Technology Education Key Learning Area Home Economics / Technology and Living

Health and Health Concerns

Level: Secondary 1 - 3

Objectives:

Students should be able to:

- understand the principles of balanced diet
- identify broad guidelines for healthy eating
- discuss the nutritional requirements for different target groups
- plan meals and develop creative recipes for different target groups and occasions
- understand the nutritive value, types, storage, choice of food commodities
- understand the principles of food preparation and processing
- demonstrate a variety of food preparation techniques and cooking methods
- apply hygiene and safety measures in food preparation and processing
- choose and use kitchen equipment properly
- develop working habits and skills in organising work in food preparation



Unit	Foundation		Extended study		Additional Activities
	Teaching Points	Suggested Activities	Teaching Point	Suggested Activities	
(1) What is Health?	What is Health? relationship between physical, mental and social health food pyramid used in Hong Kong food pyramid for teenagers dietary goals for teenagers application of balanced diet food choices – fresh or pre-packaged?	 measure food ingredients according to the requirement stated in the food pyramid compare fresh food and pre-packaged food in terms of nutritive value, convenience and choices 	 food pyramids used around the world food pyramid for other age groups dietary goals for other age groups healthy eating habits ways to achieve physical, mental and social fitness and wellness 	 mix and match game analyse recipes calculation of food portions 	• students record the food / dishes consumed by themselves in a week and evaluate their eating habits / patterns, make suggestion to improve their eating habits /patterns
(2) Meal Planning (I)	 Meal Planning breakfast meal pattern (Western and Chinese) function and role Food and Nutrition balanced diet food groups (protective food, dietary fibre, water) function source food commodities (fruits / vegetables / egg / cereals) food value types Food Preparation food preparation and cooking techniques (dicing, boiling) heat transference (moist heat) 	 prepare either a Chinese or Western style breakfast serve breakfast with a drink compare meal pattern of Chinese and Western breakfast 	Meal Planning breakfast / light meals Food and Nutrition food groups (protective food, dietary fibre) types food commodities (fruits / vegetables / egg / cereals) choice storage Food Preparation food preparation and cooking techniques (slicing, shredding, simmering)	 prepare either a Chinese or Western style breakfast / light meal serve breakfast / light meal with a drink design menu for breakfast 	 study breakfast in different cultures compare nutritive value of breakfast provided by different fast food shops and restaurants (including Chinese tea restaurants)

Unit	Foundation		Extended st	Additional Activities	
Unit	Foundation Teaching Points Meal Planning • main course / dish Food and Nutrition • food groups (body-building food) - function - source • food commodities (fish, soya bean	Suggested Activities • prepare a main course / dish with fish / soya bean products / meat as the main ingredient • suggest variations for the main course / dish	Extended st Teaching Point Meal Planning - Meal Pattern • courses of meal - soup - main course / dish - dessert - snacks Food and Nutrition	Suggested Activities prepare a soup / dessert / snack for people of different age groups develop design ideas for a main dish / one dish meal / dessert / snack for a particular	plan a series of one dish meals for school lunch with appropriate accompaniments survey on the consumption of fruits / vegetables / meat /
	products, meat) - food value - types - choice - storage Food Preparation food preparation and cooking techniques (stuffing, steaming, stewing, mincing, boiling) heat transference (moist heat, convection)	conduct proper ways for sensory evaluation	 body-building and energy giving food types food commodities meat / rice / noodles (choice, storage) flour (food value, types, choice, storage) milk (types (e.g. pasteurised, UHT etc.), storage) Food Preparation 	age group conduct food tests on egg / toast / fruits	dairy products within the class observe the difference between fresh and stale eggs
	Meal Planning One Dish Meal Food and Nutrition food groups (energy giving food) function source food commodities (meat / rice / noodle) food value types Food Preparation food preparation and cooking techniques (mincing, stir frying, shallow frying) heat transference (dry heat, conduction)	 prepare a one dish meal which serves as light lunch evaluate the food value of different one dish meals prepare the time plan for a one dish meal 	food preparation food preparation and cooking techniques (blending, stewing, Chinese dough making, grilling, use of wrapping)		

Suggested Dishes for Practical Work

	Breakfast / light meal	11.01	Soup		Main Course / Dish		One Dish Meal		Snack / Dessert		Beverage
-	making of sandwiches		Lettuce and Fish Ball in		Steamed Stuffed Bean		Fried Rice		Fish Siu Mei		Fruit Smoothies
-	<u> </u>	_		_		-		-		-	
	using whole grain food		Soup		Curd	-	Stir Fried Noodles / Rice	-	Siu Mei	-	Fruit juice
	products, egg / dairy	-	Assorted Bean Curd	-	Fried Stuffed Bean Curd		Noodles with Meat and	-	Crystal Cake	-	Lemonade
	products and vegetable		Soup		/ Bean Curd Puff		Vegetables	-	Almond Jelly with	-	Hot cocoa
-	Welsh Rarebit	-	Mixed Vegetable Soup	-	Steamed Bean Curd with	-	Rice in Soup with		Mixed Fruits	-	Tea
-	Oatmeal with Milk	-	Tomato and Carrot Soup		Fish (老少平安)		Assorted Meat	-	Spilt Peas Pudding		
-	Oatmeal congee with	-	Carrot Soup with Meat	_	Braised Bean Curd			-	Egg Custard		
	Meat Balls		Balls	_	Steamed Minced Pork /			-	Tea / Soya Eggs		
-	Hard-boiled / fried /	-	Creamy Chicken Sweet		Beef			-	Steamed Glutinous		
	scramble egg with toast		Corn Soup	-	Steamed Shredded Pork				Dumplings		
-	Omelette (plain / French	-	Minced Beef Soup		/ Beef with Preserved			-	Fruit Salad		
	/ Spanish)	-	Minced Pork with White		Vegetables						
-	Noodle in Soup with		Fungus	_	Stewed Chicken Wings						
	Sliced Meat / Roast Pork			_	Stir Fried Meat with						
	and Vegetables				Vegetables						
-	Shanghainese Wonton			-	Stir Fried Vegetables						
	with noodles in Soup				with Spicy Pressed Bean						
-	Rice Porridge with meat				Curd						
	and Vegetables										

Unit	Foundation		Extended study		Additional Activities
	Teaching Points	Suggested Activities	Teaching Point	Suggested Activities	
(3) Meal Planning (II)	Meal Planning ■ meal pattern of two course meal - Western - Chinese ■ meals for adults with different needs ■ meals for special occasion - packed meal Food and Nutrition ■ nutrients (protein, carbohydrates, fats) - function - classification - source ■ dietary goals for adult ■ nutrition labels ■ food commodities (pork & beef / fish / vegetables) Food Preparation ■ labour saving devices (liquidiser, rice cooker, microwave oven) - choice - usage ■ food preparation and cooking techniques (baking, deep frying, Chinese dough making, use of wrapping, use of raising agent) ■ heat transference (radiation, microwave) Prevention of Food Spoilage ■ causes of food spoilage ■ causes of food spoilage ■ conditions which favour the growth of bacteria	 prepare a two course meal to meet the needs of different age groups prepare a one dish meal / two course meal for packed meal prepare snacks using Chinese dough / wrapping prepare cakes made by creaming / all-in-one method conduct food test on the function of flour / sugar / fat in food preparation such as cake making prepare the time plan for a two course meal 	Meal Planning meals for adults with different needs, such as vegetarians use of convenience / left-over food Food and Nutrition food pyramids for different age groups dietary goals for elderly causes of nutritional disorders food commodities (cereals / poultry / fish & shellfish / beans & pulses / dairy products) Food Preparation food preparation and cooking techniques (braising, stewing, roasting, roux, cake making) Food Preservation basic principles examples, such as refrigeration, freezing, canning, dehydration Food Product Development idea generation sensory evaluation Food Culture role of food in Chinese family and society symbolic meaning of some Chinese cuisine	 prepare a two course meal to meet the needs of different age groups prepare snacks / dishes for vegetarians prepare cakes by rubbing in method prepare a dish with symbolic meaning of the Chinese culture develop /adapt recipes for adults with different needs conduct food tests on raising agents (mechanical, chemical and biological) conduct a sensory test and prepare star diagrams 	 prepare a week's lunch / dinner menu for the family prepare a lunch / dinner as planned for the family analyse the nutritive value of a week's lunch / dinner of the family, suggest improvement study the role of food in Chinese culture

One Dish Meal	Soup	Main Course / Dish	Dessert / Snack	Cakes
- Baked Pork Chop with Rice	- Hot and Spicy Soup	- Steamed Spareribs	- Chinese doughnuts	- Queen Cakes
- Steamed brown rice / oatmeal	- Bean Curd Soup with Meat	- Steamed Minced Meat with	- Curry Beef Triangles	- Rock Cakes
with rice	- Cream of Mushroom /	Mushroom / Water Chestnut	- Spring Rolls	- Victoria Sandwich Cakes
- Shredded Chicken Fried Rice	Chicken Soup	- Fried / Steamed Fish Fillets	- Shrimp Toast	- Cup Cakes
- Spaghetti / Lasagna		- Steamed Stuffed Fuzzy Melon	- Roast Pork / Lotus Seed Puree	- Melting Moments
- Macaroni Cheese		- Assorted Vegetables in	/ Sesame Seed Puree / Red	- Scones
- Hamburger with Vegetable		Portuguese Sauce	Bean Puree Bun	
Salad		- Fried Shrimp Balls	- Won-ton / Meat Dumplings in	
- Fried Japanese Udon		- Fried Lotus Root Patties	Soup	
- Cold Noodles with Shredded		- Shallow Fried Vegetarian Bean	- Walnut / Almond Sweet Tea	
Meat and Vegetables		Curd Sheet Rolls	- Apple Crumble	
- Stewed I Fu Noodles		- Baked Fish	- Bread and Butter Pudding	
- Rice Soup with Meat and		- Chicken a La King		
Vegetables / Mushrooms		- Chicken Rolls with Assorted		
		Vegetables		

Unit	Foundation			Extended study		
	Teaching Points	Suggested Activities	Teaching Point	Suggested Activities		
(4) Meal Planning (III)	Meal Planning meal pattern of three course meal Western Chinese meals for people with special needs vegetarian / high blood pressure /weight management deficiency in different nutrients (vitamin B / C, iron / calcium) meals for special occasion festive cooking / party Food and Nutrition dietary goals for people with special needs and dietary requirements nutrients (vitamins and minerals) function classification source retention of nutritional values in foods protein carbohydrates fat vitamins & minerals legislation and guidelines on food labeling Food Preparation labour saving devices (blender / mincer) choice usage food preparation and cooking techniques (shaping, coating, caking making, pastry making) Food Preservation principles and purposes preservation methods	 prepare three course meals for people with special needs prepare festive food for Chinese New Year prepare cakes using whisking method prepare a snack by using short crust pastry / Chinese pastry conduct food test on the effect of heat on vitamins C in different kind of fruits / vegetables / juices develop / adapt recipes for people with different needs conduct sensory test and prepare star diagrams prepare time plan for a three course meal 	Meal Planning meals for people with special needs	 prepare three course meals / snacks for people with special needs prepare cakes using melting method prepare a dish using Chinese pastry / setting agent develop / adapt and prepare a snack for celebration / a festival conduct food test on comparing the browning effects on fruits and vegetables conduct food test on functional properties protein / carbohydrates / fats 	compare vitamin C content of different vegetables / fruits / fruit juices compare the effectiveness of labour saving devices	

Food Product Development idea generation sensory evaluation	
Food Culture	
• factors affecting the development of	
a food culture	
 role of food in family and society 	

- Cream of Spinach Soup with Strawberry / Spicy Spareribs - Assorted Vegetables Soup - Stuffed Frizzy Melon - Minced Meat and Vegetables Soup - Fried Lotus Root Patties - Turnip / Taro / Water Chestnut Pudding - Corni	nd Pastry
- Minestrone - Corn Chowder - Pumpkin Soup - Pumpkin Soup - Chicken in Lemon Sauce - Stir Fried Chicken Fillets with Mango - Stuffed Vegetables (pepper, tomato, mushroom) - Vegetable Rolls - Beef Rolls with Golden Mushroom - Deep Fried Egg Bow - Tuna - Sou Gock (酥角) - Sou Gock (酥角) - Roast - Flower Rolls - Fried Pork Dumplings - Swiss - French Toast - Mango Pudding - Whisked Jelly Mousse - Ginge - Ginge	ple Turnover / Pie hit Tartlets / Mince Pies hit Flan / Rolls rnish Pasties hasage Rolls has Fish Pasties / Pie hiche hast Pork Pasties (Chinese pastry) honge Cake hiss Roll