

### GCSE Edugas Food, Preparation Nutrition Information – Autumn 2020

Please see link for the Eduqas Digital Guide below to aid your study.

https://www.illuminate.digital/eduqasfood/ Username: SLORDDERBY4 Password: STUDENT4

## **Cereal Facts**

Cereal crops include wheat, rye, barley, oats and rice.

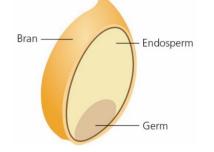
Grains are the seeds of cereal plants.

What is a wholegrain?

A 'wholegrain' is made up of three elements:

- a fibre-rich outer layer the bran
- a nutrient-packed inner part the germ
- a central starchy part the endosperm.

During the milling process, the bran and the germ are often removed to give a 'whiter' cereal.



What nutrients do wholegrains contain?

Wholegrains can contain up to 75 per cent more nutrients than refined cereals as most nutrients are found in the bran and germ of the seed.

Wholegrains provide:

- fibre -soluble and insoluble
- B vitamins and folic acid
- essential fatty acids (omega 3)
- protein
- antioxidants including vitamin E, selenium
- trace elements such as copper.

#### Types of wholegrains

#### Cereals:

- Wheat, including spelt and durum
- Rice
- Barley (but not pearl barley which has had the outer husk removed)
- Maize (corn)



- Rye
- Oats
- Millet
- Wild rice

## Other grains:

- Buckwheat
- Quinoa

Why should we eat wholegrains? Research suggests that, because of the nutrients they contain, eating wholegrains regularly may help to reduce the risk of many common diseases, including heart disease, stroke, type 2 diabetes and some forms of cancer of the digestive system (e.g. bowel cancel)..

Wholegrains may also help in maintaining a healthy body weight over time as part of a healthy diet and lifestyle.

They are usually low in fat but rich in fibre and starchy carbohydrate. They have a low glycaemic index (GI), meaning they provide a slow release of carbohydrate into the blood which, together with fibre content, may help keep you feeling fuller for longer.

### Topic 1 – Cereals (P176 Illuminate Digital Textbook)

What are cereals?

What variety of cereals are available around the world and in the UK? What is the importance of staple foods in the diet?

### **Examination questions**

a The table below compares the nutritional values of both wholemeal bread and white bread.

	Wholemeal bread, medium sliced		White bread, medium sliced	
	Per 100g	Per 40g slice	Per 100g	Per 40g slice
Energy	221kcal	88kcal	223kcal	93kcal
Protein	10g	4g	8.7g	3.5g
Fat	1.8g	0.7g	1.7g	0.7g
Carbohydrate	37.8g	15.1g	44.6g	17.9g
Fibre	6.8g	2.7g	2.4g	1.0g
Salt	0.90g	0.36g	0.90g	0.36g

Using the information given in the table, answer the following questions: (b) Which bread has the most energy value per slice? [1]

(c) Which bread type has the most protein content per 100g? [1]

(d) State why 100g wholemeal bread has more fibre content than 100g white bread. [1]

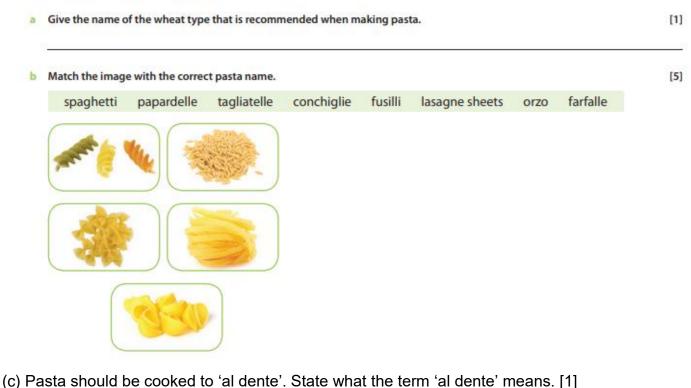
2. Mass production of bread uses the Chorleywood method. Give two reasons why a large-scale bakery uses the Chorleywood bread making process. [2]

3. Explain why kneading bread dough is an important process when making bread. [2]



4. A baker has produced a batch of bread rolls which are small and heavy. Give two reasons why this might have happened and suggest ways this can be avoided in the future. [4]

2 Pasta is a popular staple food and is made from wheat flour.



(d) Lasagne is a popular pasta dish and uses béchamel sauce as a component of the dish.

3. Explain what is happening during the sauce thickening process. [4]

## Topic 2 - Dietary Fibre (P16 Illuminate Digital Textbook)

What is dietary fibre? Why do we need dietary fibre in the diet? What is the difference between soluble and non-soluble fibre?

#### **Examination questions**



#### Question 1

A good source of the soluble fibre called beta-glucar	n is found in: Question 3
<ul><li>honey.</li><li>green leafy vegetables.</li><li>oats.</li></ul>	Insoluble fibre performs the following functions in the body: fights infections and heals wounds. oxygenates the red blood cells. promotes healthy bowels and prevents constipation.
	Question 2
Question 4	Good sources of fibre in the diet include:
Dietary fibre is also referred to as: roughage, cellophane and glucose. glucose, cellulose and non-starch polysaccharid roughage, cellulose and non-starch polysacchar	white rise, brown broad and doughpute
Question 5	Question 6
The recommended daily fibre intake for 11–16 year olds is:	Fibre is a type of carbohydrate that is found in:
<ul> <li>2.5g</li> <li>250g</li> <li>25g</li> </ul>	<ul> <li>animal-based foods, including meat, fish and dairy products.</li> <li>plant-based foods, including fruit, vegetables and whole and unprocessed grains.</li> <li>both of the above.</li> </ul>

#### Topic 3 – Diet and Good Health (P44 Illuminate Digital Textbook)

What is meant by a healthy diet? What are the guidelines and recommendations for a healthy diet? Can you explain the nutritional needs through life? How can lifestyle choices affect your diet? Can you explain specific dietary needs or deficiencies?

#### **Examination questions**

1 True or false? Tick (✓) the correct box.

Statement	True	False
A diet rich in fibre helps to prevent bowel disorders.		
You should eat large amounts of food containing sugar and fat.		
Too much salt has a bad effect on the body.		

[3]

# 6



2 Match the acronyms of nutritional requirements with the correct description. The first one has been filled in for you.

#### PAL EARs RIs DRVs

Acronym	Description
EARS	Not targets but give a useful indication of how much energy the average person needs.
	The number of kilojoules the body uses to fuel physical activity.
	An estimate of the nutritional requirements of a healthy population.
	Benchmarks for the amount of energy and key nutrients that need to be taken in on a daily basis.

- 3(a) State two factors which influence how much energy a person needs. [2] 3(b) Explain the importance of maintaining a correct energy balance. [4]
- 4(a) Give general dietary advice to a friend who is trying to lose weight. [4]
- 4(b) Suggest a suitable food choice for your friend for the following meals:
- (i) breakfast
- (ii) midday meals
- (iii) snacks iv evening meal [4]

5. State additional advice given in the Eatwell Guide. [4]

6 Reference Intake (RI) is an example of how nutritional requirements are calculated.

- 6(a). Name two other methods of calculating nutritional requirements. [2]
- 6(b). Explain how RIs, as stated on food labels, give useful information to the consumer. [4]

7. Children need to be encouraged to eat a healthy balanced diet from an early age.

7(a) Explain the benefits of a healthy, balanced diet. [4]

7(b) Outline recent measures which have been taken in the UK to ensure that school meals are healthy and balanced. [4]

8. Food labels often have claims about the product on the packaging.

8(a). Explain the difference between a nutrition claim and a health claim, giving examples to support your answer. [6]

