

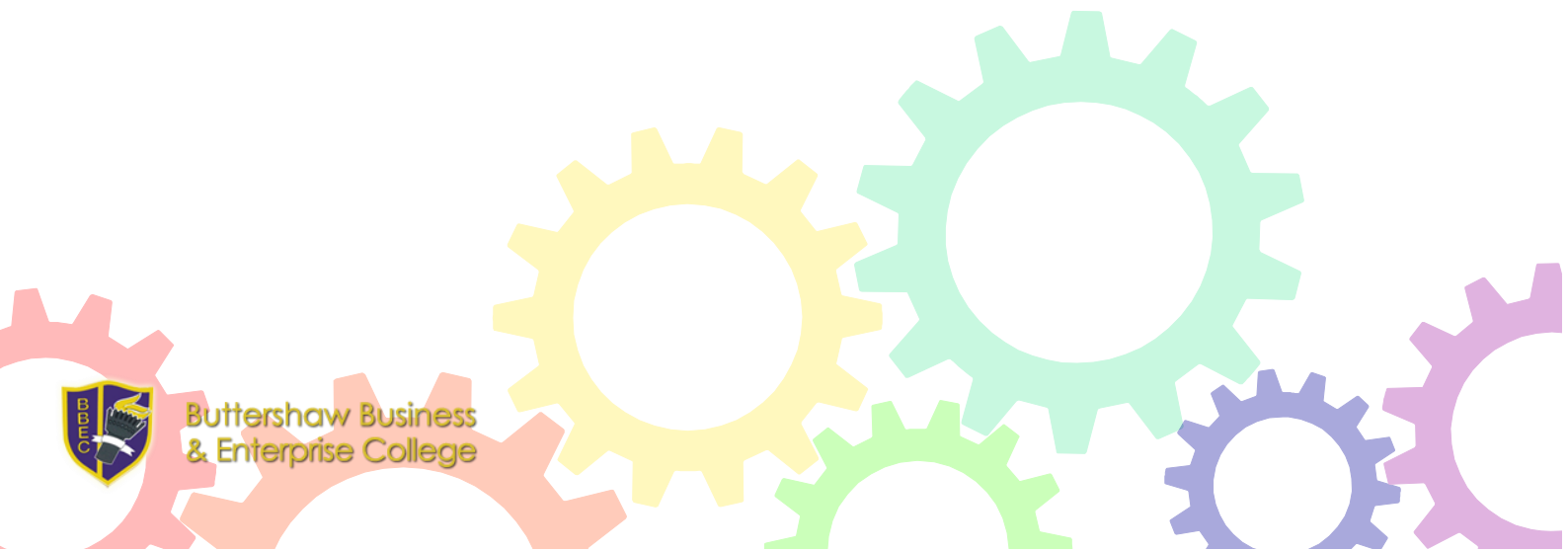
Food Preparation & Nutrition

Year 10 Homework Booklet

Autumn Term 1



Buttershaw Business
& Enterprise College



Over the next 7 weeks you will complete a range of tasks at home

Details of each task can be found in this booklet, clearly labelled homework 1 - 5

Work must be **handed in on time each week** and **presented neatly**.

It is **your responsibility** to keep this booklet safe. If you lose it you must pay to print another, photocopy someone else's or write up the tasks by looking at a friend's. It **will not be accepted as an excuse** for not handing in your work.

Homework	Hand in date
Homework 1	
Homework 2	
Homework 3	
Homework 4	
Homework 5	

Useful websites to use throughout the booklet:

www.foodafactoflife.org.uk

www.bbc.co.uk/education

www.foodforlife.org.uk

www.grainchain.com



Homework 1

Section 1—Proteins

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. Protein molecules are made up of small 'building blocks' joined together.

a. Give the name of these 'building blocks'

..... (1 mark)

b. Give the name of the building blocks that can't be made by the body.

..... (1 mark)

2. Meat and fish are both good sources of protein

a. What is the best source of protein in the meal shown on the right?

..... (1 mark)



b. Explain why protein is essential in a persons diet.

.....
.....
.....

(3 marks)

3. Proteins can be either 'high biological value' or 'low biological value'

a. What is meant by a 'low biological value' protein?

.....
.....

(1 mark)

b. other than soya products, how can a vegan ensure they get the equivalent of 'high biological value' protein in their diet?

.....
.....
.....

(3 marks)

c. Give one example meal to illustrate your answer in b.

.....

(1 mark)



Homework 2

Section 1 - Fats

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. One of the functions of fat in the diet is to provide the body with energy.

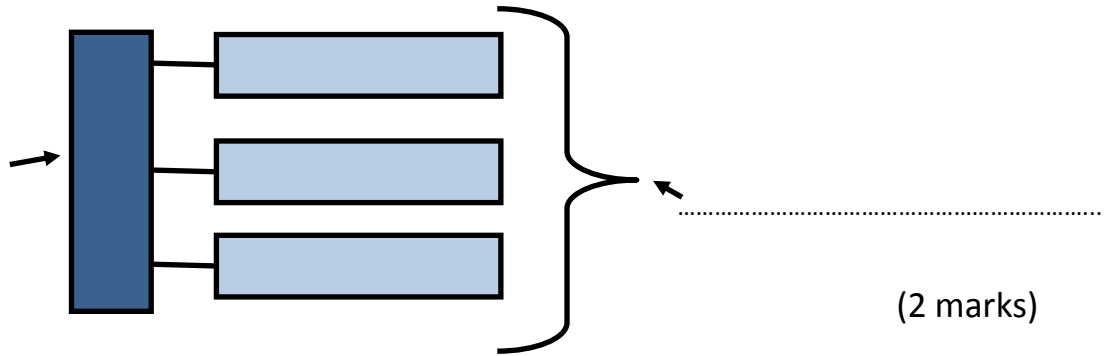
a. What is the maximum percentage of food energy per day that should come from fats?

- A. 5% B. 15% C. 35% D. 50% (1 mark)

b. An average adult should consume around 70g of fat in total each day. How much of this fat should be saturated?

A maximum ofg (1 mark)

2. Fats are made up of triglycerides. Label the diagram of a triglyceride below.



3. Most fish and chip shops use vegetable oils to fry chips, but some still use lard. Explain why chips cooked in lard would not be suitable for vegetarians.

.....
.....

(2 marks)

4. Although fats are often seen as unhealthy, they form an essential part of the diet. The first one has been done for you.

1. They provide the body with a concentrated source of energy.

2.

3.

(2 marks)



Homework 3

Section 1 - Carbohydrates

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. Glucose and fructose are examples of the most basic sugar molecules. What is the scientific name given to these sugar molecules?

- A. Monosaccharides. B. Disaccharides C. Trisaccharides. D. Polysaccharides

(1 mark)

2. Starch is a type of carbohydrate.

a. Name two foods that are high in starch

1. 2.

(2 marks)

b. Give one reason why we need starchy foods in our diet.

.....

(1 mark)

3. Some foods are made u of mostly 'empty calories'.

a. What is meant by 'empty calories'?

.....

.....

(1 mark)

B. Name two foods that contain mostly 'empty calories'

1. 2.

(1 mark)

4. Too much or too little sugar in the diet can have health implication.

a. Outline one health issue that cab be caused by having too much sugar in the diet.

.....

.....

b. Outline one health issue that can be caused by having too little sugar in the diet.

.....

.....

(4 marks)



Homework 4

Section 1 - Minerals and Trace Elements

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. Calcium and phosphorous are key minerals found in food. Which of the following functions are both of these minerals for?

- A. Clotting the blood. B. The formation of strong bones and teeth.
C. The formation of haemoglobin. D. The control of water content. (1 mark)

2. Fluoride is a trace element that our body needs in small amounts.

a. Outline the function of fluoride in the body.

.....
.....

(2 marks)

b. Identify one food source that is high in fluoride

.....

(1 mark)

3. Government guidelines recommend a maximum salt intake of 6g day for adults.

a. Why do we need salt in our diet?

.....

(1 mark)

b. Give one health problem related to having too much salt in the diet.

.....

(1 mark)

4. Good sources of iron include beef liver and dark chocolate.

a. Outline why iron is needed as part of a healthy diet.

.....

b. Name one condition that can be caused by an iron deficiency.

.....

(2 marks)



Homework 4

Section 1 - Vitamins (fat soluble)

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. Fat-soluble vitamins are store in fatty tissue. Give one source for each of the fat-soluble vitamins below

- A. Vitamin A (1 mark)
- B. Vitamin D (1 mark)
- C. Vitamin E (1 mark)
- D. Vitamin K (1 mark)

2. Derek claims that eating carrots can help you see in the dark. Explain why there is some truth to Derek's claim.

.....
.....

(2 marks)

3. We are able to spread our intake of fat-soluble vitamins out over time. Explain why we are able to spread out our intake of these vitamins.

.....
.....
.....
.....

(2 marks)

4. Our health is at risk if we don't get enough of each vitamin in our diet. Describe the health risks associated with the following vitamins deficiencies. (4 marks)

Deficiency	Health risks associated with this deficiency
Vitamin D	
Vitamin E	



Homework 5

Section 1 - Vitamins (water - soluble)

Answer the following questions, ensure you write in sentences and JUSTIFY your answers where necessary.

1. Our bodies need water-soluble vitamins for lots of different processes.

a. This vitamin is important for our nervous system and the production of red blood cells.

..... (1 mark)

b. This vitamin helps to protect our body from infection

..... (1 mark)

c. This vitamin is important for women who are planning pregnancy.

..... (1 mark)

2. Multivitamin supplements can provide us with greater amounts of vitamins than our body actually needs. Why is an excess of water-soluble vitamins unlikely to cause any side effects.

.....
.....
..... (1 mark)

3. Our bodies come into contact with free radicals every day. Explain the link between free radicals, antioxidants and vitamins A, C and E.

.....
.....
..... (2 marks)

4. A lack of vitamin B12 can cause tiredness and nerve damage. Explain why a vegan may not get enough vitamin B12 in their diet.

.....
.....
..... (2 marks)



