

# NCFE Food and Cookery Level 2

Unit 03 Exploring Balanced Diets  
(D/506/5039)

This is an introduction to the food and cookery course. This course aims to give you an experience of using a range of different cooking techniques and will provide you a basic understanding of the skills required for a career in food, as well as being a valuable life skill. This course aims to introduce you to the different types of occupations related to Food and Cookery and will provide opportunities for you to learn and demonstrate a range of practical and technical skills.

As you work through the course, you will learn how to:

- ☒ prepare and cook using a range of basic skills
- ☒ understand food and its main functions in the body
- ☒ consider the different functions of foods when used in recipes
- ☒ understand the importance of a balanced diet
- ☒ modify recipes to make them healthier
- ☒ plan and produce dishes for a purpose

Some of the key skills that you will learn and apply include:

- ☒ planning
- ☒ research skills
- ☒ communication
- ☒ problem-solving skills
- ☒ health and safety.

This second unit will introduce you to the main food groups, sources of food, social factors affecting food choice, environmental factors affecting food choice, cost factors and sensory factors. You will also need to cook a minimum of six dishes and evaluate them.

When you reach the end of this Unit, you will need to provide evidence to demonstrate how you have met the assessment criteria. You will need to cook a minimum of 6 dishes to demonstrate your practical skills. Photographs should be included and must have your name in the picture as well as being clearly labelled to show the criteria that you think it has met. You may also use a checklist to record the practical skills demonstrated in this unit and could include witness statements from those that have seen you cook or tasted your dishes.

# Examination Unit

- To pass the exam, it is important to have good knowledge of the information covered in this unit.
- You must write in depth and detail to demonstrate your understanding.
- You need to know the meaning of the following:
  - Describe:** give a detailed account in words
  - Explain:** make clear by describing it in more detail including relevant facts
  - Evaluate:** to judge or calculate the quality, importance or value of something
  - Compare:** to examine (two or more objects, ideas etc.) in order to note similarities and differences
- Read the questions carefully and make sure that you use the assessment criteria to ensure that you answer the questions fully

**Assignment title: Unit 3 Exploring Balanced Diets (D/506/5038)**

**Staff:**

**Units: Assignment title: Unit 3 Exploring Balanced Diets**

**Date Set:** \_\_\_\_\_ **Review Date:** \_\_\_\_\_ **Due Date:** \_\_\_\_\_

**Learner outcomes**

The reason for you doing this unit is to give you an understanding of:

What is meant by a balanced diet, the main nutrients and the requirements needs for different groups of people, healthy eating advice, food labels and how they inform healthy eating, food diaries and recommendations for healthy eating, assessing recipes and their contributions to healthy eating, changing recipes to make them healthier, other factors that could affect a finished dish.

**Assignment Scenario**

You are preparing to become a Food Ambassador for the school. It will be your job to act as a positive role model and to teach others about the importance of healthy eating in order to help to combat the every growing obesity problem faced by many.

You will need to understand all of the key factors regarding healthy eating in order to be able to offer advice to others.

Include the following:

- a description of the main nutrients and the requirements for different age groups
- a description of healthy eating advice that can be shared with others
- an explanation of how food labelling can be used to make informed decisions
- an explanation of how we can assess recipes to see if they are healthy
- A description of the other factors that can affect a finished dish

**Assessment Criteria**

Assessment criteria	Pass	Merit	Distinction
1.1 Explain what is meant by a balanced diet	Learners will explain what is meant by a balanced diet	Learners will explain in detail what is meant by a balanced diet	Learners will comprehensively explain what is meant by a balanced diet
1.2 Describe the nutrients that make up a balanced diet	Learners will describe the nutrients that make up a balanced diet	Learners will describe in detail the nutrients that make up a balanced diet	Learners will comprehensively describe the nutrients that make up a balanced diet
1.3 Explain nutrient requirements for different groups of people	Learners will explain nutrient requirements for different groups of people	Learners will explain in detail nutrient requirements for different groups of people	Learners will comprehensively explain nutrient requirements for different groups of people
1.4 Explain healthy eating advice	Learners will explain healthy eating advice	Learners will explain healthy eating advice in detail	Learners will comprehensively explain healthy eating advice
1.5 Explain how nutritional information on food labels can inform healthy eating	Learners will explain how nutritional information on food labels can inform healthy eating	Learners will explain how nutritional information on food labels can inform healthy eating showing critical understanding	Learners will explain how nutritional information on food labels can inform healthy eating showing critical judgement

Assessment criteria	Pass	Merit	Distinction
1.6 Assess a food diary and make recommendations	Learners will assess a food diary and make recommendations	Learners will assess a food diary and make recommendations showing critical understanding	Learners will assess a food diary and make recommendations showing critical judgement
2.1 Assess a recipe in terms of its contribution to healthy eating	Learners will assess a recipe in terms of its contribution to healthy eating	Learners will assess a recipe in terms of its contribution to healthy eating showing critical understanding	Learners will assess a recipe in terms of its contribution to healthy eating showing critical judgement
2.2 Explain how the recipe could be changed to make the finished dish healthier	Learners will explain how the recipe could be changed to make the finished dish healthier	Learners will explain in detail how the recipe could be changed to make the finished dish healthier	Learners will comprehensively explain how the recipe could be changed to make the finished dish healthier
2.3 Describe other factors that could affect the finished dish	Learners will describe other factors that could affect the finished dish	Learners will describe in detail other factors that could affect the finished dish	Learners will comprehensively describe other factors that could affect the finished dish

**What you will need to have in your folder:**

**Due Date:** \_\_\_\_\_

**A completed Unit 3 Booklet Exploring Balanced Diets**

**All class notes and activities completed in class on Understanding Food including:**

- A description of the main nutrients and the required amounts for different age groups/different groups with specific dietary needs
- A description of healthy eating advice and awareness of health implications when eating a poor diet
- An explanation of food labelling linked to food groups and impact on health
- An explanation of how we can assess recipes to see if they are healthy – cooking methods, portion control, serving suggestions
- An awareness of how to adapt recipes to make them healthier
- AN understanding of how sensory characteristics can influence choice of meal
- A cooking skills record for all of the practical work completed
- Photographic evidence of your dishes cooked
- Taste charts
- Summary information to assist you in revising for the examination**



Our bodies need a certain amount of calories to survive. They provide our bodies with energy but are also needed for growth, repair and for any activities we do.

The guideline daily amount of calories 2000 kcal for women and 2500 kcal for men.

The amount of calories that you need varies depending on your weight, gender and how active you are. The more active your lifestyle, the more calories you will need to give you the energy to do them.

Our bodies also need water – it is essential for flushing out any toxins in the body and also keeps us hydrated. We should aim to drink 6-8 large glasses of water a day.

We also need dietary fibre. This is found in fruits and vegetables but also in wholegrain ingredients like wholemeal pasta and brown rice. Fibre is essential to keep everything moving through our body – particularly the waste that the body does not require as it cannot be digested. If we do not eat enough fibre containing foods we can become constipated. It also helps to lower your risk of diabetes and heart disease as well as lowering your cholesterol.

### **Reference Intake / RI (previously GDA Guideline Daily Amounts )**

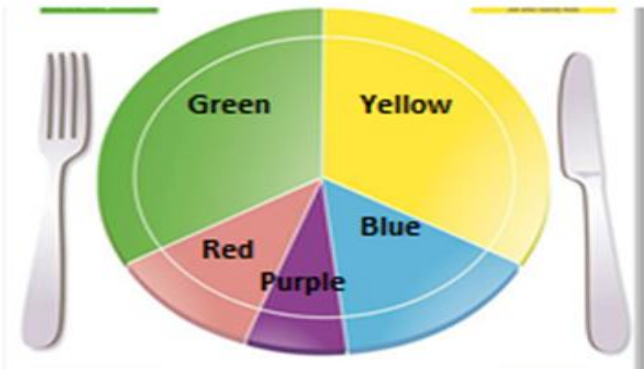
GDAs are shown for a portion and 100g for calories and the seven nutrients – protein, carbohydrate, sugars, fat , saturates, fibre and salt.

Typical values	Women	Men	Children (5-10 years)
Calories	2,000 kcal	2,500 kcal	1,800 kcal
Protein	45 g	55 g	24 g
Carbohydrate	230 g	300g	220 g
Sugars	90 g	120 g	85 g
Fat	70 g	95 g	70 g
Saturates	20 g	30 g	20 g
Fibre	24 g	24 g	15 g
Salt	6 g	6 g	4 g

It is important to try and eat the correct proportions of the different foods required by our body in order to stay healthy. It is also important to remember that different lifestyles and age groups will require these in varying amounts.

## To Do:

Can you name label the sections of the Eatwell Plate?



Green Section	
Yellow Section	
Red Section	
Purple Section	
Blue Section	

<http://www.nhs.uk/Livewell/Goodfood/Pages/the-eatwell-guide.aspx>

Look at the information shown on the NHS webpage. Use the space below to make notes on the key points. You will need this information to help you to write a detailed definition on the next page.

Assessment criteria	Pass	Merit	Distinction
1.1 Explain what is meant by a balanced diet	Learners will explain what is meant by a balanced diet	Learners will explain in detail what is meant by a balanced diet	Learners will comprehensively explain what is meant by a balanced diet

Using the Eatwell Guide, explain what we mean by the term a balanced diet.

How can the Eatwell Guide be used to help us to achieve this? Comment on the proportions of each food group and explain why this is important.

For each of the groups on the Eatwell Guide, explain what is included in each of the sections. What advice can you give about the foods that we should/shouldn't eat?

Why is it important to eat a good balanced diet?





1.2 Describe the nutrients that make up a balanced diet

Learners will describe the nutrients that make up a balanced diet

Learners will describe in detail the nutrients that make up a balanced diet

Learners will comprehensively describe the nutrients that make up a balanced diet

To Do: Read through the Bitesize guide on nutrients.

<http://www.bbc.co.uk/schools/gcsebitesize/design/foodtech/compositionpropertiesrev1.shtml>

Read through the powerpoint titled **Nutrients** using the following link:

<http://www.foodafactoflife.org.uk/Sheet.aspx?siteId=19&sectionId=75&contentId=240>

Using the information, describe each of the nutrients that we need in order to eat a balanced diet.

Nutrient	Function/Why needed	Sources

1.2 Describe the nutrients that make up a balanced diet

Learners will describe the nutrients that make up a balanced diet

Learners will describe in detail the nutrients that make up a balanced diet

Learners will comprehensively describe the nutrients that make up a balanced diet

**To Do:** Label the body outline to show the main nutrients needed by the body. Can you explain why we need them?

<http://www.s-cool.co.uk/gcse/food-technology/ingredients-and-nutrition/revise-it/nutrition>

Micro  
Needed in large amounts: fat, carbohydrates and protein

Micro  
Needed in small amounts: vitamins and minerals

Macro  
Protein:

Macro  
Carbohydrates:

Macro  
Fat:

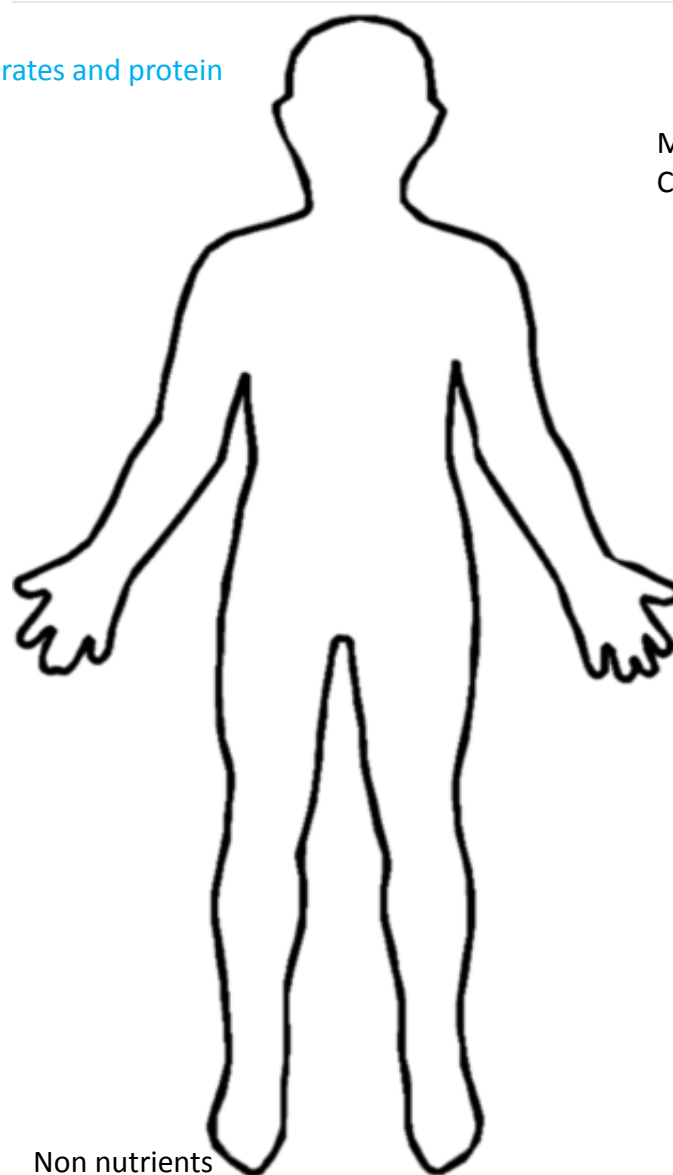
Micro  
Calcium:

Micro  
Vitamins:

Micro  
Iron:

Non Nutrient  
Water:

Non Nutrient  
Fibre:



Non nutrients  
Needed to stay alive: fibre (NSP) and water

## 1.2 Describe the nutrients that make up a balanced diet

Learners will describe the nutrients that make up a balanced diet

Learners will describe in detail the nutrients that make up a balanced diet

Learners will comprehensively describe the nutrients that make up a balanced diet

### Carbohydrates

They provide the body with energy. There are three types of carbohydrate: starch, sugar and NSP(fibre)

Starch: Needs to be broken down by digestion before the energy can be used. It provides the body with slow release energy and contains macronutrients making it a balanced nutrient eg flour, pasta, bread, potatoes, yams, bananas. We should increase the amount of carbohydrates in our diet.

Sugar: This is easily digested to make glucose and is needed by the blood for energy. Too many sugar carbohydrates cause an increase in blood sugars and can lead to rotten teeth. They do not contain any micronutrients. We should cut down our sugar carbohydrates.

NSP or Fibre does not provide the body with any energy. It cannot be digested, but it aids the body by helping waste move through it. Foods that are high in fibre are very filling and will make you feel fuller for longer, and for this reason it can help with weight loss.

Fibre can be:

Soluble: sticky when added to water eg oats, rice, fruit. It can help to lower cholesterol

Insoluble: soaks up water and adds bulk eg beans, lentils, skin of fruit and vegetables.

Wholegrain foods are very high fibre, and should be included in the diet as much as possible.

### Fats

Required for growth and energy.

Fat provides more energy than carbohydrates or protein so it is easy to get the energy the body needs, but excess is stored as fat.

Fat provides soluble vitamins (Vitamin A and D), Omega 3 and 6 for structure of body cells.

Fat cannot be manufactured by the body, so it is known as "essential" fat required to provide Vitamin A and D.

Fat also surrounds and protects the organs eg kidneys and keeps us warm.

Fat is often "hidden" in meat products – it is always a good idea to remove any visible fat.

### Protein

Protein is required for growth and repair.

Protein is made of 20 amino acids. Body makes 11 of these, other 9 come from foods we eat – known as essential amino acids.

High biological value or HBV are animal proteins and contain all 9 essential amino acids.

Low biological value or LBV have amino acids missing, so when eaten on their own, the body can't use them. Eating LBV foods with complementary food, we can increase their value so they can be used by the body. Eg beans on toast, vegetarian chilli and rice.

### To Do:

<http://www.s-cool.co.uk/gcse/food-technology/ingredients-and-nutrition/remember-it/s-cool-revision-summary>

Use the information from the website to make detailed notes on each of the different nutrients. (S-Cool revision summary)

Now focus on the main vitamins A, B, C, D, E and K. For each one, give two examples of foods that provide these vitamins.

Calcium and Iron. Why do we need them in our diet?

Present this information as a poster that could be displayed in the Food room to help others to understand the nutrients that we need in order to provide a healthy balanced diet. Don't forget to include examples of the different foods that provide us with each of the nutrients that we need!

There are 5 nutrients needed for health and wellbeing. Identify 3 of these nutrients and describe their functions and food sources.

Nutrient .....

Functions: .....

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Food sources: .....

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Nutrient .....

Functions: .....

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Food sources: .....

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Nutrient .....

Functions: .....

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Food sources: .....

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**1.3 Explain nutrient requirements for different groups of people**

Learners will explain nutrient requirements for different groups of people

Learners will explain in detail nutrient requirements for different groups of people

Learners will comprehensively explain nutrient requirements for different groups of people

**To Do:**

There are a number of different factors that affect our food choice – age, gender, lifestyle and more.

Use the link below, it will take you to a powerpoint presentation that outlines the different groups of people and their varying nutritional needs.

<http://www.foodafactoflife.org.uk/Sheet.aspx?siteId=19&sectionId=81&contentId=273>

For each of the following groups, write down the key factors to explain the different nutritional requirements for each of the following:

Pregnant women

Infants, babies and toddlers

Adolescents

Adults

Older people/elderly

Vegetarians

Coeliacs

Diabetics

Food intolerance

**You can present your information as a factsheet, a poster or in a table.**

**Name the nutrients that are important for each group, the function of those nutrients for the age group and sources that will be provide them.**

**Make sure that you cover a full range of groups, explain the limitations eg things that might make their diet restricted and how this could affect their nutrient intake, and considerations when meal planning for each group eg changes that might need to be put in place when cooking for this group of people.**



### 1.3 Explain nutrient requirements for different groups of people

Learners will explain nutrient requirements for different groups of people

Learners will explain in detail nutrient requirements for different groups of people

Learners will comprehensively explain nutrient requirements for different groups of people

There are other groups of people that may have different nutritional requirements. This could be due to their own personal food choices but also because they have allergies or other dietary needs. Cultural and religious beliefs may also impact on the food choices that we make.

Use the link below. For each group, write a definition to explain their different dietary needs. What they can/cannot eat and how they may need to amend their diet. When planning a meal for these groups, what do you need to consider? Can you suggest alternative ingredients that can be used in cooking?

<http://www.bbc.co.uk/schools/gcsebitesize/design/foodtech/socialenvironmentalissuesrev3.shtml>

- Vegetarians
- Calorie controlled
- Coeliacs
- Diabetics
- Lactose intolerance
- Nut allergy
- Religion/culture

Test yourself.....how much can you remember?

<http://www.foodafactoflife.org.uk/CreatorActivity.aspx?siteId=19&sectionId=81&contentId=304>



Alicia is a 14 year old schoolgirl. She often finds she lacks energy and frequently feels tired. She is quite small for her age. She eats very few dairy products and no red meat or fish. 2a. Identify the nutrients that may be missing from Alicia's diet.

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What impact might a lack of these nutrients have on Alicia's health and wellbeing?

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1.3 Explain nutrient requirements for different groups of people

Learners will explain nutrient requirements for different groups of people

Learners will explain in detail nutrient requirements for different groups of people

Learners will comprehensively explain nutrient requirements for different groups of people

Kalem is a 30 year old male. He has recently become a vegan.

Identify the nutrients that are most important to Kalem as he adapts to a vegan diet.

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Explain the reasons why these nutrients are important to Kalem.

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**1.3 Explain nutrient requirements for different groups of people**

Learners will explain nutrient requirements for different groups of people

Learners will explain in detail nutrient requirements for different groups of people

Learners will comprehensively explain nutrient requirements for different groups of people

1.4 Explain healthy eating advice

Learners will explain healthy eating advice

Learners will explain healthy eating advice in detail

Learners will comprehensively explain healthy eating advice

Watch the video clip – pause and make notes on the healthy eating guidelines.

<http://www.bbc.co.uk/education/clips/ztt682p>

Read through the powerpoint and write your own healthy eating advice.

<https://www.nutrition.org.uk/healthyliving/healthyeating/8tips.html>

Consider how these guidelines can help us to eat a healthy diet eg how could they be used to plan a meal when cooking? How could you use them to plan the foods that you will eat in a day?

Not everyone follows the healthy eating guidelines – some people may eat too much while others eat too little. How would this affect their nutritional intake? What are the consequences of eating too much or too little of each of the food groups? Can you explain what would happen if you did lack eat of the nutrients in your diet? What would be the impact if you ate too much of these nutrients?

Consider obesity, anorexia, diabetes, high blood pressure, tooth decay, heart disease, stroke, rickets, scurvy, vitamin D deficiency etc

Think carefully about how you could present this information. You could create your own fact sheet, you might want to annotate a figure outline or you could even choose some good and bad examples of dishes and annotate the benefits/consequences of eating them!



## 1.5 Explain how nutritional information on food labels can inform healthy eating

Learners will explain how nutritional information on food labels can inform healthy eating

Learners will explain how nutritional information on food labels can inform healthy eating showing critical understanding

Learners will explain how nutritional information on food labels can inform healthy eating showing critical judgement

Watch the video clip on food labelling

<http://www.bbc.co.uk/education/clips/zw224j6>

Follow the link to the Food Labelling powerpoint. You will need to scroll down to slide number 27-39.

<http://www.foodafactoflife.org.uk/Sheet.aspx?siteId=19&sectionId=109&contentId=568>

Read through the slides and makes notes on the key points from each page.

Explain the traffic light system.

Use diagrams and examples (supermarket websites show the nutritional information of their products) <http://www.tesco.com/groceries/product/details/?id=272757494>

How is it used to help people to identify the nutritional content of the foods that they choose?

What does each colour mean?

How do we know how much is too much? What is considered low fat, low sugar, low salt etc.

What would be the consequences if we ate lots of foods with red labels? Orange? Green?

How could these be used to follow a healthy diet? Using a supermarket website, can you find some examples of foods that help contribute to a healthy diet? What are the benefits of using food labels to eat these types of foods?



### Traffic light labelling

Traffic light labels on the front of pack provide information on high (**red**), medium (**amber**) or low (**green**) amounts of sugars, fat, saturated fat and salt present in the product, expressed per 100g/ml of the food/drink.

This front-of-pack labelling scheme was developed by the Food Standards Agency to give an at-a-glance indication of whether a food is a healthier choice.

© Food – a fact of life 2012



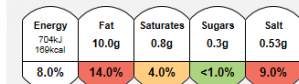
Zoom

Walkers Salt And Vinegar Crisps 32.5G



vegetarian

This pack contains:



Energy per 100g: 2166kJ 519kcal  
Reference intake of an average adult (8400 kJ/2000 kcal)



Assessment criteria	Pass	Merit	Distinction
1.6 Assess a food diary and make recommendations	Learners will assess a food diary and make recommendations	Learners will assess a food diary and make recommendations showing critical understanding	Learners will assess a food diary and make recommendations showing critical judgement

Keep a diary of everything that you eat and drink for a minimum of three days.

Day One	Day Two	Day Three

Using the Eatwell Guide to help you, how has your diet been over these days? Be honest!

What were the good points of your diet? Why?

What needs to be improved?

Why?

How could you improve it?

Assessment criteria	Pass	Merit	Distinction
1.6 Assess a food diary and make recommendations	Learners will assess a food diary and make recommendations	Learners will assess a food diary and make recommendations showing critical understanding	Learners will assess a food diary and make recommendations showing critical judgement

Look at the extract from a food diary below. Annotate the picture to explain the following:

What are the good points about this food diary? Why? How will they contribute to a healthy balanced diet?

What needs to be improved? Why? What would be the consequences if this person ate like this every day?

Explain how this person could improve their diet. What would you recommend? (think about sugar/snack swaps, high fibre alternatives etc)

Day & Date	Time	Food Description	Amount
Monday	8.30 am	White toast, butter & jam Boiled egg Coffee & 2 sugars	2 pieces 1 2 cups
	10.30am	Coffee & 2 sugars KitKat	1 cup 1 whole bar
	12.30am	Cheese & salad sandwich, mayonnaise & butter Apple Orange juice Bag of Maltesers	(2 rounds of white bread) Small carton Whole bag
	3pm	Tea & one sugar Scone, jam and cream Grapes	1 cup 1 scone 5 grapes
	5.30pm	Crisps	3 crisps
	6.30pm	Roast beef, Yorkshire pudding, roast potatoes, boiled peas, boiled carrots & gravy Rhubarb crumble and custard Wine	1 large plate + small seconds One bowl Half a bottle
	8.30pm	Hot chocolate + 2 sugars	1 cup

Assessment criteria	Pass	Merit	Distinction
1.6 Assess a food diary and make recommendations	Learners will assess a food diary and make recommendations	Learners will assess a food diary and make recommendations showing critical understanding	Learners will assess a food diary and make recommendations showing critical judgement

Look at the extract from a food diary below. Annotate the picture to explain the following:  
 What are the good points about this food diary? Why? How will they contribute to a healthy balanced diet?

What needs to be improved? Why? What would be the consequences if this person ate like this every day?

Explain how this person could improve their diet. What would you recommend? Have all of the food groups been covered? Are they getting enough nutrients?





Jessica is 6 year old girl who has put on some weight since starting school. Her mother has asked you for some advice on how to improve Jessica’s diet. You ask Jessica’s mother to keep a food diary of what Jessica eats every day. Below you can see a typical day from her food diary.

<b>Breakfast</b>	A bowl of sugar-coated cereal with semi-skimmed milk 2 slices of white toast with: <ul style="list-style-type: none"> <li>- butter</li> <li>- chocolate spread</li> </ul> A glass of fruit juice
<b>Mid-morning snack</b>	A chocolate biscuit bar A fruit squash drink
<b>Packed lunch from home</b>	2 sandwiches made with: <ul style="list-style-type: none"> <li>- 4 slices of white bread</li> <li>- butter</li> <li>- cheese spread</li> <li>- tomatoes</li> </ul> Chocolate mousse pot An apple

<b>After school</b>	A slice of homemade cake A fizzy drink
<b>Evening meal</b>	4 fish fingers Oven chips Tinned peas Meringue with ice cream A cup of tea with skimmed milk and one teaspoon of sugar
<b>Bed time Snack</b>	cup of hot chocolate with marshmallows on top

Identify how Jessica’s diet may be affecting her health and wellbeing.

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Look at the recipe below. Is it healthy? Why/why not?

Use the Eatwell guide to help you to annotate the recipe.

Does it contain all of the food groups? What nutrients does it give us? What nutrients is it missing? Are the cooking methods healthy? Is this a good portion size? What about the serving suggestions? Would this be an expensive meal to produce?

What recommendations would you make to improve this recipe? How would they improve it? Explain your answers in detail.

### Chicken Curry – serves 2

#### Ingredients

- 1 clove of garlic
- 1 x 10ml spoon oil
- 200g chicken
- 1/2 green chilli
- 1/2 x 5ml spoon turmeric
- 1/2 x 5 ml spoon ground cumin
- 1/2 x 5ml spoon chilli powder
- 250ml veg stock
- 2 x 15ml spoons double cream
- pinch black pepper
- 1 x 15ml spoon coriander

#### Method

1. Prepare the garlic, chilli  
peel and crush the garlic;  
de-seed and chop the chilli;
2. On a clean chopping board, using a clean knife, cut the chicken into cubes.
3. Fry the garlic and chilli in a little oil
5. Add the chicken and cook on a low heat for about 10 minutes.
6. Mix the turmeric, chilli powder, pepper and cumin into the yogurt in a small bowl. Increase the heat and stir-in the cream mix to the frying pan.
7. Make up stock and add to the pan.
8. Allow to cook for a further 10 minutes.
9. Chop the coriander and stir into the korma.
10. Serve with 150g boiled rice and a large naan bread.



Look at the recipe below. Is it healthy? Why/why not?

Use the Eatwell guide to help you to annotate the recipe.

Does it contain all of the food groups? What nutrients does it give us? What nutrients is it missing? Are the cooking methods healthy? Is this a good portion size? What about the serving suggestions? Would this be an expensive meal to produce?

What recommendations would you make to improve this recipe? How would they improve it? Explain your answers in detail.

#### Ingredients

For the Marinade

- 2 tbsp. soy sauce
- 1 tbsp lemon juice
- 1 tbsp honey
- 1tbsp. sesame oil
- 1 tbsp rice wine vinegar
- ½ tsp red pepper flakes
- 500g chicken breasts
- 1 tbps olive oil
- 3 cloves garlic
- 3 large carrots
- 2 large peppers
- 200g button mushrooms
- ½ head broccoli
- 1 tbsp cornstarch
- 200g brown rice



1. In a medium-sized bowl, whisk together the soy sauce, lemon juice, honey, sesame oil, rice wine vinegar, and red pepper flakes. Add in the chicken, and coat. Let marinate in the fridge.

2. When you have all your vegetables chopped and ready to go, heat a large wok over high heat. Add one tablespoon of the olive oil.

3. Drain the chicken from the marinade and put the marinade aside for later. Add the chicken to the wok and cook until the chicken is cooked through, about five minutes.

4. Then add in the garlic. Cook for a minute. Add in the carrots, peppers, and mushrooms. Cook until bright in colour and just about cooked, approx three minutes.

5. Add in the broccoli. Reduce heat to low.

6. Whisk the cornstarch into the reserved marinade, and then pour into the wok. Bring to a simmer and cook until thick, about five minutes. Serve on top of 50g portion of brown rice and topped with green onions and toasted sesame seeds.

2.2 Explain how the recipe could be changed to make the finished dish healthier

Learners will explain how the recipe could be changed to make the finished dish healthier

Learners will explain in detail how the recipe could be changed to make the finished dish healthier

Learners will comprehensively explain how the recipe could be changed to make the finished dish healthier

In order to make the food that we eat healthier, it is possible to substitute some of the ingredients for healthier alternatives. This could make the dish lower in fat or sugar or even higher in fibre.

We can also be mindful of some simple swaps that could be made - perhaps using yogurt instead of double cream.

There are also other changes that can be made eg cutting visible fat off of meat, choose meats eg mince, with a lower fat content, swapping meat for vegetarian alternatives eg Quorn, having a meat free day each week, choosing wholegrain options eg brown rice or wholemeal pasta.

We could also add healthier accompaniments to our meals eg salad instead of chips, or add additional vegetables to a dish to help to achieve our 5 a day eg adding carrots or celery to a lasagne, spinach to a spaghetti bolognese.

Choosing healthier cooking methods can help too – try stir frying or grilling foods instead of shallow or deep frying, have a jacket potato or mash instead of chips etc.

<http://www.nhs.uk/Livewell/loseweight/Pages/Healthyfoodswaps.aspx>

You can make many recipes healthier by using lower-fat or no-fat ingredients. These healthy substitutions can help you cut down on saturated fats, *trans* fats and cholesterol, while noticing little, if any, difference in taste.

- Instead of whole milk use skimmed or semi skimmed milk
- Instead of double cream use low-fat yogurt.
- Instead of sour cream, use low-fat unsalted cottage cheese plus low-fat or fat-free yogurt; or just use fat-free sour cream.
- Instead of butter (1 tablespoon), use 1 tablespoon soft margarine (low in saturated fat and 0 grams *trans* fat) or 3/4 tablespoon vegetable oil.
- Instead of one whole egg, use 2 egg whites
- Instead of chocolate use cocoa powder

#### Ways to Decrease Intake of Fat

- Minimize "fast" foods
- Minimize processed foods
- Use better cuts of meats (lean meats)
- Use low fat alternatives
- Lower use of condiments
- Eat lower fat snacks
- Choose foods lower in saturated fat & higher in monounsaturated & polyunsaturated fats



<http://www.jamieoliver.com/news-and-features/features/healthy-ingredient-swaps/#euTPFiC3rpyXar3y.97>



<http://www.bbcgoodfood.com/howto/guide/top-10-healthy-food-swaps>

2.2 Explain how the recipe could be changed to make the finished dish healthier

Learners will explain how the recipe could be changed to make the finished dish healthier

Learners will explain in detail how the recipe could be changed to make the finished dish healthier

Learners will comprehensively explain how the recipe could be changed to make the finished dish healthier

Consider the two lasagne recipes below. Some ingredients have been substituted for healthier options. Annotate the first recipe to explain the ingredients that you would change and why.

Now look at the second recipe. Explain what changes have been made and how this will make the dish healthier.

### Lasagne

1. Finely dice the onion
2. Peel and grate the clove of garlic
3. Slice and dice the carrot and stick of celery
4. Add 1 tsp oil and fry onion, garlic, carrots and celery for 2 mins
5. Add the 250g mince and fry until brown. Add tomatoes and simmer
6. Melt 25g marg on low heat and whisk in 25g flour
7. Gradually add 250ml milk and whisk continuously
8. Once thickened, add 25g grated cheese
9. Spread a layer of meat sauce on bottom of foil dish
10. Then add a sheet of pasta
11. Cover with cheese sauce and repeat.
12. Sprinkle on 25g grated cheese and bake 20 mins

### Lasagne

1. Finely dice the onion
2. Peel and grate the clove of garlic
3. Slice and dice the carrot and stick of celery
4. Add 1 tsp oil and fry onion, garlic, carrots and celery for 2 mins
5. Add the 250g Quorn mince and fry until brown. Add tomatoes and simmer
6. Stir 200ml creme fraiche with 100ml skimmed milk
7. Add 50g parmesan cheese
8. Stir together
9. Spread a layer of quorn sauce on bottom of foil dish
10. Then add a sheet of pasta
11. Cover with cheese sauce and repeat.
12. Sprinkle on 50g grated low fat cheese and bake 10 mins

2.2 Explain how the recipe could be changed to make the finished dish healthier

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Learners will explain in detail how the recipe could be changed to make the finished dish healthier

Learners will comprehensively explain how the recipe could be changed to make the finished dish healthier

Consider the two recipes below. Which of the dishes is healthier? Why? Discuss and explain why the recipe is the healthier option. Relate to the Eatwell Guide and nutrition.

### Chicken Curry – serves 2

#### Ingredients

- 1 clove of garlic
- 1 x 10ml spoon oil
- 200g chicken
- 1/2 green chilli
- 1/2 x 5ml spoon turmeric
- 1/2 x 5 ml spoon ground cumin
- 1/2 x 5ml spoon chilli powder
- 250ml veg stock
- 2 x 15ml spoons double cream
- pinch black pepper
- 1 x 15ml spoon coriander



#### Method

1. Prepare the garlic, chilli peel and crush the garlic; de-seed and chop the chilli;
2. On a clean chopping board, using a clean knife, cut the chicken into cubes.
3. Fry the garlic and chilli in a little oil
5. Add the chicken and cook on a low heat for about 10 minutes.
6. Mix the turmeric, chilli powder, pepper and cumin into the yogurt in a small bowl. Increase the heat and stir-in the cream mix to the frying pan.
7. Make up stock and add to the pan.
8. Allow to cook for a further 10 minutes.
9. Chop the coriander and stir into the korma.
10. Serve with 150g boiled rice and a large naan bread.



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### Spinach, potato and chickpea curry



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#### Ingredients

- 1 onion
- 1 clove garlic
- 1 large potato
- 1 x 5ml spoon oil
- 2 x 15ml spoons curry paste
- 300ml water
- 1 can chopped tomatoes (400g)
- 1 can chickpeas (410g), drained
- 3 handfuls of fresh spinach

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2.3 Describe other factors that could affect the finished dish

Learners will describe other factors that could affect the finished dish

Learners will describe in detail other factors that could affect the finished dish

Learners will comprehensively describe other factors that could affect the finished dish

Look at the pictures below. Annotate each picture to explain what factors might affect your opinion of these dishes.





2.3 Describe other factors that could affect the finished dish	Learners will describe other factors that could affect the finished dish	Learners will describe in detail other factors that could affect the finished dish	Learners will comprehensively describe other factors that could affect the finished dish
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There are many other factors that might influence our food choices. Using the pictures below, create a brainstorm to show the different factors that might affect our food choices. Can you give examples for each one?



Look at the notes provided. For each factor, explain how and why it may influence or restrict people's food choices. Add examples to demonstrate how these factors may have an impact on the foods that are chosen or eaten.

## Healthy Eating and Factors that Influence Food Choice

### Factors influencing food choice



Food choices for a balanced diet depend on many factors, such as:

- individual energy and nutrient needs;
- health concerns;
- cultural or religious practices;
- cost;
- food availability;
- food preferences;
- social considerations;
- environmental considerations;
- advertising and other point of sale information.

### Health concerns

Diets which exclude many foods due to a person's health concerns or for medical reasons need to be planned carefully.

For example, people who are lactose intolerant cannot eat some dairy products and so must make sure that they eat other foods which are good sources of calcium, e.g. soft edible bones in fish such as tinned salmon or sardines.

However, they can consume hard cheese, as it is low in lactose, and also yogurt in moderate amounts, because the bacteria in yogurt helps digest the lactose.

### Food availability

Most foods are grown in a particular season of the year, e.g. strawberries are harvested in summer. These are called 'seasonal foods'.

Buying foods when they are in season will often ensure the food price is lower.

Technology and the importation of food, however, has allowed food to be available all year round.

Frozen foods such as vegetables are a great alternative to fresh, if they are unavailable.



### Social concerns

Human welfare and fair trading, where growers or producers in developing countries are paid a good minimum price to cover their costs, can be a high concern for some people.

Animal welfare can also be a concern for some people. This can affect the choice between caged or free-range hens, or 'dolphin friendly' tuna.

### Individual energy and nutrient needs



The amount of energy, carbohydrate, fat, protein, vitamins and minerals needed differs between different age groups and between males and females.

Energy needs also depend on activity levels. Athletes will have much higher energy requirements due to their high level of physical activity.

### Cultural or religious practices



Ethical and religious practices, such as avoiding meat, may limit the range of foods people eat.

For example, a strict Vegan will not consume any meat products. They should choose non-meat food sources which are high in protein, iron and vitamin B12.

### Cost

Cost of food is a particularly important factor for people with low incomes.

Food prepared at home is often cheaper than eating out or buying take-aways.

### Food preferences

Not everyone likes the same food, but some foods are particularly popular or unpopular.

The taste, texture or appearance of foods can affect people in different ways.

### Food advertising

Advertisements encouraging people to choose certain foods often appear on the television, internet, radio, posters, magazines and newspapers.

### Environmental concerns



Scientific intervention in the food chain also causes concerns for some people. Genetically modified (GM) ingredients changing a plant, animal or micro-organism's genes or inserting one from another organism. These foods are labeled so people may decide to choose non-genetically modified food products.

People may also choose foods labelled as organic. The word 'organic' has come to have the meaning of foods grown without the use of inorganic fertilisers, or pesticides. Food sold as 'organic' must come from growers, processors and importers who are registered and approved by organic certification bodies, which are shown on the food label.

2.3 Describe other factors that could affect the finished dish	Learners will describe other factors that could affect the finished dish	Learners will describe in detail other factors that could affect the finished dish	Learners will comprehensively describe other factors that could affect the finished dish
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Sensory factors also influence our food choices. Would you eat burnt toast? Mouldy bread? Milk that smells funny? Watch the clip. Describe how the sensory characteristics could have an impact on the finished dish. Use some of your photographs of practical work to annotate as examples.

<http://www.bbc.co.uk/education/clips/z977cwX>

### Which senses do we use?



A range of senses are used when eating food.

These senses are:

- sight;
- smell;
- hearing;
- taste;
- touch.



A combination of these senses enables you to evaluate a food.

### Sound



The sounds of food being prepared, cooked, served and eaten all help to influence our preferences.



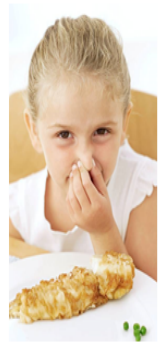
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### Odour



The nose detects volatile aromas released from food. An odour may be described by association with a particular food, e.g. herby, cheesy, fishy. The intensity can also be recorded.

Odour and taste work together to produce flavour. This is the reason why people with a blocked nose find it difficult to determine the flavours of foods.



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### Taste



The tongue can detect five basic tastes:

- bitter;
- salt;
- sour;
- sweet;
- umami.



Taste may be described by association with a particular food, e.g. meaty, minty or fruity.

The intensity can also be recorded, e.g. mild or strong Cheddar.

### Texture



Texture can be assessed through touch.

When food is placed in the mouth, the surface of the tongue and other sensitive skin reacts to the feel of the surface of the food. The sensation is also known as mouth-feel.

Different sensations are felt as the food is chewed. The resistance to chewing also affects texture, e.g. chewiness, springiness.

The viscosity is also a factor, e.g. runny, thick.

The mouth also detects temperature, which plays an important stimulus, e.g. cold icecream, warm bread, hot soup.



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### Appearance



The size, shape, colour, temperature and surface texture all play an important part in helping to determine your first reaction to a food.

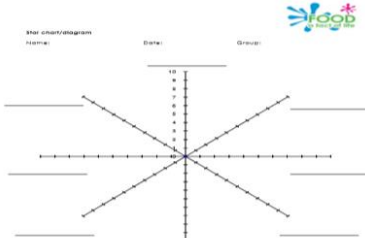
Often if a food does not look appetising, then you will not eat it.

Appearance is therefore vitally important if you want your food to be eaten and enjoyed.



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We can record the results in a number of different ways. Hedonic scale is a very simple way of recording whether someone likes or dislikes a food. Star charts give you more detail and help to identify areas that need to be improved.



### Hedonic scale

Sample	1. Dislike very much	2. Dislike	3. Neither like or dislike	4. Like	5. Like very much	Comments



2.3 Describe other factors that could affect the finished dish

Learners will describe other factors that could affect the finished dish

Learners will describe in detail other factors that could affect the finished dish

Learners will comprehensively describe other factors that could affect the finished dish

Using the information on the previous pages, create a leaflet that can be provided to a trainee Food Ambassador to help them understand the different factors that may affect a finished dish.

### Bread and Butter Pudding



**Equipment needed:** 1.2 litre oblong oven proof dish

**Ingredients:** (Serves 4 people)

- 8 slices of fruited bread
- 50 g butter
- 10 g candied lemon or orange peel, finely chopped
- 50 g sultanas
- 10 fl oz (275 ml) full fat milk
- 2½ fl oz (60 ml) double cream
- 50 g caster sugar
- grated zest ½ small lemon
- 3 free range eggs
- freshly grated nutmeg
- 25 g of icing sugar for dusting
- 5fl oz (120ml) lightly whipped double cream for serving

#### Method

Preheat the oven to 180C/400F/Gas 4.

#### Prepare the Bread

1. Grease the ovenproof dish with plenty of butter
2. Butter the fruited bread or panettone leaving the crusts on
3. Now arrange one layer of the buttered bread over the base of the oven proof dish
4. Sprinkle the candied peel and half the sultanas over the top
5. Cover with another layer of the buttered fruited bread or panettone and sprinkle on the remainder of the sultanas

#### To make the custard

6. In a measuring jug measure out the milk and add 60ml of double cream
7. Stir in the caster sugar and lemon zest
8. Whisk the eggs in a separate bowl then whisk them into the milk and cream mixture

#### To complete the pudding

9. Carefully pour over the bread and sprinkle some freshly grated nutmeg on the top
10. Bake in the oven for 30- 35 minutes
11. Dust with sieved icing sugar
12. Serve warm with lightly whipped double cream

Identify the healthy and less healthy features of the bread and butter pudding recipe. Complete the following table.

Healthy features	Unhealthy Features

Assessment criteria	Pass	Merit	Distinction
<b>2.1. Assess a recipe in terms of its contribution to healthy eating</b>	Learners will assess a recipe in terms of its contribution to healthy eating	Learners will assess a recipe in terms of its contribution to healthy eating showing critical understanding	Learners will assess a recipe in terms of its contribution to healthy eating showing critical judgement
<b>2.2. Explain how the recipe could be changed to make the finished dish healthier</b>	Learners will explain how the recipe could be changed to make the finished dish healthier	Learners will explain in detail how the recipe could be changed to make the finished dish healthier	Learners will comprehensively explain how the recipe could be changed to make the finished dish healthier
<b>2.3. Describe other factors that could affect the finished dish</b>	Learners will describe other factors that could affect the finished dish	Learners will describe in detail other factors that could affect the finished dish	Learners will comprehensively describe other factors that could affect the finished dish

