

Level 3 Nutrition $\xi$ Healthy Options SAMPLE
Contents
Note to the tutor/teacher, Page 3
Course overview, Page 4
Nutrition and Nutrients
Assessment brief 1, Page 6

- What is nutrition, Page 7
- Nutrients (including carbohydrates, proteins, lipids, vitamins, minerals, water), Pages 8 to 22
- Healthy eating, Pages 23 to 27
- The digestive process, Pages 28 to 33

Diet
Assessment brief 2, Pages 35 and 36

- Eating disorders, Pages 37 to 38
- Food allergy and intolerance, Pages 39 to 41
- Coeliac disease, Pages 42 to 43
- Other dietary disorders (including IBS, gastric and duodenal ulcers, diabetes), Pages 44 to 49
- Poor nutrition (including obesity, hypertension, high cholesterol, stroke, cancer, lack of vitamins/minerals), Pages 50 to 56
- Dietary considerations (including different diets, specific menus, specific recipes, specific shopping list, meal ingredients) Pages 57 to 66

Food safety
Assessment brief 3, Pages 68 to 69

- Food safety Ireland, Pages 70 to 72
- Food hygiene for businesses (including cross-contamination, cleaning, chilling, cooking, nutritional value, signs), Pages 73 to 90
- Correct storage methods of food, Pages 91 to 93
- Buying food, Pages 94 to 95
- Food production in Ireland (including farming statistics, milk production, GM foods, food preservation), Pages 96 to 103

Cooking vegetables
Assessment brief 4, Pages 105 to 106

- Health benefits of vegetables, Pages 107 to 113
- Vegetables as an accompaniment, Pages 114 to 118
- Cooking a vegetable accompaniment, Pages 119 to 121
- Vegetables as a meal, Pages 122 to 127
- Cooking a vegetarian meal, Pages 128 to 130
- Review of cooking (including hygiene, health and safety procedures, evaluation, review) Pages 131 to 133
- Checklist, Page 134

Appendix 1: Kitchen Skills Checklist, Page 135
Mapping of learning outcomes, Page 138
Weighting example, Page 140
Copyright © 2022, Janna Tiearney, Educoot

## A. What is Nutrition?

Nutrition is about eating a healthy and balanced diet. Food and drink provide the energy and nutrients you need to be healthy.

Many common health problems can be prevented or alleviated with a healthy diet.

1. Look at the different food groups below. Label the groups.

Dairy, Grains, Fruit, Vegetables, Proteins

2. Write true or false:
a) You need more proteins than vegetables.
b) You need more fruit and vegetables than grains.
c) You need less grains than vegetables. $\qquad$
d) Dairy products are part of a balanced diet. $\qquad$
e) Bread would be in the protein group.
f) The ingredients for a green salad would be in the vegetable group. $\qquad$
g) At least a quarter of your plate should be fruit and vegetables. $\qquad$

## B. Nutrients

An important aspect of nutrition is the daily intake of nutrients. Nutrients consist of various chemical substances in the food that makes up each person's diet.

There are six major classes of nutrients found in food:
-O carbohydrates
10) proteins

Ol lipids (fats and oils)
OO vitamins
(O) minerals
10) water

1.Name 2 healthy foods which would contain each of these nutrients:
a) carbohydrates
$\square$
b) proteins
$\square$
c) lipids (fats and oils)
$\square$
d) vitamins, e.g. Vitamin C, Vitamin A
$\square$
e) minerals, e.g. iron, calcium
$\square$
f) water
$\square$
2. Which nutrients do you think you need more of?

## Level 3 Nutrition $\xi$ Healthy Options SAMPLE

## 5. Complete the table below:

| Mineral | Symbol | Sources | How it helps the body |
| :---: | :---: | :---: | :---: |
| Sodium |  | Table salt, soy sauce | fluid balance, nerve transmission, and muscle contraction |
| Calcium | Ca |  | healthy bones and teeth, muscles nerves, blood clotting, blood pressure, immune system |
|  | K | Meats, milk, fresh fruits and vegetables, whole grains, legumes | fluid balance, nerve transmission, muscle contraction |
| Phosphorus | P | Meat, fish, poultry, eggs, milk, |  |
| Magnesium | Mg | Nuts and seeds; legumes; leafy, green vegetables; seafood; chocolate; artichokes |  |
| Iron |  | Red meats; fish; poultry; shellfish, egg yolks; legumes; dried fruits; dark, leafy greens | found in red blood cells that carries oxygen in the body; needed for energy metabolism |
|  | Zn | Meats, fish, poultry, leavened whole grains, vegetables | needed for making protein and genetic material; wound healing, immune system health |
| Fluoride | F |  | formation of bones and teeth; helps prevent tooth decay |
| Selenium | Se |  | antioxidant |
| Copper |  | Legumes, nuts and seeds, whole grains, organ meats, drinking water | part of many enzymes; needed for iron metabolism |
|  |  |  |  |

6. Read the information and answer the questions:

Carbohydrates are referred to as either sugars or starches and they provide energy for the body. Carbohydrates are converted by our body into simple sugars (like those from fruit sugars), which are released quickly, and complex sugars (from bread, pasta, potatoes, rice, vegetables, fruits etc.) which are released at a slower rate. Around 60 percent of your daily calories should be in the form of carbohydrates.

Carbohydrates help to alleviate digestive disorders like constipation and may help prevent colon cancer.
a) How do carbohydrates help the body?
$\qquad$
b) What are carbohydrates converted into?
$\square$
c) Which sugars are released at a slower rate?
d) What percentage of your daily calories should be carbohydrates?


## 1. Write true or false:

a) If you eat a varied and balanced diet, you don't usually need to take any food supplements. $\square$
b) Eat foods that are high in fat and salt. $\square$
c) Include proteins, e.g. meat, fish, eggs and beans, in your diet.
$\square$
d) Increase the amount of sugar in your diet. $\qquad$
e) Eat carbohydrates like bread, rice, potatoes, pasta and cereals. $\square$
f) Eat wholegrain varieties whenever possible. $\square$
g) Eat only a small amount of fruit and vegetables. $\square$
h) Dairy products include milk, cheese and yoghurt. $\square$
2. Look at the food pyramids below. On the left is the food triangle from 1970, and on the right, is the food triangle we would use today. Write 2 ways in which the latest food triangle is different to the previous one.


## Assessment Brief 2

Course:
Course Code:
Assessment:
Title:
Weighting:

Nutrition \& Healthy Options
3N0887 (Ireland)
Skills Demonstration / Collection of Work

## Diet

Skills Demonstration 20\%, Collection of Work 80\%

## Guidelines

You will be expected to:
I. List common dietary disorders.
2. Identify ingredients relevant to special dietary needs.
3. Devise a menu and meal for someone with special dietary needs.
4. Read recipes, shopping lists, food labels and menus to check suitability for different dietary needs.

## Assessment criteria

- Exercises and tasks must be complete and correct.
- Show an understanding of some eating disorders, including an organisation that provides support.
- Take part in a group discussion about eating disorders.
- In identifying special dietary needs, include various different diets, e.g. low-calorie diets, low cholesterol diets, nut and other allergies, vegetarians, diabetics and coeliacs.
- Include dietary disorders related to diet, e.g. I.B.S., diabetes.
- Show an understanding of how poor nutrition can affect your health, e.g. working out your BMI, checking your blood pressure, checking symptoms for lack of vitamins/minerals.
- Be aware of some common diets e.g. Weight Watchers, Kosher, Vegan, etc.
- Use key terminology related to diet.


Submission date: $\square$

Declaration of Authenticity: I confirm that this is my own original work.

Signed:

$\qquad$ Date: $\qquad$


## C. Coeliac Disease

Coeliac disease (also known as celiac disease) mainly affects the part of the gut called the small intestine. Coeliac disease is caused by a reaction of the gut to gluten. Gluten is part of certain foods - mainly foods made from wheat, barley and rye. Various symptoms can develop including abdominal pains, tiredness and weight loss. Symptoms go if you do not eat any foods that contain gluten.

Coeliac disease is not a food allergy or a food intolerance. It is an autoimmune disease.

1. Which of these meals may contain gluten? Give a brief explanation for each:

$\square$

2. Check food labels to be aware of hidden sugars! Look at other ways of naming sugar. Find two food labels, highlight the sugar ingredient and stick the labels below.

## WHERE'S ALL THAT SUGAR HIDING?

Agave nectar - Agave syrup - Barley malt Beet sugar - Brown rice syrup - Brown sugar Buttered syrup - Cane sugar - Cane juice Corn syrup - Corn sugar - Corn sweetener Crystalized fructose - Dextran - Dextrose Diatase - Fructose - Glucose - Golden sugar Grape sugar - Honey - Invert sugar - Lactose - Malt - Maltodextrin - Maltose - Maple syrup Molasses - Raw sugar - Sucanat - Sucrose Sugar - Yellow sugar


## Stroke

## 1. Read the information:

A stroke that is caused by plaque that builds up in a blood vessel, then breaks free as a clot that travels to your brain and creates a blockage can be linked to poor nutrition. Strokes damage the brain and impair functioning, sometimes leading to death. Foods high in salt, fat and cholesterol increase your risk for stroke.

2. Write the warning signs of a stroke:
$\qquad$
*Act out a scene where you call the emergency services for someone who appears to have had a stroke.

## 1. Read these food safety facts:

a) Access to enough safe and nutritious food is key to sustaining life and promoting good health.
b) Unsafe food containing harmful bacteria, viruses, parasites or chemical substances, causes more than 200 diseases - ranging from diarrhoea to cancers.
c) Almost 1 in 10 people in the world fall ill after eating contaminated food and thousands and thousands of people die every year.
d) Children under 5 years of age carry $40 \%$ of the foodborne disease burden, with many deaths every year.
e) Diarrhoeal diseases are the most common illnesses resulting from the consumption of contaminated food, causing millions of people to be sick and thousands to die.
f) Food safety, nutrition and food security are linked. Unsafe food creates a vicious cycle of disease and malnutrition.
g) Foodborne diseases can cause huge strain on health care systems, and harms national economies, tourism and trade.
h) Food supply chains now cross multiple national borders so there must be collaboration between governments, producers and consumers to ensure food safety.
2. In your own words, write some reasons why food safety is important:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## 4.See the website for the World Health Organisation.

1. Look at some general storage times for the refrigerator and freezer.

| Category | Food | Refrigerator ( $40{ }^{\circ} \mathrm{F}$ or below) | Freezer $\left(0^{\circ} \mathrm{F}\right.$ or below) |
| :---: | :---: | :---: | :---: |
| Salads | Egg, chicken, ham, tuna \& macaroni salads | 3 to 5 days | Does not freeze well |
| Bacon \& Sausage | Bacon | 7 days | 1 month |
|  | Sausage, raw - from chicken, turkey, pork, beef | 1 to 2 days | 1 to 2 months |
| Hamburger \& Other Ground Meats | Hamburger, ground beef, turkey, veal, pork, lamb, \& mixtures of them | 1 to 2 days | 3 to 4 months |
| Fresh Beef, Lamb \& Pork | Steaks | 3 to 5 days | 6 to 12 months |
|  | Chops | 3 to 5 days | 4 to 6 months |
|  | Roasts | 3 to 5 days | 4 to 12 months |
| Fresh Poultry | Chicken or turkey, whole | 1 to 2 days | 1 year |
|  | Chicken or turkey, pieces | 1 to 2 days | 9 months |
| Soups \& Stews | Vegetable or meat added | 3 to 4 days | 2 to 3 months |
| Leftovers | Cooked meat or poultry | 3 to 4 days | 2 to 6 months |
|  | Chicken nuggets | 3 to 4 days | 1 to 3 months |
|  | Pizza | 3 to 4 days | 1 to 2 months |

a) For how long can I keep leftover soup in the fridge?
b) For how long can I keep sausages in the freezer?
c) For how long can I keep raw chicken in the fridge?
d) For how long can I keep lamb chops in the fridge?

## G. Correct storage methods of food

It is important to store food safely and hygienically.
Discuss where different food is stored; e.g. in a fridge, in a cupboard (i.e. room temperature), in a pantry, in the freezer, etc.

Packaging also helps keep food safe to eat. Types of packaging include:

1O Foil bags (crisps)
iol Vacuum packs (cheese);
iol Cans (fruit, vegetables, fish, meat)

- Bottles (sauce);
© Jars (jam, pickle, sauce).


1. Where and how should you store each of these if opened, and not finished?
a) bread $\qquad$
b) ham $\qquad$
c) oil
d) onion
e) honey $\qquad$
f) cake $\qquad$
g) pasta $\qquad$
h) dried apricots $\qquad$
i) canned sardines $\qquad$

2. What is the main ingredient of each of these vegetable dishes? Match - write the numbers.
a) salsa $\qquad$
b) sauerkraut $\square$
c) guacamole $\square$
3. fava beans or chickpeas
4. tomato, cucumber, garlic
5. goat's and sheep's milk
6. rice
7. soy milk
8. semolina
9. vegetables, stock, pasta
10. beetroot
11. yellow or white cornmeal
12. tomatoes and onions
13. sesame seeds
14. raw cabbage and carrots
15. avocado
16. pickled cabbage
17. potatoes

couscous
18. Look at these vegetable meals. Use a tick or a cross to answer the questions:


## Veggie Burger

Does it look delicious?
Do you think it is nutritional? $\square$


## Vegetable Stir Fry

Does it look delicious?
Do you think it is nutritional?


## Corrot Soup

Does it look delicious? $\square$
Do you think it is nutritional?


Mushroom Pasta
Does it look delicious? $\square$
Do you think it is nutritional?


## Avocado \& Lime Tarts

Does it look delicious? $\square$
Do you think it is nutritional?


## Vegetable Tacos

Does it look delicious?
Do you think it is nutritional?

## Mapping of Learning Outcomes

Learners will be able to:
I Explain the basic principles of food safety and associated legislation Food safety Ireland - Pages 70 to 72, Food hygiene for businesses (including cross-contamination, cleaning, chilling, cooking, nutritional value, signs) - Pages 73 to 90 , Correct storage methods of food - Pages 91 to 93, Buying food - Pages 94 to 95, Food production in Ireland (including farming statistics, milk production, GM foods, food preservation) - Pages 96 to 103
2 Explain the role of nutrients in the body and the concept of a balanced diet What is nutrition and nutrients (including carbohydrates, proteins, lipids, vitamins, minerals, water) - Pages 7 to 22, Healthy eating - Pages 23 to 27

> 3 Describe the human digestive process The digestive process Pages 28 to 33

4 List common dietary disorders Eating disorders - Pages 37 to 38, Food allergy and intolerance (including Coeliac disease) - Pages 39 to 43 , Other dietary disorders (including IBS, gastric and duodenal ulcers, diabetes) - Pages $Ч Ч ~ t o ~ Ч ৭, ~ P o o r ~ n u t r i t i o n ~$ (including obesity, hypertension, high cholesterol, stroke, cancer, lack of vitamins/minerals) - Pages 50 to 56, Dietary considerations (including different diets, specific menus, specific recipes, specific shopping list, meal ingredients) - Pages 57 to 66
5 Discuss contemporary nutritional issues related to food production Food production in Ireland (including farming statistics, milk production, GM foods, food preservation) - Pages 96 to 103 6 Identify ingredients relevant to special dietary needs to include low calorie diets, low cholesterol diets, nut and other allergies, vegetarians, diabetics and coeliacs Food allergy and intolerance (including Coeliac disease) - Pages 39 to $Ч 3, ~ P o o r ~ n u t r i t i o n ~$
(including obesity, hypertension, high cholesterol, stroke, cancer, lack of vitamins/minerals) - Pages 50 to 56, Dietary considerations (including different diets, specific menus, specific recipes, specific shopping list, meal ingredients) - Pages 57 to 66
7 Describe the impact of purchasing, storage, preparation and cooking on nutritional value Food hygiene for businesses (including cross-contamination, cleaning, chilling, cooking, nutritional value, signs) - Pages 73 to 90 , Correct storage methods of food - Pages 9l to 93 , Buying food - Pages 94 to 95
8 Demonstrate the versatility of vegetables, as an accompaniment to meat and fish dishes, or as a well-balanced stand-alone meal, Health benefits of vegetables - Pages 107 to $\| 3$, Vegetables as an accompaniment - Pages $I \Psi$ to $\| 8$, Cooking a vegetable accompaniment - Pages |I9 to I21, Review of cooking (including hygiene, health and safety procedures, evaluation, review) - Pages 131 to 133 , Checklist - Page 134
9 Prepare a limited range of varied and palatable meals for vegetarians Vegetables as a meal - Pages 122 to 127, Cooking a vegetarian meal - Pages 128 to 130 , Review of cooking (including hygiene, health and safety procedures, evaluation, review) - Pages 131 to 133, Checklist - Page 134

