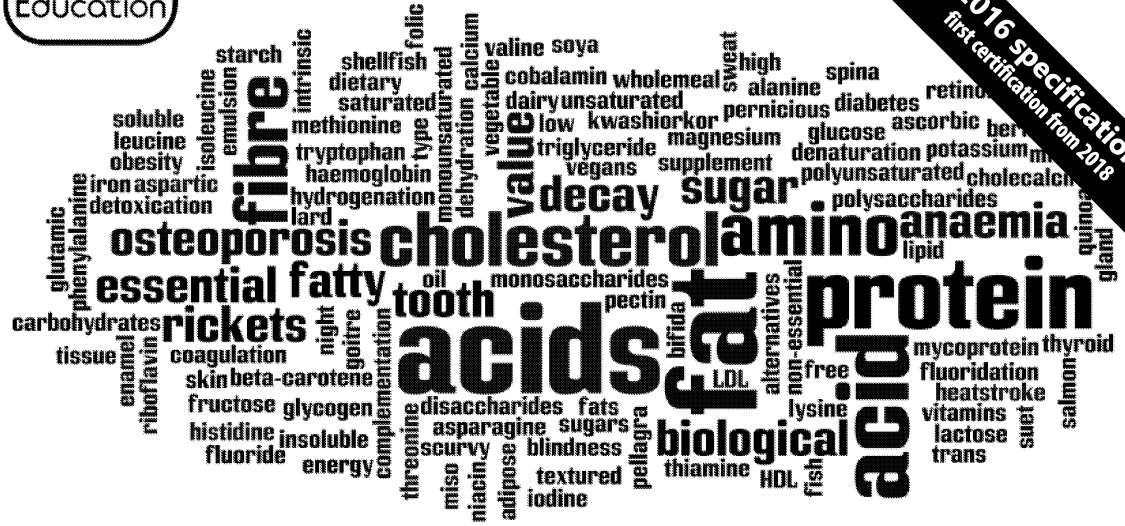
Zig Zag Education

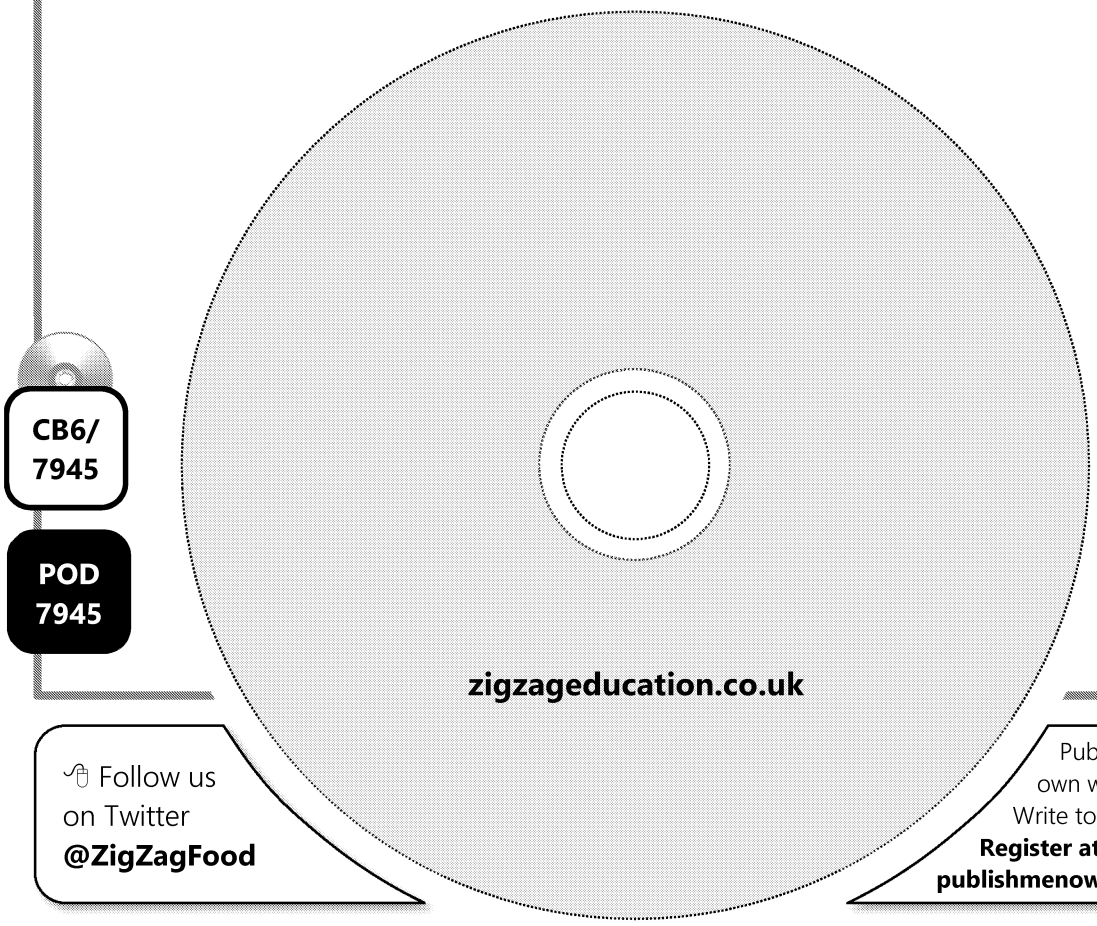
Food and Nutrition GCSE (9–1) | Eduqas | C560

2016 specification
first certification from 2018



Keyword Activities for Eduqas GCSE Food Preparation and Nutrition

Principles of Nutrition



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Match-Up Activities ..... **6 pages**

Table-Fill Activities ..... **6 pages**

Keyword Answers ..... **6 pages**

Crossword Solutions ..... **6 pages**

Table of Topics

	Keyword Titles	Spec Point
1	Macronutrients: proteins	2. Principles of Nutrition
2	Macronutrients: proteins (amino acids)	
3	Macronutrients: fats, oils and lipids	
4	Macronutrients: carbohydrates	
5	Micronutrients: vitamins	
6	Micronutrients: minerals and water	

Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **Eduqas GCSE Food Preparation and Nutrition** specification. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the Learning Aims for the following topics on the 'Principles of Nutrition':

- Macronutrients: proteins
- Macronutrients: proteins (amino acids)
- Macronutrients: fats, oils and lipids
- Macronutrients: carbohydrates
- Micronutrients: vitamins
- Micronutrients: minerals and water

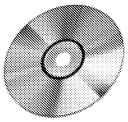
For each set, there are a number of different keyword activities on CD designed to give you a range of different options for classroom, homework and revision. This variety enables you to take a different approach to different topics – such as using the Crosswords as homework for one topic, and the Match Up as a starter for another.

Alternatively, differentiate the activity for a given topic; for example, you might want to give your stronger students the **Crosswords** early on while you start weaker learners on the **Match Up** (where terms and definitions are both available). **Domino** and **Bingo** activities add an element of fun and reinforcement, as well as potential for pair and group work. Finally, the **Flash Cards** come into their own for revision and the **Table Fill** and **Write Your Own Glossary** allow students to test their understanding by correctly filling in keywords or definitions.

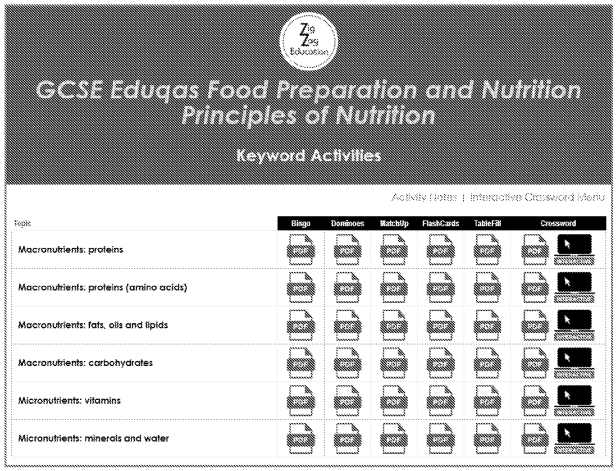
For more information about the different activities included, see overleaf →

Digital Format!

All of the activities are provided electronically on the accompanying CD. To use on a school network, the entire contents of the CD needs to be copied and pasted into an accessible location.



Providing easy access to the activities are two HTML menus:



1. ***Access All* Menu** →

   Location: index.html

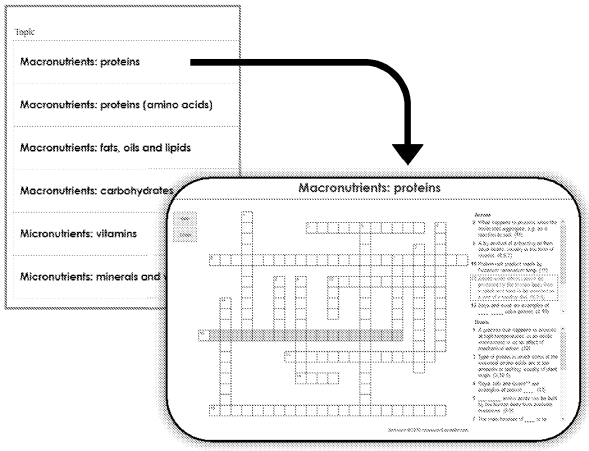
   This menu, designed primarily for teacher use, includes links to everything on provided on the CD – allowing you to easily select what you need when preparing your lessons.

   If you intend to give learners access to this menu, then be aware that it does include links to the solutions.

2. ***Interactive Crossword* Menu** →

   Location: interactive-crosswords/index.html

   This menu, which can be accessed via the *Access All* Menu is included to allow learner access to just the interactive crosswords (without the answers).



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Register your email address to receive any future free updates* made to this resource or other Food Preparation and Nutrition resources your school has purchased, and details of any promotions for your subject.

** resulting from minor specification changes, suggestions from teachers and peer reviews, or occasional errors reported by customers*

Go to **zzed.uk/freeupdates**

Activity Types

All activities are provided as PDF files, allowing for easy printing and sharing on your school's internal network or VLE. In addition, each of the single-page activities (*crosswords*, *match up* and *table fill*), as well as the solutions, are provided on paper too.

The activities included in this resource are as follows:

Bingo

Each student is given a different bingo card containing a selection of words from the set. The teacher reads the definitions using the Keyword Answers and the student must match the definition to the words on their card to complete rows, columns, and the full bingo card.

✓ PDF

Crosswords

These traditional keyword activities are equally effective as lesson or homework activities – and are also an excellent way to ease students into their revision programme.

✓ PDF ✓ PAPER

In addition to the photocopiable worksheets and pdf, the crosswords are provided in interactive format on the accompanying CD-ROM. These are web-based (HTML5) and will run straight from your Internet browser.

Dominoes

This is essentially another match-up activity, but this one is designed to be used in a more active way to engage students. It is recommended that students work in pairs or small groups.

✓ PDF

Half of each card contains a keyword, and the other contains a description. To complete the activity, students must align all the cards in the correct order. There is a 'Start' and a 'Finish', meaning that if any cards are left outside of the chain, then students have gone wrong somewhere.

Match Up

Students match descriptions to their keyword by drawing lines between them. Because there are similar descriptions and keywords, students are likely to make the odd mistake while completing the activity, so it is recommended that they use a pencil to start with! By eliminating the keywords that they are familiar with, students can then think about and learn the ones that they are less confident with.

✓ PDF ✓ PAPER

Flash Cards

These are a helpful revision tool. To make the cards, fold the page in half, then cut each card and stick together so the keyword is on one side and the definition the other. In addition, students could use these to play a game of pairs. Cut each card in two and place face down on the table.
Students will then take it in turns to turn over two cards with the aim of matching up a keyword to its definition. Matched up cards are removed and the game is finished when all the cards have been matched.

✓ PDF

Table Fill

Nothing fancy – students simply write the keyword which is being described, without any other help. Because this activity tests the students' own knowledge, it is best used as a homework activity at the end of each topic or during revision. This then acts as a check that they have grasped the key terminology for each topic. Alternatively, they could be given to students at the beginning of the topic, to see what they already know.

✓ PDF ✓ PAPER

Write Your Own Glossary

Like the Table Fill, this activity can be used to test pupils before learning a topic, or as a revision tool after learning a topic. Students are given a list of the keywords and need to produce their own definitions. Using Table Fill and Write Your Own Glossary, lessons can be differentiated for all levels of learner.

✓ PDF

Selected Activities and Completed Glossary Page

This sample shows one example of several activities.
The whole resource contains approximately 40 activities –
6 or 7 activities for each of the 6 topics.

The resource covers 113 key terms.

Macronutrients: proteins *(Table Fill)*

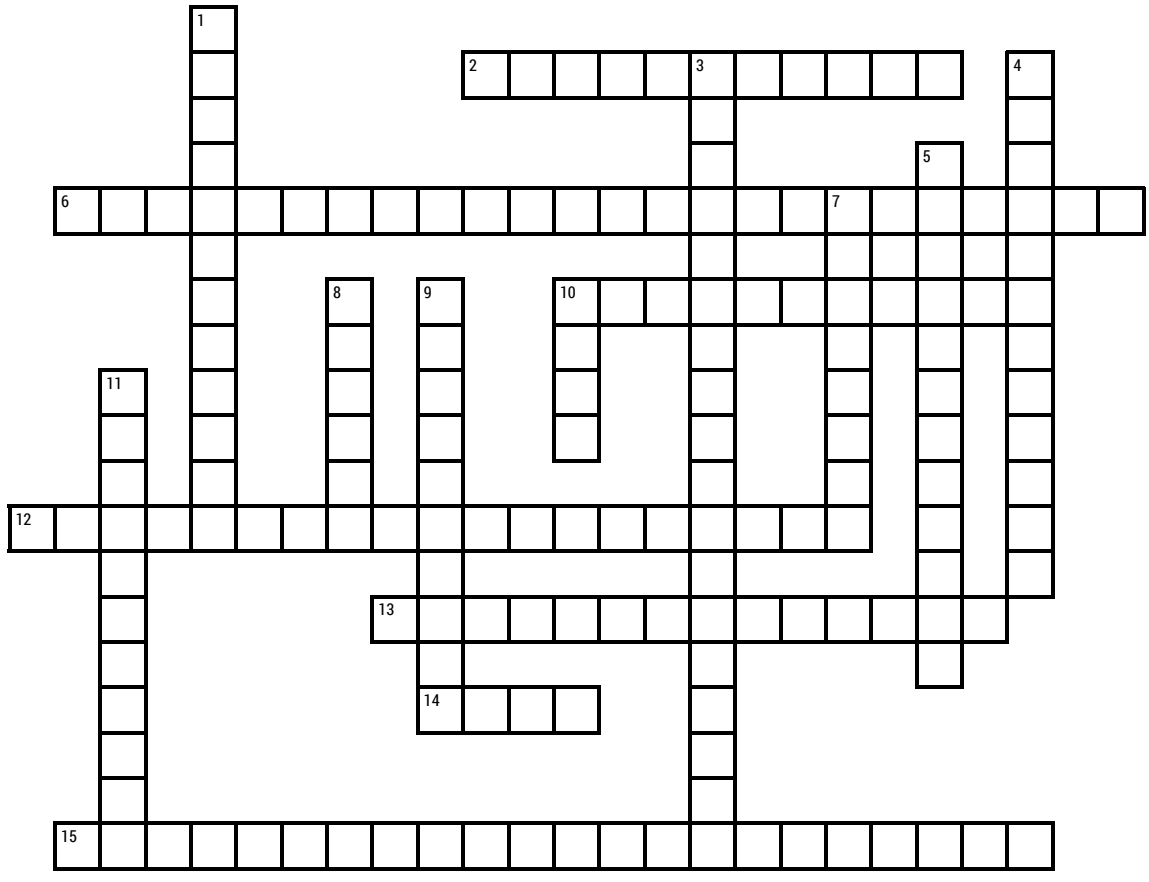
Long chains of amino acids that are the building blocks of the body, support growth and development, and make up 15% of a balanced diet.	
Type of protein in which some of the essential amino acids are in low amounts or lacking; usually of plant origin.	
Type of protein in which all essential amino acids are present in the correct amounts; usually of animal origin.	
A process that happens to proteins at high temperatures, in an acidic environment or as an effect of mechanical action.	
Combining two or more low biological value proteins in order to produce a high biological value meal.	
Protein-rich products made without the use of animal-derived ingredients.	
Protein-rich product made by *Fusarium venenatum* fungi.	
What happens to proteins when the molecules aggregate, e.g. as a reaction to salt.	
Nitrogen-based molecules that bind together to form a chain of peptides.	
Amino acids which cannot be produced by the human body from scratch and have to be provided as a part of a healthy diet.	
Amino acids which can be built by the human body from available resources.	
Type of bean rich in high biological value protein, used for manufacturing many other products, such as flour, oil, sauce or cheese-like products.	
Tiny, easy-to-digest, gluten-free grains originating from South America, rich in carbohydrates, protein and fibre, and used as a protein alternative.	
Condition caused by prolonged deficiency of protein, occurring especially in developing countries and characterised by swelling of the stomach.	
A by-product of extracting oil from soya beans, usually in the form of chunks.	
Traditional Japanese paste made of fermented soya, used for sauces and spreads.	

Macronutrients: proteins *(Match Up)*

1	A by-product of extracting oil from soya beans, usually in the form of chunks.
2	A process that happens to proteins at high temperatures, in an acidic environment or as an effect of mechanical action.
3	Amino acids which can be built by the human body from available resources.
4	Amino acids which cannot be produced by the human body from scratch and have to be provided as a part of a healthy diet.
5	Combining two or more low biological value proteins in order to produce a high biological value meal.
6	Condition caused by prolonged deficiency of protein, occurring especially in developing countries and characterised by swelling of the stomach.
7	Long chains of amino acids that are the building blocks of the body, support growth and development, and make up 15% of a balanced diet.
8	Nitrogen-based molecules that bind together to form a chain of peptides.
9	Protein-rich product made by *Fusarium venenatum* fungi.
10	Protein-rich products made without the use of animal-derived ingredients.
11	Tiny, easy-to-digest, gluten-free grains originating from South America, rich in carbohydrates, protein and fibre, and used as a protein alternative.
12	Traditional Japanese paste made of fermented soya, used for sauces and spreads.
13	Type of bean rich in high biological value protein, used for manufacturing many other products, such as flour, oil, sauce or cheese-like products.
14	Type of protein in which all essential amino acids are present in the correct amounts; usually of animal origin.
15	Type of protein in which some of the essential amino acids are in low amounts or lacking; usually of plant origin.
16	What happens to proteins when the molecules aggregate, e.g. as a reaction to salt.

protein	
low biological value	
high biological value	
denaturation	
protein complementation	
protein alternatives	
mycoprotein	
coagulation	
amino acids	
essential amino acids	
non-essential amino acids	
soya	
quinoa	
kwashiorkor	
textured vegetable protein	
miso	

Macronutrients: proteins



Across

2 What happens to proteins when the molecules aggregate, e.g. as a reaction to salt. (11)

6 A by-product of extracting oil from soya beans, usually in the form of chunks. (8,9,7)

10 Protein-rich product made by *Fusarium venenatum* fungi. (11)

12 Amino acids which cannot be produced by the human body from scratch and have to be provided as a part of a healthy diet. (9,5,5)

13 Soya and meat are examples of ____ _____ value protein. (4,10)

14 The only plant which provides HBV protein. (4)

15 The process of combining rice and peas. (7,15)

Down

1 A process that happens to proteins at high temperatures, in an acidic environment or as an effect of mechanical action. (12)

3 Type of protein in which some of the essential amino acids are in low amounts or lacking; usually of plant origin. (3,10,5)

4 Soya, tofu and Quorn™ are examples of protein ____. (12)

5 ___ _____ amino acids can be built by the human body from available resources. (3-9)

7 The main function of ____ is to support growth and repair of body tissues. (8)

8 Tiny, easy-to-digest, gluten-free grains originating from South America, rich in carbohydrates, protein and fibre, and used as a protein alternative. (6)

9 Nitrogen-based molecules which build the peptide chains. (5,5)

10 Traditional Japanese paste made of fermented soya, used for sauces and spreads. (4)

11 Disease caused by protein deficiency. (11)

Macronutrients: proteins