



# PiXL Independence

## Technology – Student Booklet

### KS4

## Food

### Contents:

- I. Multiple Choice Questions – 10 credits in total
- II. Revision Tasks – 20 credits each
- III. Wider Reading – 50 credits each
- IV. Extended Answer Questions – 70 credits each

## I. Multiple Choice Questions

1. Which food is high in protein?

- a. Cabbage
- b. Cheese
- c. Oranges
- d. Cucumber

2. Which **one** of the pasties is the highest in dietary fibre?

<b>a.</b> Beef carrot and onion pastry with short crust pastry - made with lard and butter	<b>b.</b> Cheese spinach potato pastry with puff pastry - made with margarine	<b>c.</b> Chicken carrot and onion pastry with short crust pastry - made with lard, butter and wholemeal pastry	<b>d.</b> Cheese spinach sweet potato pastry with puff pastry - made with lard and butter
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- a. Beef carrot and onion pastry
- b. Cheese spinach potato pastry with margarine
- c. Wholemeal chicken carrot and onion pastry
- d. Cheese spinach sweet potato pastry with lard & butter

3. Which **one** of the pasties is highest in iron?

- a. Beef carrot and onion pastry
- b. Cheese spinach potato pastry with margarine
- c. Wholemeal chicken carrot and onion pastry
- d. Cheese spinach potato pastry with lard & butter

4. Which **one** of the pasties contains the most saturated fat?
- a. Beef carrot and onion pasty
  - b. Cheese spinach potato pasty with margarine
  - c. Wholemeal chicken carrot and onion pasty
  - d. Cheese spinach sweet potato pasty with lard & butter
5. Which one of the pasties is highest in vitamin A?
- a. Beef carrot and onion pasty
  - b. Cheese spinach potato pasty with margarine
  - c. Wholemeal chicken carrot and onion pasty
  - d. Cheese spinach sweet potato pasty with lard & butter
6. Which **one** of the nutrients identified is not a macronutrient?
- a. Iron
  - b. Protein
  - c. Fat
  - d. Carbohydrate
7. What is the function of protein in the body?
- a. Growth & repair
  - b. Secondary source of energy
  - c. Body maintenance
  - d. All the above
8. High Biological Value (HBV) contain amino acids:
- a. In good supply
  - b. In limited supply
  - c. All the essential amino acids in good supply
  - d. In poor supply

9. How is fat stored in the body?

- a. In the blood
- b. In adipose tissue
- c. In muscle
- d. In the organs

10. There are 2 types of carbohydrates. What are they?

- a. Starch and salt
- b. Sugars and fat
- c. Starch and sugars
- d. Starch and fat

11. Which group of the following are all types of monosaccharides?

- a. Glucose, lactose, fructose
- b. Glucose, maltose, fructose
- c. Glucose, gluten, fructose
- d. Glucose, galactose, fructose

12. Which group of the following are all types of disaccharides?

- a. Sucrose, lactose, maltose
- b. Sucrose, maltose, fructose
- c. Glucose, maltose, fructose
- d. Guucose, galactose, lactose

13. Dietary fibre is also known as:

- a. Pectin
- b. Non-starch polysaccharide (NSP)
- c. Lipid
- d. Dextrin

14. Too much carbohydrate in the diet can cause:

- a. Stiff joints
- b. Constipation
- c. Obesity
- d. Heart disease (CH)

15. How much of our daily energy requirement should be supplied by carbohydrates?

- a. 40%
- b. 50%
- c. 66%
- d. 75%

16. Vitamin B9 (folate) helps to prevent:

- a. Anaemia
- b. Pellagra
- c. Spina bifida
- d. Scurvy

17. Vitamin (carotene & retinol) deficiency causes:

- a. Osteoporosis
- b. Night blindness
- c. Beri-Beri
- d. Anaemia

18. Deficiency in iron leads to:

- a. Anaemia
- b. Osteoporosis
- c. high blood pressure
- d. Scurvy

19. Fatty and oily food provide the body with:

- a. Iron
- b. Vitamin A, D, E, K
- c. Vitamin & group
- d. Calcium

20. Eating too much saturated fat can lead to:

- a. Stiff joints
- b. Constipation
- c. Anaemia
- d. Coronary Heart disease (CH)

## II. Revision Tasks

For your independence task for this level, produce an A4 placemat or 4 flash cards or an A4 mind map for the following 5 nutritional headings:

1. What is nutrition?
2. Nutrients (Macro and Micro) and water
3. Healthy Eating
4. Factors affecting nutritional needs
5. Diet & Health

Watch the following 5 clips regarding dietary disorders and allergies and summarise each in 5 bullet points:

1. <https://www.youtube.com/watch?v=5Km1fFLX6T8>
2. <https://www.youtube.com/watch?v=uoDoAasVe6I>
3. <https://www.youtube.com/watch?v=Oj9CRK26Dlo>
4. [https://www.youtube.com/watch?v=k0kaDWPED\\_U](https://www.youtube.com/watch?v=k0kaDWPED_U)
5. <https://www.youtube.com/watch?v=CnxzZXjbddk>

Summarise the following 5 sentences into 1 word or a mnemonic:

1. A healthy balanced diet can be achieved by following the 'Eat Well Guide', ensuring you consider your life stage, dietary needs and activity level.
2. A healthy balanced diet contains the correct proportions of carbohydrates, vitamins, minerals and water necessary for good health, to grow properly, be active and maintain a healthy body.
3. Diet is the food that we eat every day, there are also special diets.
4. Poor diet can result in a reduced life span, quality of life and poor health.
5. Our energy needs vary depending on our Basal Metabolic Rate (BMR), Physical Activity Level (PAL) and energy balance.

### III. In the News

Read the following news articles:

1. <https://www.theguardian.com/society/2017/nov/10/uk-most-obese-country-in-western-europe-oecd-report-finds>  
The Guardian 11th November 2017
2. <http://www.dailymail.co.uk/health/article-5079445/Fitbit-style-wristbands-NHS-obese.html>  
The Daily Mail 13<sup>th</sup> November 2017
3. <http://www.telegraph.co.uk/science/2017/11/13/gobbling-food-increases-risk-obesity-heart-attack-stroke-study/>  
The Telegraph 13<sup>th</sup> November

Consider the articles, your knowledge of nutrition and healthy eating, then suggest some ways in which the UK Government could help to reduce rates of obesity in the UK the social and economic cost of this and what impacts any successful ideas on UK society.

#### IV. Extended Answer Questions

Complete the extended answer questions.

1. Sarah is a 23-year-old office worker. She takes a packed lunch to work each day and is trying to lose weight.

Today Sarah takes the following packed lunch:

*Salmon salad with wild rice, tomatoes, rocket, roasted orange peppers. With a vinaigrette dressing. Bran muffin - apple and cinnamon Innocent smoothie*

Explain how the macronutrient content of the packed lunch provides Sarah with a balanced diet and how the meal could be modified to help her lose weight.

**[6 marks]**

2. Childhood dental cavities are increasing in Britain with an increase of children 4 and under having milk teeth extracted which by 24% since 2006/7.

Assess the various factors which contribute to childhood dental extractions and explain how a sugar tax may impact on these figures.

**[12 marks]**

3. Describe a breakfast that would supply the micronutrients needed for good dental health in young children. Give reasons for your choice.

**[6 marks]**

4. All special dietary needs groups have to consider how their nutritional needs can be fulfilled.

Describe the different nutritional needs to be considered when planning meals for:  
Coeliacs Lacto-ovo vegetarians

**[2 x 4 marks]**



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