

FOOD SCIENCE AND TECHNOLOGY

Unit 1C Nutrition and health promotion

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Teaching and learning program Food Science and Technology (Nutrition and Health Promotion)

Unit 1C: Food and my life

Unit focus: How healthy is my food?

Week	Content	Learning Experiences	Assessment	Resources
1	<p>Physical properties of food that influence selection and use of fresh and processed foods</p> <p>Food issues related to lifestyle that affect personal needs, wants, beliefs and values</p> <p>Workplace procedures for health and safety e.g. safe work techniques using</p>	<p>Introduction to the course, equipment, attendance and assessment requirements</p> <ul style="list-style-type: none"> • Provide students with: <ul style="list-style-type: none"> ○ syllabus document 1C pages 20 – 21 ○ unit outline ○ assessment outline ○ school assessment policy ○ grade descriptors. • Motivational lesson • How do you taste your food and beverages? <ul style="list-style-type: none"> ○ influence of sensory properties on food selection ○ excess nutrient consumption from lifestyle beverages • Investigate beverages and complete a results sheet <ul style="list-style-type: none"> ○ working in pairs blindfold one student ○ the partner collects eight samples in coded cups ○ the blindfolded student tastes and the partner records the results ○ cleanse the palate with water between each taste ○ repeat the activity with a blindfold and a nose peg. students swap roles and repeat the activity ○ once completed record the data from the nutrition panel on each beverage as per 100 ml information to relate to % and per serve to relate to RDI • Revise workplace procedures for health and safety <ul style="list-style-type: none"> ○ safe work techniques using equipment 		<p>RDI information for Calcium, Sodium</p> <p>Sensory tasting equipment: Blindfold, nose peg, small disposable taste cups, 4 pairs of drinks (orange juice/o-juice + calcium, energy drink and caffeine based soft drink +/- caffeine and +/- sweetener, milk shake, yoghurt drink) that are of similar taste and flavour but differ in their nutrient content (high sugar, salt, flavoured, caffeine added V natural flavour, low sugar, low salt)</p>

<p>knives and equipment, handling hot surfaces, emergency procedures, safe posture including lifting bending and standing</p> <p>Safe personal presentation standards e.g. personal grooming and hygiene, appropriate clothing and footwear</p> <p>Safe food handling and processing techniques used to ensure the quality and palatability of food.</p> <p>Use of food selection models to appraise food and diet e.g. Australian Guide to Healthy Eating Safe and hygienic work practices when using equipment and appliances</p> <p>Preparation methods used to produce food products</p>	<ul style="list-style-type: none"> ○ safe posture including lifting, bending and standing ○ safe handling of hot surfaces ○ emergency procedures ● Revise procedures for washing up and cleaning <ul style="list-style-type: none"> ○ view “Food Safety” video ○ provide students with worksheets including visual illustrations of safe and unsafe practices. ○ food Safety Test ○ personal photo with required clothing and grooming as a cover for the Task Portfolio ● How safe is your food? <ul style="list-style-type: none"> ○ Demonstrate the use of inoculation loops to swab food and work surfaces (see you tube videos for use of the loop and inoculating the agar) ● Experiment <ul style="list-style-type: none"> ○ test the food preparation area with swabs ○ take swaps of washed and unwashed fruit ○ swab the loop over a pre packaged cut surface (watermelon, rockmelon – anything pre cut and moist) ○ use loop in water used for washing fruit ○ apply on growth medium in petri dish, cover and seal with tape, keep at room temperature ● Introduction to food selection models, emphasis on Australian Guide to Healthy Eating (AGHE) <ul style="list-style-type: none"> ○ Revise serving sizes ● Introduce task1 ● View video ‘The knives are out’ ● Practical lesson <ul style="list-style-type: none"> ○ prepare a fruit salad using precision cuts 	<p>Introduce Task 1</p>	<p>Perraton, G. Boddy, G. Compton, L. Weston, K. Brown, M. <i>Food and Technology 2</i>, Milton Qld.: Jacaranda Chapter 1</p> <p>Food Safety Matters Kit (2003 Qld Health Dept) Food Safety Video: A case for Contamination Food safety matters booklet and test</p> <p>Disposable petri dishes, inoculation loops and cotton buds</p> <p>Australian Guide to Healthy Eating http://www.health.gov.au/internet/main/publishing.nsf/Content/health-publth-publicat-document-fdeduc-cnt.htm The Knives are Out, Using kitchen knives correctly Video Education Australasia 29 minutes</p>
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		<ul style="list-style-type: none"> ○ fruit salad recommended serve size (AGHE) ○ measure other displayed serve sizes of food from the six food groups (use the foods on offer in the canteen to calculate serving sizes) 		
2	<p>Preparation methods used to produce food products</p> <p>Reasons for selecting cooking methods e.g. availability of time, nutrition, sustainability</p> <p>Variation of macronutrient requirements depending on an individual's age, lifestyle</p> <p>Use of food selection models</p>	<ul style="list-style-type: none"> ● Wet and dry cooking methods video <ul style="list-style-type: none"> ○ wet cooking methods worksheet ○ dry cooking methods worksheet ● Hand out "The Teenage Anti Acne Diet" ● Practical lesson <ul style="list-style-type: none"> Anti Acne diet "Creamy Beef Stroganoff" <ul style="list-style-type: none"> ○ establish food preparation skill levels ○ identify cooking methods to be used ○ identify advantages of steaming, boiling, braising ○ wet cooking methods: steaming, boiling, braising ○ identify the individual serving size of ingredients in the recipe ○ classify into food groups ○ calculate how many recommended serves the food represents ○ compare to AGHE recommended serves ○ produce Beef Stroganoff ○ demonstrate knife skills, oven/stove management, cooking methods ● Introduction to carbohydrate rich foods (sugars and starches) with the AGHE and the required carbohydrate rich servings ● Macronutrient - Carbohydrate <ul style="list-style-type: none"> ○ classification of carbohydrates ○ functional properties ○ requirements depending on age and lifestyle 		<p>Clickview video library: Wet/dry cooking methods video and associated worksheet http://www.clickview.com.au</p> <p>http://www.mla.com.au/NR/rdonlyres/CE255645-C3A4-47EF-86B3-D860E69B0CA4/0/TheTeenageAntiAcneDietbooklet.pdf</p> <p>Cameron, S. Russell, S. <i>Cookery the Australian Way</i>, 7th edition, South Yarra Vic.: Macmillan Publishers Australia, pg.311,326 or http://www.macmillandigital.com.au/BookStore/pagedisplay.d</p>

	<p>to appraise food and diet to appraise food and diet e.g. Healthy Eating Pyramid, Australian Guide to Healthy Eating</p> <p>Physical properties that influence selection and use of fresh and processed foods</p>	<ul style="list-style-type: none"> • Practical lesson <ul style="list-style-type: none"> ○ stewing ○ Apple Sauce with low fat homemade custard ○ identify serve sizes as per AGHE ○ identify carbohydrates present in the recipe from the different food groups ○ classify carbohydrate combinations with nutrient dense or “empty calorie/joule” nutrient poor food: <ul style="list-style-type: none"> - flour/starch from bread and cereals as a complex carbohydrate but nutrient poor - sugar from the extra group to sweeten as a simple carbohydrate but nutrient poor - fruit with complex carbohydrates, fibre and fructose as a nutrient dense food ○ identify gelatinisation as a process <ul style="list-style-type: none"> - starch granules absorb water in the presence of heat thickening the liquid and forming a gel ○ wet cooking method: stewing 	<p>o?genre=book&pub=macaus&id=9781420225198&page=S-FC</p> <p>Mann, J., Truswell, S., <i>Essentials of Human Nutrition</i>, Oxford New York: Oxford p.8 – p.33</p> <p>Perraton, G. Boddy, G. Compton, L. Weston, K., Brown, M. <i>Food and Technology 2</i>, Milton Qld: Jacaranda Chapter 2, pg. 48</p>
3	<p>Choosing recipes to suit a purpose</p> <p>Organisation of work using food orders and production plans</p> <p>Economic and environmental</p>	<ul style="list-style-type: none"> • Classification of carbohydrates <ul style="list-style-type: none"> ○ practical laboratory activity ○ read through carbohydrate information sheet ○ identify the main carbohydrates (sugars or starches) in a selection of test mediums under laboratory conditions ○ complete worksheets from the http://www.lessonplansinc.com/science.php/biology/detail/macromolecule_lab/ • Average carbohydrate requirements for the body • Practical lesson <ul style="list-style-type: none"> ○ Anti Acne Diet: Tandoori Chicken ○ students adapt recipe to suit their needs as the Anti Acne Diet does not specify how to produce Tandoori Sauce ○ identify individual serving size ○ classify into food groups 	<p>http://www.lessonplansinc.com/science.php/biology/detail/macromolecule_lab/ (free to use)</p> <p>http://www.homeeconomics.ie/homeeconomics/Main/Curriculsupport-carbohydrates.htm</p> <p>http://www.mealsmatter.org/recipes-meals/recipe/16870 Cut chicken in strips and add 1 cup chicken stock and braise</p> <p>http://uktv.co.uk/food/recipe/aid/512018</p>

	<p>aspects of purchasing fresh compared to processed foods e.g. packaging, recycling, composting, cost</p> <p>Physical properties that influence selection and use of fresh and processed foods</p> <p>Preparation methods used to produce food products</p>	<ul style="list-style-type: none"> ○ compare to AGHE ○ produce a food order and production plan for recipe with ready-made sauce or freshly made sauce ○ half the class produce braised Tandoori Chicken with ready-made Tandoori Sauce ○ half the class produce Tandoori Chicken with homemade Tandoori Sauce ○ all students compare economic and environmental aspects of purchasing ready-made sauce to producing fresh Tandoori Sauce <ul style="list-style-type: none"> ● Practical lesson <ul style="list-style-type: none"> ○ poaching ○ Poached Pear in Grenadine with toffee for presentation ○ boiling – caramelisation and crystallisation of sugar ○ identify caramelisation and crystallisation as processes 		<p>http://www.abc.net.au/tv/cookandchef/txt/s2049179.htm Sugar decorations Perraton, G., Boddy, G., Compton, L., Weston, K., Brown, M., <i>Food and Technology 2</i>, Milton Qld.: Jacaranda Chapter 2, Toffee thermometer</p>
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<p>4</p>	<p>Preparation methods used to produce food products</p> <p>Variation of macronutrient requirements depending on an individual's age and lifestyle e.g. carbohydrates, proteins and fat</p> <p>Physical properties that influence the selection and use of fresh and processed foods</p> <p>Food issues related local food habits and trends</p>	<ul style="list-style-type: none"> • Practical lesson Part A: Anti Acne Diet, Tuna Pasta with steamed / fresh vegetables <ul style="list-style-type: none"> ○ identify individual serving size ○ classify into food groups ○ compare to AGHE ○ using dry cooking methods – frying • Practical lesson Part B: Fruit Smoothie as per Teenage Anti Acne Diet (yoghurt - protein denaturation) <ul style="list-style-type: none"> ○ calculate serving size as per AGHE ○ classify into food groups • Macronutrient Protein <ul style="list-style-type: none"> ○ examine protein requirements as per AGHE ○ examine proteins as a macronutrient that promotes body tissue repair/ building ○ use protein product with added functional properties (yoghurt as a food that promotes health) ○ identify active probiotic cultures that denature protein from the ingredients list ○ compare the preparation of popular European thickened milk with the enzyme rennin (junket tablets) ○ observe thickening of milk protein through coagulation ○ research the increase in varieties of yoghurt on sale but junket tablets are rarely available – example of change in food habits due to health benefits of fermentation with bacterial cultures • Practical lesson: • Anti Acne Diet “Sweet corn, spinach and mushroom omelette” <ul style="list-style-type: none"> ○ dry cooking method – frying ○ identify individual serving size as per AGHE ○ classify into food groups 		<p>Explanation of yoghurt production using heat treatment of milk and acids through fermentation with Lactobacillus http://books.google.com.au/books?id=nleJiL_dLeQC&pg=PA304&lpg=PA304&dq=protein+changes+in+yoghurt&source=web&ots=qXTdMFy6Oa&sig=pQVgc5uuoxgY_3iu2ol_PqM9xTc&hl=en&sa=X&oi=book_result&resnum=1&ct=result#PPA304,M1 Junket: Prepare as per instructions</p> <p>Perraton, G., Boddy, G., Compton, L., Weston, K., Brown, M., <i>Food and Technology</i> 1, Milton Qld.: Jacaranda, pg. 129-132 http://www.homeshop.com.au/website/home/jsp</p> <p>http://www.foodstandards.gov.au/thecode/nutritionpanelcalculator/</p>
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	<p>Use of food selection models to appraise food and diet e.g. Healthy Eating Pyramid, Australian guide to Healthy Eating</p>	<ul style="list-style-type: none"> ○ access the Australian and New Zealand Food Authority (ANZFA) Nutrition calculator to calculate macronutrient per gram and percentages ● Assess daily food intake <ul style="list-style-type: none"> ○ use a food intake diary to record food intake for one day ○ enter results in g/cup or teaspoon measures in the appropriate food group column ○ include an extra's column ○ include a column for foods that do not fit ○ enter measurements into ANZFA calculator as a recipe ○ enter 10% as weight change for plate scraps ○ deduct 10% from initial weight and enter result into final weight ○ enter one into serve size and serves per package ○ click on update recipe to receive quantity per serve and quantity per 100g ○ calculate total weight per 100g and calculate % proportions of each macronutrient, differentiating between total fat and saturated fat and total carbohydrates and sugar. ○ compare to recommended energy intake ○ convert to pie diagram for total intake displayed per 100% ○ label pie diagram 		<p><i>VCE Food and Technology</i>, Unit 1 Properties of Food, Vhetta Vic. p. 117 –p. 124</p> <p>Perraton, G. Boddy, G. Compton, L., Weston, K. Brown, M. <i>Food and Technology 2</i>, Milton Qld.: Jacaranda Chapter 2, p. 42-48</p> <p>http://books.nap.edu/openbook.php?record_id=10490&page=941</p> <p>Nutrient Reference Values http://www.nhmrc.gov.au/publications/synopses/files/n35.pdf</p>
5	<p>Physical properties that influence the selection and use of fresh and processed foods</p> <p>Safe food handling practices and processing techniques used to ensure the quality and palatability of food</p>	<ul style="list-style-type: none"> ● Practical lesson: ● Tenderising meat - “Marinated Steak” <ul style="list-style-type: none"> ○ observe the effect of acid on protein denaturation ○ using smaller cuts of meat (80 – 120 g) use half the meat in the recipe and marinate as per recipe ○ process the other steak without marinating ○ complete worksheets ○ evaluate using sensory descriptors <ul style="list-style-type: none"> - appearance 	Task 1 due	<p>Recipe and worksheets: Evaluation questions from <i>VCE Food and Technology, Unit 1 Properties of Food</i>, Vhetta Vic.: p136 http://www.exploratorium.edu/cooking/meat/INT-what-is-</p>

	<p>Economic and environmental aspects of purchasing fresh compared to processed foods e.g. packaging, recycling, composting, cost</p> <p>Classification of foods e.g. natural, processed</p>	<ul style="list-style-type: none"> - taste - texture - sound - umami (new descriptor for savoury, fullness of flavours – associated with amino acids (monosodium glutamate)) <ul style="list-style-type: none"> • Experiment • Gluten (Protein) formation and washing away starch <ul style="list-style-type: none"> ○ read the protein information sheet ○ measure one cup of flour by sifting the flour into the cup ○ transfer the flour into a bowl and add just enough water to make a stiff but slightly sticky dough ○ mix thoroughly and let stand at least 5 minutes ○ knead for 10 minutes ○ minimise kneading variations -keep to the same pattern ○ place dough ball in a container of water ○ wash out the gluten carefully (the starch washes away from the gluten) this leaves you with an elastic mass of crude gluten • Introduce task 2 • Introduction to the Foodcent\$ program developed in Western Australia <ul style="list-style-type: none"> ○ how to get value for money and achieve a balanced diet ○ spending money across the food groups in set proportions, spending the most on fruits, vegetables and plain cereal foods ○ ensuring that most money is spent on the foods we should eat most of and least being spent on the foods we should eat least • Practical lesson • Spicy potato wedges and processed wedges food 	<p>Introduce Task 2</p>	<p>meat.html http://www.exploratorium.edu/cooking/meat/INT-what-makes-juicy.html</p> <p>Sensory descriptors: Heath, G. McKenzie, H. Tully, L. <i>Food Solutions Food and Technology Units 3 & 4</i>, Melbourne Vic.: Pearson Longman p. 206 - 207</p> <p>Protein information http://www.homeeconomics.ie/homeeconomics/Main/curricularsupport-protein.htm</p> <p>Fennema, O. <i>Food Chemistry</i>. New York: Marcel Dekker Inc. p.184 – p.196</p> <p>Foodcent\$ hardcopy availability: http://catalogue.nla.gov.au/Record/400113?lookfor=author-browse%3A%22Nutrition+Program+%28W.A.%29%22&max=12&offset=11&#details Online access to all parts of the program: http://www.foodcentsprogram.com.au/about-foodcents/eat-smart/recipes/ http://www.foodcentsprogram.com.au/about-foodcents/eat-smart/recipes/</p>
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		<ul style="list-style-type: none"> • comparison of baking and roasting • classify foods as natural or processed <ul style="list-style-type: none"> ○ assess the sensory attributes i.e. appearance, smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the nutrition values of three major ingredients. ○ evaluate possible positive or negative health impacts ○ describe the common packaging materials used for the processed food ○ evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ record the time taken to prepare each product 	<p>smart/recipes/#Spicy_Potato_Wedges Commercial potato wedges (avoid chilli/ hot flavour- not easy to compare products in sensory evaluation) https://www.colesonline.com.au/webapp/wcs/stores/servlet/CM_LForwardViewCmd?langId=1&storeId=11054&catalogId=10051&useropt=browse&viewName=TopCategoriesDisplayView&shopTabCategoryId=10001 or http://www.homeshop.com.au/website/home.jsp?bmUID=1230876343524 using the postcode 3000 so online prices can be viewed</p>
6	Preparation methods used to produce food products	<ul style="list-style-type: none"> • Investigate the structure and types of lipids (solid - fats and liquid - oils) and their origin <ul style="list-style-type: none"> ○ read the lipids information sheets ○ examine a food display to identify the different types of fat from the following examples <ul style="list-style-type: none"> - butter, fat from rump steak, chicken skin, fish oil (capsule), margarine, different oils, nuts, seeds (linseed) - classify fats into saturated, monounsaturated, polyunsaturated, animal origin and plant origin - assess labels and find information on fats used in food processing - what makes some fats a health risk? - why is there a nutritional importance to lower consumption of trans and saturated fats - how can a fat be a functional food e.g. linseed oil, Omega 3 fatty acids? • Practical lesson 	<p>http://www.homeeconomics.ie/homeeconomics/Main/cirriculars/upport-lipids.htm</p> <p>http://www.lessonplansinc.com/science.php/biology/list/C115/ http://www.qffoodservice.com.au/NutritionalFacts/Nutritional-Faq.aspx http://www.ific.org/foodinsight/2006/jf/fatsfi106.cfm http://www.ific.org/publications/factsheets/omega3fs.cfm</p>

		<ul style="list-style-type: none"> • Chicken Parmigiana with chips cooked in fat (frying, deep frying, baking) <ul style="list-style-type: none"> ○ recognise the types of fat in this recipe ○ deep fry some of the chips and compare with oven baked ○ complete worksheets from the recipe • Practical lesson • Breakfast food comparison (frying, microwaving, boiling) from the Foodcent\$ cookbook <ul style="list-style-type: none"> ○ in groups prepare homemade and ready-made hotcakes, homemade and ready-made magic muesli, homemade and ready-made fruit spread ○ assess the sensory attributes i.e. appearance, smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the nutritional values of three major ingredients ○ evaluate possible positive or negative health impacts of consumption of the products ○ describe the common packaging materials used for the processed food ○ Evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ Record the time taken to prepare each product 		<p>VCE Food and Technology, Unit 1 Properties of Food, Mt Waverly Vic. Vhetta p114 – p. 116</p> <p>http://www.foodcentsprogram.com.au/about-foodcents/eat-smart/recipes</p>
7	<p>Economic and environmental aspects of purchasing fresh compared to processed foods e.g. packaging, recycling, composting, cost</p> <p>Producing food products, services or systems for themselves and their families</p>	<ul style="list-style-type: none"> • Practical lesson • Lunch food comparison (Frying, boiling, baking) from the Foodcent\$ cookbook <ul style="list-style-type: none"> ○ in groups prepare homemade and ready-made vegetable quiche, homemade chilli con care using dried and canned beans ○ assess the sensory attributes i.e. appearance, smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the 		<p>http://www.foodcentsprogram.com.au/about-foodcents/eat-smart/recipes</p>

	<p>using the technology process</p>	<p>nutrition values of three major ingredients</p> <ul style="list-style-type: none"> ○ evaluate possible positive or negative health impacts ○ describe the common packaging materials used for the processed food ○ evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ record the time taken to prepare each product <ul style="list-style-type: none"> ● Preparation for oral presentation <ul style="list-style-type: none"> ○ produce a table for the PowerPoint presentation using the following headings ○ describe the general sensory properties of the home-made products compared to the processed products ○ describe the general environmental impact of the packaging used for the commodities used in the home-made products and that used for the processed products ○ describe the nutrition of the home-made products compared to the processed products ○ describe the cost of the home-made products compared to the processed products ○ describe the preparation time for the home-made products compared to the processed products ○ identify three personal food related beliefs and values e.g. health, cost, nutrition, convenience, food skills ○ justify which version of each of three pairs of products you would include in your diet according to your personal food related values and beliefs ○ describe two impacts on enterprises of consumer 		
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	Preparation methods used to produce food products	<p>demands for either natural or processed food products</p> <ul style="list-style-type: none"> • Practical lesson • Snack food comparison (boiling, baking) from the Foodcent\$ cookbook <ul style="list-style-type: none"> ○ In groups prepare Macaroni Cheese recipe reducing the cheese to ½ quantity, add skim milk powder and ½ teaspoon of low salt stock powder for flavour ○ prepare ready-made Macaroni Cheese ○ prepare beverages commonly consumed before bedtime, homemade hot chocolate and hot chocolate using chocolate powder ○ assess the sensory attributes i.e. appearance, smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the nutrition values of three major ingredients ○ evaluate possible positive or negative impacts on health ○ describe the common packaging materials used for the processed food. ○ evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ record the time taken to prepare each product 		
8	Preparation methods used to produce food products	<ul style="list-style-type: none"> • Practical lesson • Dinner foods comparison (roasting, steaming) <ul style="list-style-type: none"> ○ prepare spicy roast chicken drumstick (pre cook chicken in MW at 50 % power for 7-9 min per 500 g and transfer to oven to roast) and homemade potato salad and BBQ chicken and ready-made potato salad Foodcent\$ cookbook ○ assess the sensory attributes i.e. appearance, 		<p>http://www.foodcentsprogram.com.au/about-foodcents/eat-smart/recipes</p> <p>Using the smart shopping webpage have food labels and</p>

	<p>Reasons for selecting cooking methods e.g. availability of time, nutrition, sustainability</p>	<ul style="list-style-type: none"> ○ smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the nutrition values of three major ingredients. ○ evaluate possible positive or negative impacts on health ○ describe the common packaging materials used for the processed food ○ evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ record the time taken to prepare each product <ul style="list-style-type: none"> ● Practical lesson ● Dinner foods comparison (stewing, baking, simmering) <ul style="list-style-type: none"> ○ prepare homemade stewing steak with dumpling topping and ready-made pie, Citrus mousse/dairy dessert from the Foodcent\$ cookbook ○ assess the sensory attributes i.e. appearance, smell, taste, umami and texture of food ○ use the ANZFA nutrition calculator to evaluate the nutrition values of three major ingredients. ○ evaluate possible positive or negative health impacts ○ describe the common packaging materials used for the processed food ○ evaluate environmental impacts of the packaging used ○ calculate the cost per serve ○ record the time taken to prepare each product ● Continue oral presentation preparation 		<p>nutrition claims explained http://www.diabetes.com.au/smartshopping/index.php Task 1B General Recommendations for macronutrient intake work sheet and computer access</p>
9		<ul style="list-style-type: none"> ● Individual oral presentations 	Task 2 Due	

	<p>Producing a range of food products, services or systems suitable for themselves and their families</p> <p>The impact on enterprises of consumer demands for particular food products e.g. supply and demand</p> <p>The impact of beliefs and values on selection of food products, services and resources</p>	<ul style="list-style-type: none"> ○ use power point effectively ○ keep to the time allocated ○ provide an introduction that explains the investigation issue ○ use relevant terminology ○ organise information logically ○ speak clearly and confidentially ○ address the audience ○ provide a logical conclusion <ul style="list-style-type: none"> ● Introduce task 3 ● Practical lesson ● Introduction to Finger foods <ul style="list-style-type: none"> ○ convert an all in one pan Potato and Smoked Salmon Frittata with added vegetables into a nutritious finger food ● Hand out the functional food tips from the International Food information council (IFIC) <ul style="list-style-type: none"> ○ discuss options that will suit the design brief reflecting on foods that promote health ● Choose from a display of products <ul style="list-style-type: none"> ○ the most suitable casing to hold the liquid mix in a mini muffin tin <ul style="list-style-type: none"> - oiled filo pastry layered - puff pastry - spring roll wrap - flat rolled bread ○ adapt the ingredients to reduce saturated fat content <ul style="list-style-type: none"> - investigate possible changes to plant oils, vegetables, beans, pulses ○ adapt protein ingredients to achieve required setting of product (egg) ○ adapt carbohydrate ingredients (add different 	<p>Introduce Task 3</p>	<p>Hay, D., No time to cook, Harper Collins NSW.: p.72</p> <p>http://www.ific.org/nutrition/functional/upload/FINAL-IFIC-Fndtn-Functional-Foods-Backgrounder-with-Tips-and-changes-03-11-09.pdf</p> <p>Perraton, G., Boddy, G., Compton, L., Weston, K., Brown, M., <i>Food and Technology 2</i>, Milton Qld.: Jacaranda p. 237 -242, Variety in meal planning</p>
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	Foods that promote health e.g. fresh fruit and vegetables	<p>flours) to achieve required setting of product</p> <ul style="list-style-type: none"> ○ add vegetables to reduce GI and increase complex carbohydrate component ○ include functional foods that are more economical e.g. substitute salmon with tinned tuna to retain the omega 3 balance ○ consider including yoghurt instead of cream ○ produce a food order for one serve 		
10	<p>Consideration of the beliefs and values of producers and consumers to address changing consumer needs</p> <p>Organisation of work using food orders and production plans</p> <p>Choosing recipes to suit a purpose</p> <p>Adapting recipes to suit a design brief</p> <p>Relevant terminology</p>	<ul style="list-style-type: none"> ● Practical lesson ● Potato and Smoked Salmon finger food cups <ul style="list-style-type: none"> ○ produce the adapted recipe ○ compare the outcome with that of your partners ○ select the most appropriate adaptation ○ give reasons for the selection ● Finger food menu planning for winter evening entertaining for adults <ul style="list-style-type: none"> ○ work individually ○ choose three finger food recipes to suit the purpose of the task ○ adapt each recipe to suit the design brief <ul style="list-style-type: none"> - include a variety of fresh ingredients - low in saturated fat and salt - high in complex carbohydrates - include functional foods - processing method retains vitamins ○ use the ANZFA nutrition calculator and identify the macronutrient and salt content of each recipe ○ produce a food order to trial the recipes ○ produce a production plan to trial the recipes 		
11	Skills to manage small scale food production	<ul style="list-style-type: none"> ● Practical lesson ● First individual product trials <ul style="list-style-type: none"> ○ complete pre-production tasks for each recipe, 		Recipe yield calculations – free

	<p>Safe food handling practices and processing techniques to ensure the quality and palatability of food</p> <p>Preparation methods used to produce food products</p> <p>Food issues related to local food habits and trends</p>	<p>produce bases, cases, toppings</p> <ul style="list-style-type: none"> ○ store the pre-prepared portions of the products for three days and evaluate the results <ul style="list-style-type: none"> ● Practical lesson <ul style="list-style-type: none"> ○ produce the recipes with the stored pre prepared portions and conduct and record sensory evaluations ○ calculate the yield from each recipe ○ adapt the recipes and processing methods following sensory and storage evaluations ○ produce a new food order to trial the adjusted recipes ○ produce a production plan to trial the adapted recipes ● Arranging and serving Food: <p>View either of the following videos to ensure quality finger food presentation for photos in the flyer</p> <ul style="list-style-type: none"> ○ Looks Good Enough To Eat ○ Great Food Presentation 1 and 2 - More Than Food On a Plate ● Presentation for best effect <ul style="list-style-type: none"> ○ research magazines and recipe publications for food styling techniques ○ cut out finger food photos to view techniques to be applied in the flyer <ul style="list-style-type: none"> - take notes of colour combinations e.g. individual food, food in combination with garnish, dressing, sauce etc. - crockery used - serviettes matched up - lighting, background surface 		<p>software at: http://www.recipecenter.com/FreeSoftware.aspx</p> <p>VCE Food and Technology, <i>Unit Planning and Preparation of Food</i>, Mt Waverly Vic.: Vhetta p. 29 – 31</p> <p>www.clickview.com.au</p>
12	Teamwork skills	<ul style="list-style-type: none"> ● Practical production of individually adapted food order 		

	<p>Selection of appropriate equipment for stated purpose</p> <p>Safe use and storage of equipment</p> <p>Safe personal presentation standards e.g. personal grooming and hygiene, appropriate clothing and footwear</p> <p>Relevant terminology</p>	<ul style="list-style-type: none"> ○ evaluate results ○ proceed to form teams and select the three most suitable recipes ○ ensure most of the design features are included in the recipe ● Working in teams <ul style="list-style-type: none"> ○ negotiate and communicate to select three products that will be produced in your team ○ show effective team work skills ○ produce a food order to produce ten finger portions of each recipe ○ produce a team production plan that includes all tasks and team members ○ your personal preparation standard reflects industry expectations ○ your workplace procedures reflect industry expectations ● Proceed to design a flyer using Publisher <ul style="list-style-type: none"> ○ include spaces for food photos ○ identify arguments why <ul style="list-style-type: none"> - the amount of fresh fruit and vegetables should be increased - salt should be reduced - saturated fat should be reduced - complex carbohydrates should be increased to lower GI - functional foods should be included - processing techniques that retain nutrients should be used 		<p>Online tutorials for publisher at; http://movies.atomiclearning.com/uk/publisher07</p>
13	<p>Skills to manage small scale food productions</p>	<ul style="list-style-type: none"> ● Practical lesson ● Produce team food products 		

	<p>Variation of macronutrient requirements depending on an individual's age and lifestyle e.g. carbohydrates, protein, fats</p> <p>Teamwork skills</p> <p>Safe food handling practices and processing techniques used to ensure the quality and palatability of food</p>	<ul style="list-style-type: none"> ○ apply procedures to avoid cross contamination ○ select processing methods to retain vitamins ○ select processing techniques that enhance the physical and sensory properties of food commodities ○ store food correctly ○ use sensory testing to evaluate food products <ul style="list-style-type: none"> ● During product planning and production demonstrate the following skills: <ul style="list-style-type: none"> ○ effective teamwork and negotiation skills ○ choice of recipes to suit a purpose ○ organization of work using food orders and production plans ● Following team product production and sensory evaluation select ten food products to be featured in the flyer ● Collate recipes for each class member ● Individually produce the promotional flyer 		
14	<p>The impact on enterprises of consumer demands for particular food products e.g. supply and demand</p> <p>The impact of beliefs and values on selection of food products, services and resources</p>	<ul style="list-style-type: none"> ● Innovative food product development <ul style="list-style-type: none"> ○ display common sweeteners available on the Australian market ○ discuss the Glycaemic Index of natural and processed sugars ○ view sugar cane growing and processing techniques in Australia ○ discuss current sugar usage of an average of 50 kg per person per year in Australia ○ choose a dessert recipe to be produced using a low GI sweetener or a high GI sweetener ○ in pairs produce a food order for two serves of a low or high GI sweetened dessert 	Task 3 Due	<p>http://www.fao.org/docrep/005/X0513E/x0513e04.htm</p> <p>http://www.healthyeatingclub.com/info/articles/diseases/glycaemic-table.htm</p> <p>http://www.canegrowers.com.au/docs/ChildrenWhereDoesSugarComeFrom.pdf</p> <p>http://www.sucrose.com/learn.html</p>

		<ul style="list-style-type: none"> • Introduce Task 4 <ul style="list-style-type: none"> ○ obtain a copy of the article ' New sugar less bad for you' from foodweek.com.au ○ complete an essay in response to this article 	Introduce Task 4	
15		<ul style="list-style-type: none"> • Practical lesson • Produce a dessert with a high or low GI sugar <ul style="list-style-type: none"> ○ complete sensory tasting with a production group that chose a different sweetener to you ○ evaluate sweetness of product and other sensory descriptors ○ evaluate the products considering your own values and beliefs ○ would you include these sweeteners in your diet? • Complete all unit requirements 	Task 4 Due	

Assessment outline – Food Science and Technology (Nutrition and health promotion)

Unit 1C: Food and my life

Unit learning context: How healthy is my food?

Assessment type	Type weighting	Assessment	Task weighting	Week due	Content	Outcome 1 Understanding food materials	Outcome 2 Developing food opportunities	Outcome 3 Working in food environments	Outcome 4 Understanding food in society
Investigation	30% (CC weighting 20-30%)	Task 1 Nutrition investigation	15%	5	Food as a commodity Nutrition	✓			✓
		Task 2 Investigate natural and processed foods	15%	9	Food as a commodity Properties of food Nutrition	✓			✓
Production	60% (CC weighting 50-70%)	Task 3 Devise, produce and evaluate nutritious food creations for entertaining	60%	14	Nutrition Skills with food Food practices and processing Technology process Laws and regulations	✓	✓	✓	
Response	10% (CC weighting 10-20%)	Task 4 Response to an innovative product	10%	15	Nutrition Food in society Issues trends and innovation Consumer and enterprise relationships	✓			✓

Assessment Task 1: Unit 1C FSTN

Task 1: Nutrition Investigation

Assessment type: Investigation

Outcomes: Outcome 1: Understanding Food Materials
Outcome 4: Understanding Food in Society

Unit context: How healthy is my food?

Task duration: 4 weeks

Task weighting: 15% of unit total

Task 1: Nutrition Investigation (90 marks – 15%)

Investigate the recommended serving sizes in the Australian Guide to Healthy Eating and the “Australian Teenage Acne Diet”. Compare your food habits and serve sizes with those recommended in the AGHE. Produce a personal food intake diary, a table and a report.

What you need to do:

1. Table - Investigate recommended sample serves of food

- Classify twelve given display foods into the six given food groups
- Identify the food groups (include a column for the “foods that do not fit”) from the following six produced recipes featured in the Anti Acne Diet
 - Creamy Beef Stroganoff, vegetables, rice
 - Tandoori Chicken, vegetables, rice
 - Tuna pasta with vegetables
 - Fruit smoothie
 - Sweet corn and spinach omelette
 - Dairy snack / fruit snack, home-made low fat custard with poached pear in pistachio and grenadine emulsion
- Measure/weigh the individual serving size of ingredients in the recipe
- Calculate how many recommended servings the food represents using the examples in the AGHE
- Decide if it is less, equal or more than the recommended sample serve
- Create a table with your results using the AGHE food groups
- Complete a personal one day food intake diary for the five food groups, extra’s and a “foods that do not fit” column, measure food accurately using g/measuring cup size units
- Calculate the macronutrients (total carbohydrates, sugar, protein, total fat, saturated fat), total energy and sodium content of your intake with the ANZFA Nutrition Calculator
- Use a pie diagram to display the result
- Label pie diagram correctly.

2. Report - Investigate recommended sample serves of food

- Describe why the recommended serving sizes for each food group are OR are not equally represented in the Teenage Anti Acne diet
- Explain one example of whether the AGHE serving sizes and the Teenage Anti Acne diet serving sizes are realistic for an adolescent
- Evaluate how well the personal intake reflects the recommendations in the AGHE. Explain three examples.

3. Report writing:

- Demonstrate accurate spelling of relevant terminology, correct punctuation and sentence structure and effective paragraphing.
- Include an introduction to the task outlining the focus of the investigation
- Include an effective and logical conclusion
- Use an approved format to record all references.

What is required for assessment?	Due dates
<input type="checkbox"/> Food portioning investigation table	Week 2
<input type="checkbox"/> Food intake diary	Week 3
<input type="checkbox"/> Nutrition calculator printout	Week 5
<input type="checkbox"/> Report	Week 5

Marking key Task 1: Unit 1C FSTN

Nutrition investigation	Maximum mark /80
1. Table – investigate recommended sample serves	
<ul style="list-style-type: none"> • Classifies 12 given display foods into the six given food groups (1/2 mark each food) 1 mark each food group for all foods correctly classified ? • Need to keep the marks down, they really are doing the same thing in the next dot point 	/6
<ul style="list-style-type: none"> • Identifies the six food groups (including a 'Foods that do not fit' column) from six produced recipes featured in the Anti Acne Diet <ul style="list-style-type: none"> ○ Creamy Beef Stroganoff, vegetables, rice ○ Tandoori Chicken, vegetables, rice ○ Tuna pasta with vegetables ○ Fruit smoothie ○ Sweet corn and spinach omelette ○ Dairy snack / fruit snack, home-made low fat custard with poached pear in pistachio and grenadine emulsion (1 mark each recipe for all foods correctly classified) 	 /1 /1 /1 /1 /1 /1
<ul style="list-style-type: none"> • Measures/weights the individual portion size of ingredients in each meal (1 mark each meal) • Calculates how many servings each meal represents (1 mark each meal) • Decides if it is less, equal or more than the recommended AGHE sample serve (1 mark each meal) 	 /6 /6 /6
<ul style="list-style-type: none"> • Creates a table with results 	/1
<ul style="list-style-type: none"> • Completes a personal food intake diary for the five food groups, extra's and foods that do not fit ,measures food accurately using g/measuring cup size units <ul style="list-style-type: none"> ○ logs food from each of the AGHE six food groups (1 mark each of seven groups) ○ accurately measures food from each of the six AGHE food groups (1 mark each of seven groups) 	 /7 /7
<ul style="list-style-type: none"> • Calculates the macronutrients in g per total intake <ul style="list-style-type: none"> ○ total carbohydrates, ○ sugar, ○ protein, ○ total fat, ○ saturated fat ○ total energy content ○ uses the ANZFA Nutrition Calculator • Calculates the total sodium content • Calculates the % part per 100% for 	 /1 /1 /1 /1 /1 /1 /1 /1

<ul style="list-style-type: none"> ○ total carbohydrates ○ sugar ○ protein ○ total fat ○ saturated fat ○ uses a pie diagram to display the result ○ labels pie diagram correctly 	/1 /1 /1 /1 /1 /1 /1
Total - Investigation	/60
2. Report - Investigate recommended sample serves	
<ul style="list-style-type: none"> • Describes why the recommended serving sizes for each food group are OR are not equally represented in the Teenage Anti Acne diet (1 mark each reason each of six food groups) 	/6
<ul style="list-style-type: none"> • Explains one example of whether the AGHE serving sizes and the Teenage Anti Acne diet serving sizes are realistic for an adolescent (1 mark) 	/1
<ul style="list-style-type: none"> • Evaluates how well the personal intake reflects the recommendations in the AGHE. Explains three examples (1 mark each example, 1 mark each explanation) 	/6
Total - Report	/13
Report writing	
<ul style="list-style-type: none"> • Demonstrates accurate spelling of relevant terminology, correct punctuation and sentence structure and effective paragraphing <ul style="list-style-type: none"> ○ accurate spelling of relevant terminology ○ correct punctuation ○ correct sentence structure ○ correct paragraphing (1 mark each)	/1 /1 /1 /1
<ul style="list-style-type: none"> • Includes an introduction to the task outlining the focus of the investigation <ul style="list-style-type: none"> ○ clearly outlines the investigation issue (1 mark) 	/1
<ul style="list-style-type: none"> • Includes an effective and logical conclusion <ul style="list-style-type: none"> ○ provides logical conclusions or recommendations (1 mark) 	/1
<ul style="list-style-type: none"> • Uses an approved format to record all references (1 mark) 	/1
Total - Report writing	/7
TASK TOTAL	/80

Teacher comment:

Assessment Task 2: Unit 1C FSTN

Task 2: Investigate natural and processed foods

Assessment type: Investigation

Outcomes: Outcome 1: Understanding Food Materials
Outcome 4: Understanding Food in Society

Unit context: How healthy is my food?

Task duration: 4 weeks

Task weighting: 15% of unit total

Task 2: Investigate natural and processed foods (70 marks - 15%)

Conduct experiments with food to investigate the nutrition and properties of natural and processed foods. Compare recipes featured in the Foodcent\$ cookbook, made from natural products, with similar processed products. Record the investigation in a portfolio. Present your findings in an oral presentation using PowerPoint.

What you have to do:

In small teams use natural commodities to produce all of the home-made recipes, featured in the Foodcent\$ recipe book, in the following table. Obtain and prepare the processed foods. As a class, use the products for the investigation.

Macronutrient	Home-made	Processed
Carbohydrate simple/complex	Spicy potato wedges Homemade hotcake Magic muesli Home-made fruit spread	Processed wedges Processed hotcake Processed muesli Processed fruit spread
Protein	Vegetable quiche Citrus mousse Chilli Con Carne with dried beans	Processed quiche Dairy dessert Chilli Con Carne with canned beans
Fat / saturated fat	Spicy chicken roast Potato salad Steak pie Macaroni cheese	BBQ chicken Processed potato salad Processed steak pie Processed macaroni cheese

1. Investigation – record in a table

- Devise a list of six sensory descriptors for each sense i.e. appearance, smell, taste, umami and texture of food
- Assess the sensory attributes of six home-made products and the similar processed product
- Use the ANZFA nutrition calculator to evaluate the nutrition of three major ingredients from three pairs of products. Evaluate three positive or negative health impacts
- Describe the common packaging materials used for the processed food. Give two examples
- Evaluate two environmental impacts of the packaging used
- Calculate the cost per serve of each product in three pairs of products
- Record the time taken to prepare each product in three pairs of products

2. Oral presentation

- Describe the general sensory properties of the home-made products compared to the processed products
- Describe the general environmental impact of the packaging used for the commodities used in the home-made products and that used for the processed products
- Describe the nutrition of the home-made products compared to the processed products
- Describe the cost of the home-made products compared to the processed products
- Describe the preparation time of the home-made products compared to the processed products
- Identify three personal food related beliefs and values e.g. health, cost, nutrition, convenience, food skills
- Justify which version of each of three pairs of products you would include in your diet according to your personal food related values and beliefs
- Describe two impacts on enterprises of consumer demands for either natural or processed food products.

3. Oral skills

- Use PowerPoint effectively
- Keep to the time allocated
- Provide an introduction that explains the investigation issue
- Use relevant terminology
- Organise information logically
- Speak clearly and confidently
- Address the audience
- Provide a logical conclusion

What is required for assessment?	Due dates
<input type="checkbox"/> Oral presentation	Week 9
<input type="checkbox"/> Portfolio (list of sensory descriptors, comparison table including sensory attributes, nutrition, packaging, environmental impacts, cost, and time, PowerPoint printout)	Week 9

Marking Key Task 2: Unit 1C FSTN

Investigate natural and processed foods	Maximum mark /70
1. Investigation	
<ul style="list-style-type: none"> • Devises a list of six sensory descriptors for each sense i.e. appearance, smell, taste, umami and texture of food (1 mark each of five lists) 	/5
<ul style="list-style-type: none"> • Assesses the sensory attributes of six home-made products and the similar processed product (2 marks each pair of products) 	/12
<ul style="list-style-type: none"> • Uses the ANZFA nutrition calculator to evaluate the nutrition of three major ingredients from three pairs of products. Describes three positive or negative health impacts <ul style="list-style-type: none"> ○ evaluates three major ingredients from three pairs of products (1 mark each of nine ingredients) ○ describes three positive or negative health impacts (1 mark each) 	/9 /3
<ul style="list-style-type: none"> • Describes the common packaging material used for each processed food. Gives two examples (1 mark each example) 	/2
<ul style="list-style-type: none"> • Evaluates two environmental impacts of the packaging used (1 mark each) 	/2
<ul style="list-style-type: none"> • Calculates the cost per serve of each product in three pairs of products (1 mark each of six costings) 	/6
<ul style="list-style-type: none"> • Records the time taken to prepare each product in three pairs of products (1 mark each of six time recordings) 	/6
Total - Investigation	/45
2. Oral presentation	
<ul style="list-style-type: none"> • Describes the general sensory properties of the home-made products compared to the processed products <ul style="list-style-type: none"> ○ home-made products ○ processed products (1 mark each) 	/1 /1
<ul style="list-style-type: none"> • Describes the general environmental impact of the packaging used for the commodities used in the home-made products and that used for the processed products <ul style="list-style-type: none"> ○ home-made products ○ processed products (1 mark each) 	/1 /1
<ul style="list-style-type: none"> • Describes the nutrition of the home-made products compared to the processed products <ul style="list-style-type: none"> ○ home-made products ○ processed products (1 mark each) 	/1 /1

<ul style="list-style-type: none"> • Describes the preparation time of the home-made products compared to the processed products <ul style="list-style-type: none"> ○ home-made products /1 ○ processed products (1 mark each) /1 	
<ul style="list-style-type: none"> • Identifies three personal food related beliefs and values e.g. health, cost, nutrition, convenience, food skills (1 mark each) /3 	
<ul style="list-style-type: none"> • Justifies which version of each of three pairs of products you would include in your diet according to your personal food related values and beliefs <ul style="list-style-type: none"> ○ justifies three versions (1 mark each) /3 ○ relates to personal beliefs and values (1 mark) /1 	
<ul style="list-style-type: none"> • Describes two impacts on enterprises of consumer demands for either natural or processed food products (1 mark each) /2 	
Total - Oral presentation	/17
3. Oral skills	
<ul style="list-style-type: none"> • Uses PowerPoint effectively /1 	
<ul style="list-style-type: none"> • Keeps to the time allocated /1 	
<ul style="list-style-type: none"> • Provides an introduction that explains the investigation issue /1 	
<ul style="list-style-type: none"> • Uses relevant terminology /1 	
<ul style="list-style-type: none"> • Organises information logically /1 	
<ul style="list-style-type: none"> • Speaks clearly and confidently /1 	
<ul style="list-style-type: none"> • Addresses the audience /1 	
<ul style="list-style-type: none"> • Provides a logical conclusion /1 	
Total – Oral skills	/8
TASK TOTAL	/70

Teacher comment:

Assessment Task 3: Unit 1C FSTN

Task 3: Nutritious food creations for entertaining

Assessment type:	Production
Outcomes:	Outcome 1: Understanding Food Materials Outcome 2: Developing Food Opportunities Outcome 3: Working in Food Environments
Context:	How healthy is my food?
Task duration:	5 weeks
Task weighting:	60% of unit total

Task 3: Nutritious food creations for entertaining (100 marks – 60%)

Work individually and in small teams to devise and produce a flyer that promotes the nutritional features of a ten item finger food menu suitable for entertaining. Demonstrate skills with food. Record your planning in a portfolio.

Design brief:

Produce a flyer to promote the nutritional features of a ten item finger food menu for evening, winter entertaining for adults. Each item must contain a variety of fresh ingredients, be low in saturated fat and salt, high in complex carbohydrates, include functional foods and be produced using processing methods that retain vitamins.

What you need to do:

1. Planning - Work individually

- Choose three finger food recipes to suit the purpose of the task
- Adapt each recipe to suit the design brief
- Use the ANZFA nutrition calculator and identify the key macronutrient and salt content of each recipe
- Produce a food order to trial the recipes
- Produce a production plan to trial the recipes
- Complete pre-production tasks for each recipe e.g. produce bases, cases, toppings
- Store the pre-prepared portions of the products for three days and evaluate the results
- Produce the recipes and conduct and record sensory evaluations
- Calculate the yield from each recipe
- Adapt the recipes and processing methods following sensory and storage evaluations
- Following team production and sensory evaluation select ten items and produce a promotional flyer that promotes five nutritional features of the menu

2. Production - Work in teams

- Negotiate and communicate to select three products that will be produced
- Produce a food order to produce ten finger portions of each recipe
- Produce a team production plan that includes all tasks and team members

- Produce the products
- Conduct sensory evaluations

3. Skills with food

During product planning and production demonstrate the following skills:

- Skills with food
 - effective teamwork skills
 - choice of recipes to suit a purpose
 - organization of work using food orders and production plans
- Safe food handling practices
 - store food correctly
 - apply procedures to avoid cross contamination
- Processing techniques to ensure the quality and palatability of food
 - selection of processing methods to retain vitamins
 - selection of processing techniques that enhance the physical and sensory properties of food commodities
 - use of sensory testing to evaluate food products

4. Evaluation

- Use the design brief to evaluate the complete menu:
 - explain the reasons for two recipe adaptations to increase fresh ingredients
 - explain the reasons for two recipe adaptations to reduce saturated fat
 - explain the reasons for two recipe adaptations to reduce salt
 - explain the reasons for two recipe adaptations to increase complex carbohydrate
 - explain the reasons for the addition of two functional foods
 - explain the reasons for the use of two processing techniques to retain vitamins

What is required for assessment	Due dates
<input type="checkbox"/> Production food order and production plan	Week 11
<input type="checkbox"/> Promotional flyer	Week 13
<input type="checkbox"/> Evaluation	Week 14
<input type="checkbox"/> Portfolio (recipe adaptations, ANZFA printout, trial food order and production plan, storage and sensory evaluations, yield for each product, recipe adaptations for final production)	Week 14

Marking key Task 3 Part A: Unit 1C FSTN

Nutritious food creations for entertaining	Maximum mark /100
1. Planning	
<ul style="list-style-type: none"> • Chooses three finger food recipes to suit the purpose of the task (1 mark each) 	/3
<ul style="list-style-type: none"> • Adapts each recipe to suit the design brief (1 mark each recipe) 	/3
<ul style="list-style-type: none"> • Uses the ANZFA nutrition calculator and identifies the key macronutrient and salt content of each recipe <ul style="list-style-type: none"> ○ carbohydrate ○ protein ○ fat ○ salt (1 mark each category for each recipe) 	/3 /3 /3 /3
<ul style="list-style-type: none"> • Produces a food order to trial the recipes (1 mark) 	/1
<ul style="list-style-type: none"> • Produces a production plan to trial the recipes (1 mark) 	/1
<ul style="list-style-type: none"> • Completes pre-production tasks for each recipe e.g. produce bases, cases, toppings (1 mark each recipe) 	/3
<ul style="list-style-type: none"> • Stores the pre-prepared portions of the products for three days and evaluates the results (1 mark each recipe) 	/3
<ul style="list-style-type: none"> • Produces the recipes and conduct and record sensory evaluations <ul style="list-style-type: none"> ○ produces three recipes (1 mark each) ○ conducts and records sensory evaluation for each (1 mark each) 	/3 /3
<ul style="list-style-type: none"> • Calculates the yield from each recipe (1 mark each recipe) 	/3
<ul style="list-style-type: none"> Adapts the recipes and processing methods following sensory and storage evaluations <ul style="list-style-type: none"> ○ adapts recipes ○ adapts processing methods ○ adapts storage techniques (1 mark each category for each recipe) 	/3 /3 /3
<ul style="list-style-type: none"> • Following team production and sensory evaluation selects ten items and produces a promotional flyer that promotes five nutritional features of the menu <ul style="list-style-type: none"> ○ promotes five nutritional features (1 mark each) 	/5
Total - Planning	/49

2. Production				
1 = poor, 2 = satisfactory, 3 = very good				
Skills with food				
• <i>Effective teamwork skills</i>				
○ communication and negotiation	1	2	3	
○ decision making	1	2	3	
• <i>Chooses recipes to suit a purpose</i>				
○ suitable for winter	1	2	3	
○ suitable for entertaining adults	1	2	3	
• <i>Organises work using food orders and production plans</i>				
○ accurate food order, submitted on time	1	2	3	
○ follows and modifies a production plan, submits on time	1	2	3	
Total –Skills with food				/18
Safe food handling practices				
• <i>Stores food correctly</i>				
○ packages food correctly for storage	1	2	3	
○ stores food at the correct temperature	1	2	3	
• <i>Applies procedures to avoid cross contamination</i>				
○ keeps raw and cooked foods separate	1	2	3	
○ uses separate boards for meats and other products	1	2	3	
Total - Safe food handling practices				/12
3. Processing techniques to ensure the quality and palatability of food				
○ to retain vitamins	1	2	3	
○ to enhance physical and sensory properties	1	2	3	
○ conducts sensory evaluation	1	2	3	
Total - Processing techniques				/9

4. Evaluation	
<ul style="list-style-type: none"> Explains the reasons for two recipe adaptations to increase fresh ingredients (1 mark each) 	/2
<ul style="list-style-type: none"> Explains the reasons for two recipe adaptations to reduce saturated fat (1 mark each) 	/2
<ul style="list-style-type: none"> Explains the reasons for two recipe adaptations to reduce salt (1 mark each) 	/2
<ul style="list-style-type: none"> Explains the reasons for two recipe adaptations to increase complex carbohydrate (1 mark each) 	/2
<ul style="list-style-type: none"> Explains the reasons for the addition of two functional foods (1 mark each) 	/2
<ul style="list-style-type: none"> Explains the reasons for the use of two processing techniques to retain vitamins (1 mark each) 	/2
Total - Evaluation	/12
TASK TOTAL	/100

Teacher comment:

Assessment Task 4: Unit 1C FSTN

Task 5: Response to an innovative product

Assessment type: Response

Outcomes: Outcome 1: Understanding Food Materials
Outcome 4: Understanding Food in Society

Unit context: How healthy is my food?

Task duration: 2 weeks

Task weighting: 10% of unit total

Task 4: Response to an innovative product (45 marks - 10%)

Produce a report that predicts consumer response to the launch of an innovative food product.

What you have to do:

1. Response

- Obtain a copy of the article from:
www.foodweek.com.au > new products > New sugar is less bad for you 16.03.2009
- Explain four three issues related to lifestyle, that affect the health of Australian population and influence the development of healthier food products
- Provide a definition of 'GI'
- Identify three low GI foods and explain the physical and chemical properties that make them low GI
- Describe three health problems that can result from a diet consistently high in high GI foods
- Provide and explain two statistics showing the consumption of sugar by Australian children and adolescents
- Describe two nutritional advantages of consuming the new sugar product rather than refined sugar
- Explain two economic reasons why the government would subsidise the development of the new product
- Predict consumer response to the new product i.e. adolescent response, cost, sensory properties.

2. Report writing

- Demonstrate accurate spelling of relevant terminology, correct punctuation and sentence structure and effective paragraphing.
- Include an introduction to the report clearly outlining the response issue
- Include an effective and logical conclusion
- Use an approved format to record all references.

What is required for assessment?	Due date
<input type="checkbox"/> Report	Week 15

Marking key Task 4: Unit 1C FSTN

Respond to a new product	Marks allocated 45	Marks awarded /45
1. Response		
<ul style="list-style-type: none"> • Obtains a copy of the article 	1	
<ul style="list-style-type: none"> • <i>Explains three food issues related to lifestyle, that affect the health of Australian population and influence the development of healthier food products</i> <ul style="list-style-type: none"> ○ clearly explains three issues ○ satisfactorily explains three issues ○ clearly explains two issues ○ satisfactorily explains two issues 	4 3 2 1	
<ul style="list-style-type: none"> • <i>Provides a definition of 'GI'</i> <ul style="list-style-type: none"> ○ fully defines GI ○ limited definition 	2 1	
<ul style="list-style-type: none"> • <i>Identifies three low GI foods and explains the physical and chemical properties that make them low GI</i> <ul style="list-style-type: none"> ○ identifies and thoroughly explains three examples ○ identifies and satisfactorily explains three examples ○ identifies and thoroughly explains two examples ○ identifies and satisfactorily explains two examples ○ identifies and gives a limited explanation of one example 	5 4 3 2 1	
<ul style="list-style-type: none"> • <i>Describes three health problems that can result from a diet consistently high in high GI foods</i> <ul style="list-style-type: none"> ○ clearly describes three relevant health problems ○ satisfactorily explains three health problems ○ clearly describes two relevant health problems ○ satisfactorily explains two health problems ○ limited explanation of one health problem 	5 4 3 2 1	
<ul style="list-style-type: none"> • <i>Provides and explain two statistics showing the consumption of sugar by Australian children and adolescents</i> <ul style="list-style-type: none"> ○ provides and clearly explains two statistics ○ provides and satisfactorily explains two statistics ○ provides and clearly explains one statistic ○ provides and satisfactorily explains one statistic 	4 3 2 1	

<ul style="list-style-type: none"> • <i>Describes two nutritional advantages of consuming the new sugar product rather than refined sugar</i> <ul style="list-style-type: none"> ○ clear description of two nutritional advantages ○ satisfactory description of two nutritional advantages ○ clear description of one nutritional advantage ○ satisfactory description of one nutritional advantage 	<p style="text-align: center;">4 3 2 1</p>	
<ul style="list-style-type: none"> • <i>Explains two economic reasons why the government would subsidise the development of the new product</i> <ul style="list-style-type: none"> ○ clear description of two economic reasons ○ satisfactory description of two economic reasons ○ clear description of one economic reason ○ satisfactory description of one economic reason 	<p style="text-align: center;">4 3 2 1</p>	
<ul style="list-style-type: none"> • <i>Explains two economic reasons why the government would subsidise the development of the new product</i> <ul style="list-style-type: none"> ○ thorough explanation of two reasons ○ satisfactory explanation of two reasons ○ thorough explanation of one reason ○ satisfactory explanation of one reason 	<p style="text-align: center;">4 3 2 1</p>	
<ul style="list-style-type: none"> • <i>Predicts consumer response to the new product i.e. adolescent response, cost, sensory properties</i> <ul style="list-style-type: none"> ○ detailed prediction including three criteria ○ satisfactory prediction including three criteria ○ detailed prediction including two criteria ○ satisfactory prediction including two criteria ○ limited prediction 	<p style="text-align: center;">5 4 3 2 1</p>	
Total - Response	/38	
2. Report writing		
<ul style="list-style-type: none"> • Includes an introduction to the report clearly outlining the response issue (1 mark) 	/1	
<ul style="list-style-type: none"> • Demonstrates accurate spelling of relevant terminology, correct punctuation and sentence structure and effective paragraphing <ul style="list-style-type: none"> ○ accurate spelling of relevant terminology ○ correct punctuation ○ correct sentence structure ○ correct paragraphing (1 mark each) 	<p style="text-align: center;">1 1 1 1</p>	
<ul style="list-style-type: none"> • Includes an effective and logical conclusion <ul style="list-style-type: none"> ○ provides logical conclusions or recommendations (1 mark) 	1	
<ul style="list-style-type: none"> • Uses an approved format to record all references (1 mark) 	1	
Total - Report writing	7	
TASK TOTAL	45	/45

Teacher comment:
