# GCSE FOOD TECHNOLOGY COURSEWORK GUIDELINES

### 1) Task Title

Many school meal services rely on ready-made dishes or products, which can be heated or served quickly and conveniently.

Make a range of meal options for a school canteen that follow current healthy eating principles and have pupil appeal.

# 2) Gantt Chart

Gantt charts are a way of planning that takes account of time. This is particularly useful when more than one thing is happening at once. It helps you plan and manage your time.

Refer to the example of Gantt chart.

# 3) Design Brief

It must start with:

'Design, make and evaluate a marketable product suitable for a school canteen meal which can be heated or served quickly or conveniently. The target group is teenagers and the product must have pupil appeal.'

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You can then add to this to make your work more individual e.g. Hand held snack}}
Main course     } you will deduce these from your questionnaire.

Dessert     }
Sports nutrition }
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#### 4) Analysis

- Imagine you are explaining to a friend from another school what the task is asking you to do and how you will go about it. (One paragraph).
- Make sure you include the following words/phrases in your explanation:
- Research/ develop ideas/ trial products/ modify/ final product/ evaluate .

## 5) Brainstorm school meals

The 'Inspiration' package on the school network is an excellent tool. Not only will it create an impressive mind map but will also demonstrate use of ICT.

Consider the following factors:

Pupil appeal, Dietary Requirements, Healthy Eating, Cost, Value for money, Variety.

### 6) Questionnaire

This is a consumer survey to find out the needs of your target market group (teenagers).

- Devise 8-10 questions approx.
- Avoid open ended questions, stick to multiple choice answers,
- Remember you are aiming to find out the gap in the market
- Interview 15-25 people.
- You need to find out the following information: Gender

Age

Where you eat lunch

Why you don't eat school meals

Dietary needs e.g. vegetarian, sports nutrition

Healthy eating

Budgetary constraints (Cost)

Types of food

Hand held snacks, desserts

Any other relevant questions

### 7) Reasons for Questions

Say why you have asked the questions.

## 8) Tally

Produce a tally chart of your results (we don't want 15 question answer sheets).

# 9) Graphs

Try to fit these onto one side of A3 - use Excel and ensure each graph is labelled with the question.

### 10) Comments

State what each graph tells you and you may wish to comment on reasons for these results.

## 11) Conclusion

You now have a picture of what people want and should be able to spot the gap in the market.

You may want to start it 'my product must be ......'

Numbers 12-22 involve research.

Information booklets are available from your teacher.

You will also need to do Internet research, the following are useful websites:

British Nutrition Foundation - <a href="https://www.nutrition.org.uk">www.nutrition.org.uk</a>
DATA food - <a href="https://www.foodtech.org.uk">www.foodtech.org.uk</a>
Food Forum <a href="https://www.foodstandards.gov.uk">www.foodstandards.gov.uk</a>
Food Standards Agency <a href="https://www.sainsburys.co.uk">www.sainsburys.co.uk</a>
Meat and livestock commission <a href="https://www.britishmeat.org.uk">www.britishmeat.org.uk</a>
Fronk finit and worstables <a href="https://www.foidh.go.uk">www.foidh.go.uk</a>

Fresh fruit and vegetables <u>www.ffvib.co.uk</u>

You can use textbooks, leaflets from supermarkets, magazines, newspaper articles and school videos.

KEEP A LIST OF RESOURCES FOR YOUR BIBLIOGRAPHY, THIS MEANS WHERE YOU GOT YOUR INFORMATION FROM.

#### 12) Packaging

- Function / Purpose
- Packaging materials
- Environmental considerations
- Labelling annotate an existing label

## 13) Health and Safety and temperatures

- Health and safety in relation to Food Safety regulations (1995)
- The role of Environmental Health officers
- Temperature control
- Personal hygiene
- Cleaning procedures

### 14) Preservation

Underlying principles

Industrial methods such as canning and cook chill, dehydration etc.

## 15) Production methods

E.g. one off, batch and continuous.

#### 16) Conclusions

These are the conclusions to 12 - 15 (one paragraph)

Conclusions must be drawn as to how you might use this information in your product.

WITHOUT THIS YOU WILL GAIN NO MARKS IN THIS SECTION.

## 17) COMA

Committee on Medical Aspects of Food Policy

Refer to handout from teacher.

## 18) Healthy Eating

Refer to handout on Government guidelines to a healthy diet.

19) Dietary requirements for teenagers.

Refer to textbooks and handout on RNI and EARs

#### 20) School meals research

Current news items
Refer to BBC website - <a href="www.bbc.co.uk">www.bbc.co.uk</a>
Food Standards Agency - <a href="www.foodstandards.gov.uk">www.foodstandards.gov.uk</a>

# 21) SNAG

Schools Nutrition action group - see SNAG website

### 22) Conclusions

Repeat number 16

# 23) Design Specification

Refer to the information sheet and proforma

Once you have summarised your research information, you are ready to write a design specification. This should give details of the products form, function and budgetary constraints.

This should be thorough and detailed - you will need to refer to it when you write your evaluation. This means you will get a higher mark for this section.

### 24) Brainstorm product ideas

- Brainstorm at least 20 product ideas (recipes). (Use Inspirations)
- Recipe books and supermarket websites will give you ideas.
- Your choice of recipe must reflect and relate to results of your questionnaire, research and specification.
- Select and highlight 3 products that you intend to trial. (Actually cook in school).
- Discuss your choices with your teacher and make sure your recipes show skill (you can not gain an A - C grade otherwise.
- Choose a recipe that can be easily modified.

### 25) Suitable packaging /portion control/regeneration/method of serving.

For your 3 products suggest all of the above.

### 26) Disassembly of similar products.

School will provide 2 products for class analysis and you will be expected to analyse 2 further products, which are similar to your trial products. Results must be recorded on a product analysis sheet.

## 27) Conclusions

These go onto your product analysis sheet

### 28) Research into area of own interest

#### Examples:

- Snack products
- Vegetarianism
- Low fat

Up to one A4 side - record the sources of information.

# 29) 2<sup>nd</sup> Questionnaire

You will do this when you have trialled your 3 products (see 35, 36 and 37) You will choose one of these as a final product and need to know in greater detail what people actually require of your product.

E.g. portion size, cost, flavours, healthy options and form.

Ask about 5 questions to ten people.

# 30) Reasons for questions

Explain why you have asked each question.

31 - 34) - see 7 - 11.

# 35 - 37) Trial Practicals

To be successful you will need to select a range of appropriate tools, equipment and processes and use them with a high degree of skill and accuracy to make a product.

#### Written Evidence includes:

- Photo with name, candidate number, centre name and number and date.
- Ingredients, quantity, cost and function.
- Flow Chart.
- Equipment used.
- HACCP
- Nutritional Analysis (Food in focus package on school network)
- Star chart
- Testing and tasting
- Evaluation.

### 38) Final Product Idea.

- Say why you are rejecting the 2 products ideas
- Explain why you have chosen the winner.
- Evaluate against your design specification as per page 110 Edxecel Food Technology textbook.

### 39) Modifications to be made to final product.

Modifications to your final product may involve:

- Reducing cost of ingredients.
- Making product more nutritious or healthy.
- Changing ingredients to improve flavour, texture, aroma.
- Changing portion size.
- Altering the preparation of ingredients or the shape or decoration.

## 40 - 42) Modified Practicals

Written evidence as per trial practicals but also include evaluation against specification and possibility of large scale manufacture.

### 43) Information on CAD/CAM and their application to your product.

See handout on CAD/CAM - describe the role of CAD/CAM would play in the manufacture of your product.

## 44) Final Product Manufacturing Specification

This differs to a design specification. A manufacturing specification is written once the final product has been decided. It is for the factory to use, so they know what is required and how to make it.

See page 109 of Edexcel Food Technology textbook.

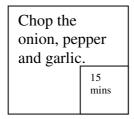
## 45) Large HACCP Chart.

See proforma.

## 46) Flow Chart with photos, timings and Health and Safety.

When you cook your final product, your teacher will photograph you at each stage and the photos will be used to illustrate your final flow chart.

Timings will be added to the corner of each process step. E.g.



Health and Safety - to get full marks you will need to mention the names of at least 2 or 3 bacteria e.g. Salmonella, Listeria, Staph. Aureus. You will also need to mention that products need to achieve a core temperature of 70°C and chilling temperature of 0-5°C where applicable.

Quality Control - this refers to the quality control checks you carried out e.g. weighing and measuring, using scales, templates etc.

#### 47) Final Evaluation against specification

Evaluate your final product against the design specification (no 23) see 110 in Edexcel Food Technology textbook.

## 48) How could this product be developed further?

Give a few bullet points e.g. make a vegetarian version by replacing chicken with Quorn.

## 49) Cover page with name, candidate and centre number.

This will be your first page, ensure you have the correct candidate number. Toothill centre number is 28308.

# 50) Pages numbered and contents page.

## 51) Bibliography

List the books, magazines, internet sites etc. (Title and author)

## 52) CAB and final photo

The CAB is the official mark sheet to which you will attach a photograph of your final product.

## **ADVICE**

- 1) Store all your work on disc ( and store the disc separately from your coursework)
- 2) Use no more than 25 sides of A3. Use size 11 or 12 font.
- 3) Make sure you use ICT as much as possible.
- 4) Include magazines, pictures, graphs, tables, clipart, sketches and diagrams to illustrate different types of communication. This will automatically gain you 3 marks.