



---

GCSE

# Food Preparation and Nutrition

8585/W

Report on the Examination

---

8585

June 2018

---

Version: 1.1

---

---

Further copies of this Report are available from [aqa.org.uk](http://aqa.org.uk)

Copyright © 2018 AQA and its licensors. All rights reserved.

AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

## **Introduction**

This was the first year of this new specification. The quality of communication was generally very good but there were many occasions when students need to be more concise in their responses.

### **Section A – Multiple choice questions**

- 1.1** 66% of students correctly chose vitamin as a micronutrient.
- 1.2** 73% of students correctly chose wheat as being linked to coeliac disease.
- 1.3** 80% of students accurately identified iron as the deficient mineral.
- 1.4** Only 29% of students could correctly identify the recommended percentage of energy from carbohydrates.
- 1.5** 67% of students chose the correct danger zone temperatures.
- 1.6** 78% of students correctly chose room temperature for the storage of bananas
- 1.7** 90% of students were able to identify water based methods of cooking.
- 1.8** Bacterial contamination was well known with 94% of students gaining the correct answer.
- 1.9** Convection was less well known with only 46% of students correctly linking this to liquids.
- 1.10** Vitamins B and C were correctly identified as water soluble vitamins by 50% of students.
- 1.11** 89% of students could correctly identify caramelisation.
- 1.12** 50% of students correctly linked vitamin D to the absorption of calcium.
- 1.13** 57% of students correctly identified flour as a primary processed food.
- 1.14** Eggs were well known as free range foods by 94% of students.
- 1.15** Flour extraction rates were less well known with only 44% gaining the correct answer.
- 1.16** 92% of students correctly linked apples to enzymic browning.
- 1.17** 72% of students correctly identified food miles, although many confused this with air miles.
- 1.18** Knowledge of antioxidants was less well known with only 26% of students selecting vitamin A.

**1.19** 68% of students correctly chose serving suggestions.

**1.20** 32% of students correctly identified nutrients linked to fortification.

## **Section B**

### **Question 2.1**

This was an AO1 question requiring students to recall their knowledge of personal hygiene. The majority of students correctly linked their answers to personal hygiene, giving well qualified answers such as clean aprons, blue plasters, and disposable gloves.

### **Question 2.2**

Most were able to identify food safety rules for both the prawns and the chicken but could not always follow this with a valid explanation. Some students failed to recognise that the prawns were cooked and as such wrote about placing them on the bottom shelf of a refrigerator and of juices dripping. The majority correctly identified the correct temperature for the refrigerator or the freezer, and the danger zone temperatures. There was good use made of the terms cross contamination, with better answers showing good understanding of the difference between dormant and active bacteria, some even naming specific pathogenic bacteria such as salmonella.

Reheating of cooked chicken was less well done. The majority of answers referred to heating to over 75°C and only reheating once but explanations were often vague and repetitive. A few correctly noted the use of a temperature probe and that chicken was a high risk food. A common misconception was that chicken had to be reheated above 63°C for it to be safe.

### **Question 3.1**

A challenging AO4 question which required students to both analyse and evaluate information. There was a wealth of information for students to access and it was pleasing to see that schools had prepared well for this type of question. There were some excellent, detailed answers, but also there were responses that gave the bare minimum of information. Better answers showed excellent understanding of dietary needs, nutritional function and were also able to closely tie these into the needs of the elderly throughout. Analysis was detailed and referred to both ingredients and nutritional content. However, little reference was made to Reference Intake figures or their meanings.

Less successful responses gave answers that simply listed nutrients found in the ingredients without making any evaluation to use in the body or more particularly the elderly. These answers were very generic in nature and only accessed the lower mark band.

### **Question 3.2**

This question was generally well answered with most students giving at least one function of dietary fibre. Better responses listed a range of conditions that can be attributed to lack of dietary fibre. Students needed to include modifications in order to be awarded credit in the top band. The most common modifications given were to add vegetables, use of wholemeal flour in the pastry or

leaving the skin on the potatoes. Common misconceptions were boiling or steaming the potatoes to keep the fibre in, others referred to the fat content, not the dietary fibre.

#### **Question 4.1**

This was generally well answered. The starch based roux sauce was known by a majority of students.

#### **Question 4.2**

This AO1 question tested the recall and knowledge of making sauces. This was generally well answered with the most popular answers being: to prevent lumps, stop sticking and burning. Better answers gave details related to obtaining the correct consistency or to allow full gelatinisation.

#### **Question 4.3**

This AO2 question required students to explain fully how gelatinisation takes place. Better students gave detailed answers which included key words such as absorb, swell, burst, full gelatinisation and gave accurate temperatures to back up their knowledge, this enabled them to be credited in the top mark band. Less successful answers gave confused details, often referring to sugars not starch, and making reference to the gluten content of the flour and referring to the use of gelatine sheets to set the sauce.

#### **Question 4.4**

This question was generally well done across the ability ranges. Students could name raising agents and products that use them. There were several misconceptions: Self raising flour, lemon juice egg whites and yeast were often used as chemical raising agents and steam used as a biological raising agent.

The description of how they worked was less well answered. Students lacked the terminology to describe clearly the actions of raising agents, although the use of carbon dioxide was well known. Some correctly mentioned the need for the correct conditions for yeast to work, with better answers talking of fermentation and alcohol produced.

Frequently, students gave the correct answers but could not match them up to chemical or biological agents.

#### **Question 5.1**

An AO4 question which required students to analyse and carry out evaluation. There was good knowledge about organic foods and this was used to enhance the quality of answers given. The most frequent factors analysed by students were personal preferences, health, costs, media, availability, food miles, environmental concerns and animal welfare. Better answers linked these closely to reasons why sales of organic foods have increased. Lower level responses failed to make sufficient links and focused on only one or two of these and often only gave a description of what organic foods are.

#### **Question 5.2**

This question was generally well answered, with the advantages of GM foods being better known than the disadvantages. Focus was often given to the ethical and environmental concerns and

fears that there is insufficient information about the long term effects. When referencing advantages, it was clear that students were knowledgeable about the benefits to food security, nutrient content and the improvement of foods.

### **Question 6.1**

Many students misinterpreted the focus of the question regarding how the different heat treatments allowed milk to last longer, simply repeating times and temperatures given in the stem. Better responses gave storage times for the different milks, most gained marks by identifying that length of storage was linked to killing the bacteria to make the milk safe to consume. Some answers showed confusion over how many bacteria were killed by the different methods and that the bacteria gave milk flavour. Many simply repeated the stem saying the treatment made milk last longer, without giving extra detail.

When asked how these treatments affected the nutrition, taste and appearance of milk the majority of students gave generic answers which lacked the detail needed for award of credit. Answers talked of thick and thin milk, suitability of milk for babies and a varying range of colours. Better responses took each type of milk in turn and spoke of any changes envisaged, caramelisation of milk sugar and protein denaturing.

### **Question 6.2**

Most students knew that food additives are used to add flavour and colour and to improve shelf life. Better answers also included improvements in texture of foods. The concerns were less well detailed. Many students referred to making food cheaper and making foods that could become addictive. Better answers referred to allergies, hyperactivity in children, and use of additives to disguise inferior food products.

### **Mark Ranges and Award of Grades**

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.

### **Use of statistics**

Statistics used in this report may be taken from incomplete processing data. However, this data still gives a true account on how students have performed for each question.