently demonstrate good practice in the kitchen. •Students will understand why we must wash fruits and vegetables. •Students will understand the difference between and importance of 'use by' and 'best before' dates. •Students will know the importance of stock rotation. •Students will learn about bagged salads – food poisoning risks. *Practical dishes cooked this half term: Apple pie, soup and rolls, pineapple upside down cake, students choice from investigation, pumpkin recipes, sweet potato curry with flat bread.*	All Students have a CGP GCSE Food preparation and Nutrition revision guide with a comprehensive glossary of terms at the back (p87 – 90) Organic, pesticides, herbicides, seasonality, harvesting, preservation, soluble, insoluble, oxidation, lacto, vegan, enzymic, ambient, use-by, best-before, stock-rotation,	'Written' Summative assessment at end of half term to assess understanding of key learning points. End of year exam

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Half term 2	**Half term 2** •Students will know different areas where meat, fish, poultry, eggs reared/produced. •Students will know the difference between local and imported (e.g. local eggs v imported eggs from Europe). •Students will be able to describe the key factors of sea and farmed fish (Marine Stewardship Council). •Students will understand the differences between intensive farming and natural farming. •Students will understand the importance of animal welfare within the food industry. •Students will know how animals are farmed/reared and slaughtered. • Students will know how fish is caught (fish quotas, availability/ethical fishing). • Students will know about the poultry and eggs farming industry – how it is reared/slaughtered/egg farming . •Students will understand the term secondary processing: Cuts of meat/poultry, processing into bacon, ham, sausages, pies. • Students will be able to describe the term 'offal' and its uses. • Students will know the different cuts of fish (whole, steaks, filets, etc). • Students will know the uses of eggs – pasteurised whole/white/yolk. •Students will be able to categorise the different animal types. • Students will know the different cuts of meat (methods of cooking, tender/tough cuts, and cost). • Students will know the term gelatine, where it comes from and its uses. • Students will know the different categories of fish – white/oily/shell, flat and round. • Students will know the different types of eggs. • Students will understand why Protein (HBV), Saturated fat, B vitamins, are in our foods. • Students will understand the importance of Iron (complementary action of vitamin C with iron). • Students will understand the term 'trace elements' – iodine and fluoride in fish and shellfish. • Students will know the health benefits of eating fish (Omega 3 in oily fish). • Students will understand the implications of excess or deficiency of protein and Iron. • Students will know what the body needs to have healthy blood – iron (haem and non-haem iron). • Students will be able to describe key religious considerations when eating meat. • Students will understand the chemical and physical structure of meat, fish, poultry, eggs. • Students will know the terms denaturation and coagulation. • Students will know how to create foaming and aeration to their food. • Students will know that there is connective tissue in meat and fish and how that effects the cooking method - maillard reaction. • Students will understand that high risk foods can be linked to specific food poisoning bacteria. • Students will know correct storage temperatures. • Students will know how to tell if meat is 'off' and how to tell fish is fresh. • Students will know why there is a lion mark on eggs. • Students will understand different forms of food and drink preservation. *Practical dishes cooked this half term: Chicken butchery, chicken ballotine, lemon tart, pheasant, beef stew & dumplings, fish filleting and cookery, chocolate roulade.*	Intensive, ethical, reared, offal, pasteurised, protein, saturated-fat, gelatine, trace-elements, iodine, fluoride, deficiency, haem, denaturation, coagulation, foaming, aeration, connective-tissue, maollard, lion-mark	

Subject Curriculum Overview for Academic Year 2022/2023

Subject: Food Preparation & Nutrition	Subject Leader: Mr Oaten	Year Group: 10	SPRING TERM
Half term 3 Provenance How commodity grown/ reared and processed Classification Nutrition Dietary considerations Food science Food hygiene and safety Storage	**Half term 3** • Students will know the difference between local and nationally distributed/ imported. • Students will understand how cost can impact on milk prices for farmers livelihood. • Students will know the term 'food miles' and why consumers may choose organic. • Students will understand food wastage and sustainability. • Students will know how animals are reared, fed and milked. Know there are different animal sources of milk. • Students will understand food preservation (drying, UHT, pasteurisation), heat treatment for food safety. • Students will understand the effect on nutritional content from processing. • Students will understand secondary processing – milk, cream, yoghurt, cheese, etc. • Students will know about animal sources. Alternatives e.g. nut, soya, coconut. • Students will understand the different types of milk – skimmed, semi-skimmed, etc. • Students will understand the different types of cream – whipping, soured, etc. • Students will be able to describe different types of cheese – hard, soft, etc. • Students will have an understanding of nutrient requirements (linked life stages). • Students will understand the importance of Protein – HBV and amino acids. • Students will know the difference between Fats – saturated fats. • Students will understand the different vitamins: Fat soluble A and D and minerals: calcium, trace element – iodine. • Students will know why calcium and vitamin D are link to bone health. • Students will know how some allergies are derived from lactose intolerance from cow milk, alternatives. • Students will know that fat content is linked to heart health. • Students will know the chemical and physical structure of dairy based products. • Students will know 'emulsion' and why milk is an emulsion. • Students will understand the denaturation and coagulation of milk proteins. • Students will know the science behind making cream, butter, yoghurt. • Students will know how to making cheese – use of rennet (curds and whey). • Students will understand the benefits of bacteria in the making of yoghurt, cheese, effect of heat on cheese. • Students will know that high risk foods are a cause of bacteria multiplication. • Students will know how to avoid cross-contamination. • Students will understand why it is important to heat treat raw milk. • Students will know how dairy based products should be stored - temperatures? *Practical dishes cooked this half term: Brioche rolls with burgers, chocolate eclairs, tandoori chicken with flat bread, baked cheesecake, dough balls with tomato sauce, savoury cheese dish.*	All Students have a CGP GCSE Food preparation and Nutrition revision guide with a comprehensive glossary of terms at the back (p87 – 90) Nationally distributed, food-miles, UHT, HBV, amino acid, lactose, intolerance, emulsion, rennet, curds, cross-contamination	'Written' Summative assessment at end of half term to assess understanding of key learning points. End of year exam

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Half term 4	**Half term 4** • Students will know the fffects of climate and soil on which cereals can be grown. • Students will be able to describe GM (genetically modified) crops. • Students will understand that cereal is a staple food and the impact of crop failure on nation health. • Students will know how cereals are grown, harvested and processed. • Students will understand the general structure of grain – endosperm, germ and bran. • Students will know the process of milling wheat into flour – key processing stages. • Students will understand the secondary processing: breakfast cereals, use of different grains. • Students will know the nutritional content inc. sugar and salt of breakfast cereals. • Students will know the function of packaging, environmental impact, and marketing. • Students will be able to describe the key stages in the bread making process. • Students will be able to describe the key stages in the pasta making process. •Students will understand that there are a range of cereals grown and eaten across world. • Students will be able to describe different wheat – wholemeal, white, self-raising, semolina. • Students will know the different uses of Rice – brown, white, basmati, Arborio, rice flour, rice vinegar. • Students will be able to describe different oats – rolled, oatmeal. • Students will know the key difference in gluten-free flour. • Students will be able to describe a primary source of carbohydrate. • Students will understand the bodies energy requirements/balance of energy input, energy output. • Students will be able to describe key features of a carbohydrate – starch. • Students will know the importance of dietary fibre (NSP: non-starch polysaccharide) soluble and insoluble. • Students will be able to describe the values of B vitamins and where they are found. • Students will know the effect of nutrient absorption due to presence of phytates. • Students will know the term 'fortification of food' e.g. flour and breakfast cereals. • Students will know that wholegrains reduce risk of heart disease, type 2 diabetes and control of blood cholesterol. • Students will know the effects of low-fibre diet: Haemorrhoids, diverticulitis, cancer of colon. •Students will be able to describe deficiencies: Beriberi – lack of thiamin (vit B1), Pellagra – lack of niacin (vitamin B3). • Students will understand coeliac disease and the allergy related to this. • Students will know the chemical and physical structure of cereal grains. • Students will understand gluten formation, gelatinisation, coagulation, dextrinisation, retrogradation, gels. • Students will investigate different breadmaking techniques: scientific principles, chorleywood process vitamin C (ascorbic acid) in large scale bread manufacturing. • Students will understand how yeast works as a raising agent (and other raising agents). • Students will be able to describe a low risk food (exception includes cooked rice – safety issues). *Practical dishes cooked this half term: Eight stand plaited bread, Danish pastry dough, Danish pastries, students choice from investigation, Victoria sandwich.*	Genetically-modified, crop, endosperm, germ, bran, wholemeal, semolina, basmati, arborio, rolled-oats, oatmeal, gluten-free, starch, absorption, cholesterol, haemorrhoids, diverticulitus, thiamine, gelatinisation, dextrinisation, retrogradation.	

Subject Curriculum Overview for Academic Year 2022/2023

Subject: Food Preparation & Nutrition	Subject Leader: Mr Oaten	Year Group: 10	SUMMER TERM
Half term 5 Provenance How commodity grown/ reared and processed Classification Nutrition Dietary considerations Food science Food hygiene and safety Storage	**Half term 5** •Students will understand how/where soya, beans, nuts and seeds are grown. •Students will understand how soya beans are cultivated. •Students will know the secondary processing: soya processed into tofu, TVP (textured vegetable Protein), soya milk. • Students will know how beans (pulses/legumes), nuts and seeds are grown. • Students will understand Mycoprotein (Quorn TM) – what it is derived from, how it is processed into mycoprotein. •Students will know the secondary processing: beans (legumes) – preservation (drying and canning). •Students will understand the different categories of nuts – ground, flaked, nibbed, etc. • Students will understand different types of seeds – drying, etc. • Students will be able to describe what a soya product is – milk, yoghurt, TVP, tofu, tempeh. • Students will be able to describe different beans (legumes) – red kidney, black eyed, aduki, etc. • Students will be able to describe nuts – brazil, cashew, almonds, etc. • Students will understand the 14 allergen. • Students will be able to describe soya products and Quorn TM - Protein, amino acids, HBV source. • Students will know that soya products and Quorn TM, beans (legumes), nuts and seeds are a good HBV source for vegetarians. • Students will know that nuts can be used as a thickener. • Students will understand that nuts must be kept away from other food sources – risk of allergen contamination. • Students will understand how to store nuts, relating to rancidity, and how to avoid rancidity. *Practical dishes cooked this half term: Seeded bagels, students choice from Investigation, tarka dal with chapatis, Bakewell tart.*	All Students have a CGP GCSE Food preparation and Nutrition revision guide with a comprehensive glossary of terms at the back (p87 – 90) Cultivated, tofu, pulses, legumes, mycoprotein, TVP, tempeh, aduki, allergen, rancidity.	'Written' Summative assessment at end of half term to assess understanding of key learning points. End of year exam

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Half term 6	**Half term 6** •Students will know where is sugar cane and sugar beet grown. • Students will how butter is made. • Students will understand the principles of oils/margarine – growing of vegetable crop for oil production, including pressing. • Students will be able to describe the process of making margarine – different oil types used. • Students will know the benefits of using fish oil. • Students will be able to describe cane and beet climate requirements and the refining process. • Students will know the process of making syrup. • Students will know the primary processing uses of oil and sugar. • Students will know the secondary processing uses for butter, margarine and sugar syrups. • Students will know the key elements of butter, oils, margarine (animal and vegetable fats). • Students will know the effects of temperature on fats. • Students will know the difference between butters – salted, unsalted (lard and suet). • Students will understand that margarine is made from different oil bases (sunflower, olive, soya, etc). • Students will investigate whether margarine is healthy? (hydrogenation). • Students will be able to describe sugar cane, sugar beet, types of syrup (monosaccharides and disaccharides, e.g. treacle). • Students will know that butter, oils and margarine nutrient requirements are linked to different life stages. • Students will know that saturated and unsaturated fats have different calcium and vitamin content. • Students will understand that sugar and syrup are empty calories, link to weight gain, obesity, dental cavities, type 2 diabetes. • Students will know how to make sensible choices on fat type (unsaturated, etc). • Students will know how to look for lower fat and lower sugar alternatives. • Students will know the chemical and physical structure of butter, oils, margarine. • Students will understand the hydrogenation in oils produces hard fats. • Students will understand the key functions of fats – plasticity, shortening, emulsification. • Students will know that fats have different melting points and smoke points. • Students will understand the chemical and physical structure of sugar and syrup. • Students will be able to identify when butter, oils and margarine are rancid. • Students will know that sugar and syrup are low risk foods. • Students will know the correct storage of butter and margarine. • Students will understand the effect of light on oil. • Students will know how to maintain quality and longevity of oil. • Students will understand that sugar storage is impacted by humidity. • Students will know that syrup storage may be a factor of crystallisation. *Practical dishes cooked this half term: Eggs benedict, swiss roll with homemade jam, steamed pork buns, chicken cordon bleu, sugar work.*	Sugar-cane, sugar-beet, pressing, refining, hydrogenation, monosaccharides, disaccharides, saturated, unsaturated, plasticity, shortening, emulsification, smoke-point, longevity, crystallisation.	

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How parents can support learning in the subject this academic year

Encourage and help students with homework tasks, checking on epraise for tasks set and logging onto 'remote access' to go through class computer work.
Encourage practising of recipes learned at school and wider recipes of their choosing. Allow student to cook for the family at dinner times.
Recommend watching cooking programmes together, competitions and lifestyle shows to motivate and enthuse students.
Encourage students to use their revision guide and accompanying workbook at home.

Recommended Reading

Websites:
www.senecalearning.com www.bbc.co.uk/bitesize www.foodafactoflife.org.uk

Books:
Collected from school – exam board revision guide and accompanying workbook.
The Complete Cookbook for Young Chefs – By America's Test Kitchen Kids
The Complete Baking Book for Young Chefs - By America's Test Kitchen Kids
Masterchef Junior Cookbook

Points to note

Students are expected to bring in ingredients to cook with on a weekly basis. All recipes are on epraise in advance of the lesson. If there are any particular lessons where you have been unable to locate or supply ingredients, please contact Mr Oaten as soon as you are aware of the issue; roger.oaten@jmhs.hereford.sch.uk
With thanks.