

Plan, prepare, cook and present a range of dishes that meet the dietary needs of an individual with cardiovascular health problems. Present two dishes.

Name: _____



Marking

This is the only NEA you will have to complete this year and it is worth **50%** of your total GCSE grade. You will be given deadlines for each section to make sure that you meet the final deadline. The marks for each section are displayed below.

You are not allowed any specific feedback on what you have done or your recipe choices. However, Ms Read will address the whole class with top tips. Make sure you record these in your booklet. Keep this booklet with you for every lesson so you know what you need to do and tick off the tasks as you complete them. Record your Jenny Ridgewell user name and password below so you are able to log on to complete nutritional analysis for your evaluation.

Food preparation assessment

Marking criteria	Maximum mark	Mark awarded
Section A Researching the task	6	
Section B Demonstrating technical skills	18	
Section C Planning for the final menu	8	
Section D Making the final dishes	30	
Section E Analyse and evaluate	8	
Total mark	70	

Your completed NEA is due in on:
10th February

Log in: _____

Password _____



Deadlines

Research: 23rd September

10 possible dishes: 7th October

Write up of skills trial dishes: 9th December

Reasons for choice and recipes for final exams handed in: 16th December

Time plan: 17th January

Group 1 exam: 20th January

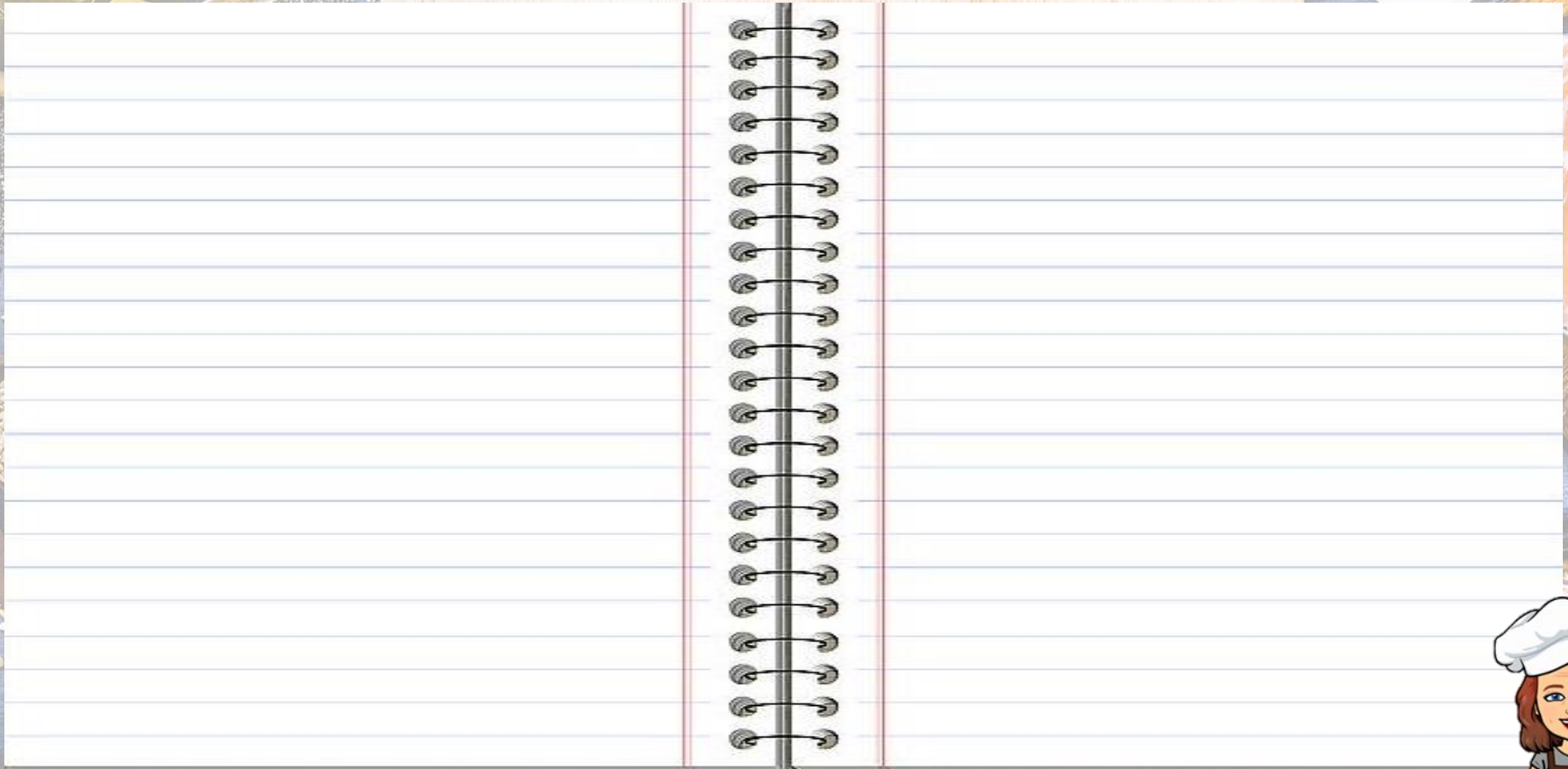
Group 2 mock exam: 27th January

Evaluation: 10th February



Bibliography

You will need to record all books used and websites visited throughout your project. Please record them below:

A spiral-bound notebook with two blank, lined pages. The pages are white with light blue horizontal ruling. The spiral binding is in the center, and the pages are slightly curved. The notebook is set against a background of various food items, including nuts, broccoli, salmon, and a chef's hat.

A. Research

Section A: Researching the task (6 marks)

Students should:

- Analyse the task by explaining the research requirements
- Carry out relevant research and analysis related to the: life stage, dietary group or culinary tradition
- Identify a range of dishes eg by mind-mapping, or using annotated images
- Select and justify a range of technical skills to be used in the making of different dishes

5-6	<ul style="list-style-type: none">• Relevant, concise and accurate research that shows discrimination when selecting and acquiring information to answer the task.• Detailed understanding and analysis of the dietary group, life stage or culinary tradition.• Selected a varied range of relevant dishes closely reflecting the research and chosen task.
3-4	<ul style="list-style-type: none">• Relevant research carried out related to the task.• Includes analysis of the dietary group, life stage or culinary tradition.• Selected a range of relevant dishes reflecting the research and chosen task.
1-2	<ul style="list-style-type: none">• Limited research carried out.• Limited analysis of the dietary group, life stage or culinary tradition.• Selected some trial dishes reflecting the research and chosen task.



A. Research

Section

A

Note's from what Ms Read said:

What I need to do:



A. Research

Task analysis looks at all of the key words in the design brief. You need to:

- ✓ Explain what they all mean
- ✓ What you will have to research/investigate
- ✓ How you will use this information.

Section A: Researching the task

Task analysis:

I have decided to choose this task because I think it would be very interesting and the research is very varied. I also think this is suitable for today because type 2 diabetes is a growing issue in society. I have a deep interest in nutrition and look forward to researching specific dietary needs.

Present: if I want to achieve aesthetically pleasing dishes, then I need to consider all aspects including colours; heights and their aroma.

Plan: I will need to arrange my time carefully to enable the best of my ability and remain coordinated throughout the practical time.

Cook: I aspire to use a variety of different cooking methods with a range of different ingredients to create a blend of desirable qualities. I need to ensure to properly season and possibly experiment with spices to maximise the flavour of the ingredients.

Type 2 diabetes: a common condition that involves blood sugar levels; glucose and insulin. I am going to investigate different factors that affect this

Prepare: I will be able practice my preparation skills first in the technical trials and then develop these further in the final dishes –acting on previous feedback.

Dietary needs: this can include things such as intolerances or allergies but also links to medical factors which in this case diabetes can be affected by lifestyle factors including PAL levels and food choice. It can also be a choice e.g. vegetarians.



A. Research

After task analysis you will look at the **research** you need to do before you come up with dishes that meet your brief.

For this project you will:

- ✓ Explain what Cardiovascular health problems are.
- ✓ Explain how each one is caused.
- ✓ Explain what guidelines someone who has a cardiovascular health problems would need to follow in their diet. Explain what types of foods they should be eating.
- ✓ Explain other lifestyles changes they might have to make.

You can include photos.

Deadline 23rd September

Task analysis

Research of cardiovascular health problems.



A. Research

After research you will **select 12 dishes** that meet the needs of your brief that you have identified through your research.

For each dish you pick you need to explain:

Deadline 7th October
10–12 Possible dishes

- ✓ Your reasons for choice
- ✓ The nutritional content of the dish. Must fit Eatwell guide and nutritional guidelines someone with cardiovascular health problems should follow.
- ✓ Technical skills used to make the dish (refer to the 12 skills you follow in practical lessons)
- ✓ Presentation techniques

Dish type	Reasons for choice	Nutrition	Technical skills	Finishing techniques
Vibrant veg tagine with flatbreads.	This wonderful dish is loaded with a range of luscious veg and low in fat and sugar. By making this dish I am able to experiment with a variety of adventurous spices. I will also be able to make my own dough for the flatbreads. I chose this dish because the colours were appealing. This would be a great alternative to a ready-made curry for a diabetic.	The chickpeas provide protein; there are B and C vitamins from the array of veg (tomatoes, carrots and courgettes.) the sweet potato incorporates carbohydrates with a lower glycaemic index and acts is more nutritious than a regular potato. The flatbread also add some starchy carbohydrates.	Weighing and measuring ingredients. Preparing and cutting vegetables; making a dough; kneading and shaping a dough. Griddling the flatbreads.	I could mould the couscous/ rice onto the plate, and possibly spread a dollop of low- fat soured cream on the side with a few sprinkles of pomegranate seeds.



B. Demonstrating technical skills

Section B: Demonstrating technical skills (18 marks)

Students will make 3–4 dishes to showcase their technical skills. Students should:

- ✓ Demonstrate technical skills in the preparation and cooking of three to four dishes.
- ✓ Select and use equipment for different technical skills in the preparation and cooking of selected dishes. Food safety principles should be demonstrated when storing, preparing and cooking.
- ✓ Identify the technical skills within each dish. Photographic evidence will be needed to authenticate the technical skills.
- ✓ Students will select three dishes to make which allow them to showcase their technical skills to make for their final menu. The final dishes will relate to the task and research and be dishes that have not been made previously. For example, a student could make the following initial dishes to demonstrate technical skills:

1. Fish pie (technical skills shown: filleting fish, making a sauce, vegetable preparation, piping potato).
2. Beef lasagne (technical skills shown: pasta making, sauce making, vegetable preparation).
3. Traditional quiche (technical skills shown: shortcrust pastry, lining a flan ring).
4. Flavoured bread rolls (technical skills shown: bread making: kneading, shaping).

For the final menu, they could choose to produce:

1. Fish cakes with parsley sauce.
2. Cannelloni with homemade pasta and tomato ragu sauce.
3. Roasted vegetable flan with reduced fat ingredients to improve the nutritional properties.



B. Demonstrating technical skills

Section

B

Note's from what Ms Read said:

What I need to do:



B. Demonstrating technical skills

15–18	<p>Competently executes a wide range of complex technical skills/processes (eg filleting fish or cutting vegetables with precision and accuracy eg julienne) to produce excellent quality dishes.</p> <ul style="list-style-type: none"> • Selects and uses appropriate equipment confidently and accurately. • Extensive review of technical skills that leads to appropriate and justified final dishes.
10–14	<ul style="list-style-type: none"> • Executes technical skills/processes with accuracy, including some complex technical skills (eg filleting fish or cutting vegetables with precision and accuracy eg julienne) to produce very good quality dishes. • Selects and uses appropriate equipment accurately. • Very good review of technical skills leads to appropriate final dishes.
5–9	<ul style="list-style-type: none"> • Demonstrates technical skills/processes with some accuracy to produce good quality dishes. • Selects and uses equipment with some accuracy. • Good review of technical skills leads to appropriate final dishes.
1–4	<ul style="list-style-type: none"> • Basic technical skills/processes (eg slicing raw meat, peeling fruits and vegetables) used to produce adequate quality dishes. • Difficulty in using some equipment. • Some review of the technical skills leads to the final dishes.

Skills trial

Recipe 1: Mushroom Tagliatelle

Reasons for choice: I chose this dish because the pasta and the sauce can be high in fibre when wholemeal variations are used. In addition, making pasta and the sauce is a complex skill that I would be demonstrating. The dish is original and would appeal to the teenage market. There are many ways the dish could be developed,

Ingredients: 500g mixed mushrooms sliced, 25g dried porcini, 1 Onion, A clove of garlic, 10ml Olive Oil, Parsley, 50g Parmesan, 200g Pasta flour, 2 Eggs.

Skills: Making pasta is an extremely complex skill: rolling the dough out to the correct thickness, forming the correct shapes, making sure the dough is smooth. In addition, seasoning the dish and cooking the mushrooms when incorporating all the accompaniments takes care and consideration. A sauce also needs to be made

Sensory evaluation:

It was important to test the tagliatelle in terms of the sensory characteristics. The appearance scored 17/20. The tasting panel liked the contrasting appearance of the pasta and the sauce. The basil was a good garnish. The purpose of this skills test was to test homemade pasta as this is something I have not made before. The texture scored 18 out of 20. The tasting panel were very complimentary about the texture; explaining that it was light and much better than shop bought pasta. I hope to use fresh pasta as part of my final menu. To increase the fibre I will use a blend of wholemeal flour. The taste scored only 14 out of 20. The panel thought the pasta was a little bland and could have more flavouring such as chilli to give a more appetising overall flavour. When using fresh pasta I will need to ensure that I use strong flavours in the sauce.

	Taster 1	Taster 2	Taster 3	Taster 4	Total
Appearance	4	5	4	4	17
Texture	4	4	5	5	18
Taste	4	4	3	3	14
Aroma	3	2	4	4	13



B. Demonstrating technical skills

Section

B

After you have cooked your 3-4 dishes you need to pick two to develop into **2 new products**.

You then need to explain fully your reasons for choice. You can add accompaniments for your practical exam. In your reasons for choice you need to justify the appropriateness of the final dishes in terms of:

- ✓ technical skills
- ✓ nutrition
- ✓ ingredients
- ✓ cooking methods
- ✓ food provenance
- ✓ sensory properties
- ✓ portion size

Deadline 9th December
Skills trial write up for each dish cooked
Reasons for choice completed for both dishes.
Copies of recipes for exam handed in.

Section C: Planning for the final menu

1. Initial dish: Tagliatelle arrabiata

Final dish: Rotolo of spinach, butternut squash and feta cheese (serves 6).

A sumptuous blend of baked butternut squash, greens, salty feta and nutmeg; all encased in a soft whole-meal pasta and baked in a rich tomato sauce. The technical skills involved in this dish include: making a pasta dough and rolling into pasta sheets, making a filling and making a sauce. This is ideal for my theme (type 2 diabetes) because the pasta can be made with whole-wheat flour so that the dish is higher in fibre- which aids digestion and helps control blood sugar levels. Without enough fibre, problems such as constipation may arise. In addition, the spinach benefits eye health and reduces blood pressure levels. The feta cheese adds a hint of calcium – good for the bones and teeth, alongside vitamins E from butternut squash and A from the tomato sauce- both of which are antioxidants. The main cooking method in this dish is baking followed by sautéing. Linking to food provenance, when making this dish I will make sure I dispose of my food waste in the compost bin so the waste is re-used.



Ingredients: 1 butternut squash (roughly 2 kg), 1 red onion, diced, olive oil, 1 tsp dried thyme, 500 g frozen spinach, 1 whole nutmeg, for grating, 4 clove garlic, 1 jar (700 mL) passata, 6 large fresh pasta sheets (roughly 0.5 cm x 20 cm each) made from one egg yolk, one whole egg and strong whole-meal bread flour, 50 g feta cheese, 20 g Parmesan cheese, a few sprigs fresh sage (optional). Despite being Italian-based, this dish utilises many flavoursome locally-sourced ingredients. It has a high vegetable and fibre content as well as being very low in saturated fat and sugar. The glycaemic index is also taken into consideration by the usage of whole wheat flour.



C. Time Plan

Section C: Planning for the final menu (8 marks)

produce a detailed time plan for the production of the final two dishes including appropriate techniques. Within the plan, food safety principles will be demonstrated when storing, preparing, cooking and presenting the final dishes demonstrate appropriate use of the three hours to dovetail tasks to prepare, cook and present the final two dishes

7-8	<ul style="list-style-type: none"> Detailed review and full justification of the choice and appropriateness of the final two dishes related to the task and research eg nutrition, ingredients, cooking methods. Detailed, realistic, logical and accurate plan including selecting appropriate techniques for the making of the final dishes. The time plan will include accurate timings, reference to food safety, relevant and accurate dovetailing.
5-6	<ul style="list-style-type: none"> Reviews and explains the choice and appropriateness of the final dishes related to the task and research eg nutrition, ingredients, cooking methods. Produced a clear, logical and accurate plan including selecting appropriate techniques for the making of the final dishes with some dovetailing. The time plan will include appropriate timings, reference to food safety, with appropriate dovetailing.
3-4	<ul style="list-style-type: none"> Limited reasons for choice of the final dishes eg nutrition, ingredients, cooking methods. Produced a plan for the making of the final dishes. The time plan will include some appropriate timings, reference to food safety and limited dovetailing.
1-2	<ul style="list-style-type: none"> The justification for the choice of the final dishes is not clear. Simplistic plan for making the final dishes, reference to food safety with several inaccuracies.

Deadline 17th January

Time plan completed and handed in.

You will also need a copy to use in your practical exam.



C. Time Plan

Note's from what Ms Read said:

What I need to do:



C. Time Plan

Time	Process	Food Safety Principles/ Accuracy



Timings- Need to be accurate. Better to start at a time e.g. 9:30 and put actual time you will do things instead of 2 mins, 5mins etc.



Process- Make sure all steps of all components you are going to cook are in the correct order and are detailed.



Safety and hygiene- Include personal hygiene, storage and cooking temperatures, food and personal safety.
Quality Checks- include sizes, temperatures, checking product is cooked, visual checks, tasting etc.

Safety and Hygiene	Process	Quality Checks
<p>Basic hygiene: When to wash hands, apron on, hair tied back.</p> <p>Personal safety: Oven gloves, standing back from oven to allow steam to escape, pan on pan rest, pan handle to the side when it's on the hob, draining hot water in sink</p> <p>Knife skills: Claw grip/bridge hold, fingers away from grating blade, Electrical equipment: care taken with sharp edges of food processors, electric not near water or wet hands.</p> <p>Food safety: Temperature of fridge/freezer, checking 72°C</p> <p>Food Hygiene: Coloured chopping boards, washing eggs, use of waste plate.</p>	<p>These points should be detailed so that it is obvious what you are doing. Reread after you have written them to make sure that you have made sense. (harder than it sounds) Your points should include:</p> <ul style="list-style-type: none"> • Timings • Ingredients used • Equipment used 	<p>Visual checks: Check for bruising, mould on products, visible checks of dates on packaging, tares/damage to packaging, checking ingredients mixed.</p> <p>Visual checks cooking: Meat turning brown, onions starting to soften, check dicing pieces are the same size.</p> <p>Timing checks: Use of phone, visual checks every few minutes.</p> <p>Cooking checks: Preheating oven, checking water is boiling before adding pasta/veg, checking fat is hot before frying, greasing baking tray so product doesn't stick</p> <p>Cooked checks: Temperature probe in meat, change in colour, hollow sound on base of bread, taste checks to ensure cooked, using knife to check cooked.</p>
	<p>Quality Checks</p> <p>Weight checks: Electrical scales, accurate measuring, level tsp, tablespoon, checking weight on packet,</p> <p>Measuring controls: Weighing burgers, rolls all the same weight, use of ruler to check thickness, use of setting on pasta machine to check correct consistency.</p>	

Between 10:10 and 10:30

Wash all equipment up first and wipe down work surface.
Make mayonnaise: separate out one egg yolk and add to the other egg in a bowl. Measure out the olive oil and add gradually while constantly mixing with an electric whisk. Then mix in the lemon juice/ white wine vinegar.
Make spinach and onion filling for rotolo: chop up the onion and cook on a medium-low heat with oil, thyme and salt and pepper, for around 8 minutes. Then stir in the frozen spinach and cook for around 10 minutes, or until the water has evaporated. Remove this mixture from the heat and season with salt, pepper and nutmeg.

Wash the equipment in hot soapy water and wipe down work surface with a hot cloth and sanitiser.
Discard of the egg shells straight away and wash hands to prevent the risk of salmonella. Cover and place the mayonnaise in the fridge to avoid cross-contamination and slow the growth of bacteria down.
Use a brown chopping board and sharp knife the chop the onion and place in the pan over a medium-heat-making sure the pan handle is well out of the way.



D. Practical Exam

Section

D

Section D: Making the final dishes (30 marks)

Students will prepare, cook and present a menu of two dishes within a single period of no more than three hours. Students should prepare, cook and present the final dishes, demonstrating:

- selection and use of equipment for different technical skills in the preparation and cooking of the final two dishes.
- knowledge and application of food safety principles (including temperature control) when storing, preparing, cooking and presenting the final dishes
- selection, knowledge and use of ingredients when producing different dishes
- appropriate use of the two hours to demonstrate: technical skills, processes and the use of equipment
- execution of a range of technical skills with accuracy
- good judgement with regard to cooking times and methods and the sensory properties of each dish
- organisation and good planning using the time plan and linking tasks within the 3 hours
- a range of finishing techniques to produce a high standard of presentation of the final dishes.

Students must include photographic evidence of the final dishes. Students will be rewarded for the use of a range of technical skills and the quality of outcomes achieved. The complexity and challenge of the dishes produced is linked to the complexity of the skills involved in producing the dish.

To achieve the top bands students must attempt complex skills. Selecting unchallenging skills would prevent students reaching the top mark band.

Practical exams:

17th January or 24th January

Ms Read will explain which session you are in



D. Practical Exam

25-30	<ul style="list-style-type: none">• Competently executes a wide range of complex technical skills and processes to an excellent standard (such as filleting fish or cutting vegetables with precision and accuracy eg julienne) in the making of the final dishes.• Selects and uses appropriate equipment with precision and accuracy• The final dishes show a high level of demand, complexity and challenge.• Final dishes include a wide range of finishing techniques such as garnishing and decoration eg piping. All dishes are accurately presented with attention to detail and finished to an excellent standard.• Excellent evidence of time management. All three dishes produced very successfully within the three hour period. The student followed the time plan closely using the correct sequence with excellent linking and application of food safety principles.
19-24	<ul style="list-style-type: none">• Competently executes a range of technical skills, including some complex skills (such as filleting fish or cutting vegetables with precision and accuracy eg julienne) to a very good standard in the making of the final dishes.• Selects and uses appropriate equipment accurately.• The final dishes show complexity and challenge.• The final dishes show a range of appropriate finishing techniques and are presented to a very good standard.• Very good evidence of time management. All dishes were produced successfully within the 3 hour period. The student followed the time plan using the correct sequence with very good linking and application of food safety principles.
13-18	<ul style="list-style-type: none">• Executes technical skills and processes to a good standard (such as cutting vegetables accurately eg baton) in the making of at least one of the final dishes.• Selects and uses appropriate equipment with some accuracy.• At least one of the final dishes show some demand and challenge.• The final dishes show some appropriate finishing techniques such as garnishing and decoration and are presented to a good standard.• Good evidence of time management. All dishes were produced within the 3 hour period. The student followed the time plan in a logical sequence with good linking and application of food safety principles.
7-12	<ul style="list-style-type: none">• Executes technical skills and processes with some inaccuracies in the making of the final dishes.• For the majority of the processes appropriate equipment selected and used with some accuracy.• Final dishes show some demand but limited level of skill.• Final dishes include some finishing techniques but lack of consideration related to some of the presentation.• Satisfactory attempt to follow the time plan with adequate application of food safety principles.
1-6	<ul style="list-style-type: none">• Limited/basic technical skills (eg slicing raw meat, peeling fruits and vegetables) and processes used with inaccurate outcomes in the making of the final dishes.• Some attempt to select appropriate equipment.• Final dishes lack demand and include mainly basic skills.• Final dishes are of a basic standard with a lack of appropriate finish and presentation.• Time plan not used for most or all of the making of the final dishes.



D. Practical Exam

Section

D

Note's from what Ms Read said:

What I need to do:



D. Practical Exam

Section

D

On the day of the practical exam:

You can drop your ingredients in the food room from 8:30am. Preparation time from 1:00pm. The exam will start at **1:30pm**. You need to make sure that you come with:

- A copy of your recipes and time plan
- A list of ingredients you can check against.
- All ingredients, pre-weighed if applicable and labelled.
- Any tins/ presentation plates.

In the preparation time you can:

- Preheat oven.
- Weigh and measure.
- Grease baking trays.
- Boil kettles.
- Collect equipment.
- Open cans.
- Set out all of your ingredients.
- Set out all of your equipment.



E. Evaluation

Section E: Analyse and evaluate (8 marks)

Students will carry out sensory evaluation and record the results for all of their practical dishes. For the final dishes, students will carry out and record nutritional analysis, costing and identify improvements to their dishes. Students should:

- record and analyse the sensory properties (taste, texture, aroma and appearance) of the final practical dishes
- carry out nutritional analysis of the final dishes
- analyse the cost of the three final dishes.

Clear links should be evident from analysing the data and information when reviewing the completed work. **This leads to qualified suggestions for improvements/further modifications to the final dishes.** This could include:

- ✓ nutrition
- ✓ skills
- ✓ sensory characteristics
- ✓ presentation of the dishes.



E. Evaluation

Section

E

7-8	<ul style="list-style-type: none">• Accurate nutritional analysis data for the final dishes which is fully explained with conclusions and recommendations.• Accurate and excellent knowledge of nutrition is demonstrated.• Detailed and appropriate sensory testing with detailed analysis and evaluation.• Final dishes are costed with the results of this costing analysed and explained.• Detailed, relevant and creative improvements suggested for the final dishes.
5-6	<ul style="list-style-type: none">• Nutritional analysis for the final dishes is explained with conclusions and some recommendations suggested.• Very good knowledge of nutrition is demonstrated.• Sensory testing with very good analysis and evaluation.• Final dishes are costed with some analysis.• Relevant improvements suggested for the final dishes
3-4	<ul style="list-style-type: none">• Nutritional analysis for the final dishes includes some conclusions.• Good knowledge of nutrition is demonstrated.• Sensory testing with some analysis.• Some costing of the final dishes with limited analysis.• Some suggested improvements of the final dishes.
1-2	<ul style="list-style-type: none">• Limited or no nutritional analysis is carried out for the final dishes.• Evidence of sensory testing with little or no analysis.• Little or no evidence of costing of the final dishes.• Limited or no improvements are suggested for the final dishes.

**Deadline:
10th February**



E. Evaluation

Section

E

Note's from what Ms Read said:

What I need to do:



E. Evaluation

Section D: Making the final dishes



Bhaji burgers with whole-meal bread buns and mayonnaise:

Sensory analysis:

The scores from my sensory analysis- indicated that the appearance needed the most improvement- scoring 15/20. The tasters said the colour of the burger was too similar to the bread bun and therefore didn't look as distinctively vibrant as it could have done with a white bread bun. Because I wanted to do wholemeal bread buns due to the higher fibre content, this made my bread-buns a similar shade to the burger. To work around this I could either add different veg as opposed to butternut squash in my burgers such as beetroot which would add a lovely pink colour or garnish the burger with lettuce leaves and a slice of pickle. The texture scored 17/20 due to: the silky mayonnaise, airy bread bun and soft burger texture. By adding the extra garnish for colour, this would also add crunch and balance out the softness of the dish. The burgers had a fantastic aroma (scoring 19/20) due to the spices, curry paste and coriander. In return, this combination of green chillies, fresh lime juice and ginger made this burger have excellent organoleptic sensory qualities. The taste also

	Taster 1	Taster 2	Taster 3	Taster 4	Total
Appearance	4	4	3	4	15
Texture	5	4	4	4	17
Taste	5	5	4	5	19
Aroma	5	5	5	4	19

scored 19/20. This was due to the sensational mixture of pungent spices and fresh ingredients such as the lime and Rogan josh curry paste which made this dish have a delicious hum of flavour. To



**Deadline:
10th February**



E. Evaluation

enhance this fantastic flavour I could add a dollop of fresh natural yoghurt to the burger to balance out the spices and add a freshness to the dish. In conclusion my bhaji burgers seemed to smell and taste delectable but could be further improved with fresh crunchy salad and some natural yoghurt.

Please note that this table has been re-formatted due to copyright restrictions.

Recipe: Bhaji Burgers with wholemeal bread buns and mayonnaise – 4 portions

Per 246g portion				
Energy	Fat	Carbohydrate	Protein	Salt
692	22.2	47.3g	11.2g	0.8g
13%	41%	10%	22%	16%

Net weight 246g

Ingredients	Per 100g	Per portion (246g)	% RI
Flour (25%)	Energy 371	91.3	18%
Butternut squash (20%)	Energy 150	37.2	7%
Oil (20%)	Energy 371	91.3	18%
Red onion (10%)	Energy 47	11.7	2%
Flour (10%)	Energy 371	91.3	18%
Paneer (5%)	Energy 371	91.3	18%
Green chile (5%)	Energy 47	11.7	2%
Garlic (5%)	Energy 47	11.7	2%
Shallot and curly parsnip (5%)	Energy 47	11.7	2%
Onion (2%)	Energy 47	11.7	2%
Coriander leaves (2%)	Energy 47	11.7	2%
Salt (2%)	Energy 47	11.7	2%
Egg yolk (1%)	Energy 47	11.7	2%
Yeast (1%)	Energy 47	11.7	2%
Lime juice (1%)	Energy 47	11.7	2%
Sugar (1%)	Energy 47	11.7	2%
Salt (1%)	Energy 47	11.7	2%
Salt (1%)	Energy 47	11.7	2%

*Data for some ingredients is not available

Nutritional analysis and improvements: The bhaji burgers and wholemeal bread buns were amber in the traffic-light system with an exception of being green in the sugar category. These provided 692 calories of energy which is a sufficient amount considering it is the main meal of the day. The fat in this dish consumes 54% of an adult's reference intake which is very high for one single meal. This is 6.2g of saturated fat (31% of an adult's RI) which is found in the mayonnaise and paneer cheese. To reduce the fat in this dish the mayonnaise could be substituted with low fat natural yoghurt or the paneer cheese could be changed to mozzarella which is lower in fat but has a similar texture. The fat content needs to be considered in this dish because too much fat in

the diet leads to higher cholesterol and increases the risk of heart diseases or stroke. In particular this needs to be considered for a diabetic who has high blood glucose levels which need to be carefully controlled. The carbohydrates from this dish are present in the whole-meal bread bun and starchy butternut squash. These aspects contribute to the 31% of carbohydrates this dish supplies- 72g. This is a good amount – taking into account the glycaemic index for a diabetic. Carbohydrates are important in the body for energy and the regulation of blood glucose levels. The amount of sugar in this dish (6.9g – which is only 8% of an adult's RI is very low which is ideal for a type 2 diabetic who generally needs to maintain a low concentration of glucose in the blood. Furthermore, this dish is filling so reduces the cravings for sugary snacks. The 18g of protein in this dish contributes 40% of an adult's reference intake which is a substantial amount. This key nutrient is sourced from, paneer cheese and the egg in the mayonnaise. It is important in repair and growth of the body. One way in which this dish could be improved to be more suitable for a diabetic is to increase the fibre content which is currently only 5g of the dish and 21% of an adult's RI. This is important for a diabetic because fibre helps to slow the absorption of sugar; to control blood glucose levels. Though I kept this in mind and therefore used wholemeal bread flour it could be increased further by substituting half the paneer cheese for another vegetable such as sweet potato. Lastly, the salt in this dish though only being 0.8g which is ok as long as the burger is not eaten with additional salted chips, because too much salt can increase blood pressure and therefore heart failure- which needs to be avoided, especially by someone who has type 2 diabetes. Overall this dish provides a great amount of carbohydrates and protein to fuel the body, whilst incorporating some micronutrients and fat.

Costing:

One bhaji burger with a dollop of mayonnaise in a whole-meal bread bun costs 61p which is good value. The cost of this dish was taken into account due to the use of vegetables in contrast with lean meat. The most expensive ingredient of this dish was the paneer cheese, which also has a higher carbon footprint and food miles due to being an Indian food. This could be substituted with a local cheese such as cheddar which would reduce both the cost of the dish and the fat. All the other ingredients such as the vegetables and flour are fairly cheap so these do not need to be unchanged.

Recipe: Bhaji burgers with wholemeal bread buns and mayonnaise

Recipe weight: 981g	Recipe cost: £2.44	Selling price for recipe: £5.99
Portion weight: 246g	Portion cost: £0.61	Selling price for portion: £1.52
Number of portions: 4	Cost for 100g: £0.35	

Cost analysis

Name	Amount used	Cost for 100g	Recipe cost	Portion cost
Salt	2g	£0.06	£0.06	£0.06
Coriander leaves	20g	£0.03	£0.17	£0.04
Green chile	24g	£0.04	£0.21	£0.05
Garlic, fresh	25g	£0.50	£0.36	£0.21
Red onion	100g	£0.12	£0.12	£0.03
Garlic	2g	£1.50	£0.03	£0.01
Paneer	75g	£1.00	£0.75	£0.30
Butternut squash	200g	£0.17	£0.34	£0.08
Flour, plain	100g	£0.08	£0.08	£0.02
Lime juice	25g	£0.15	£0.04	£0.02
The oil (surya)	200g	£0.40	£0.12	£0.03
Egg yolk	100g	£0.10	£0.10	£0.03
Flour, bread	250g	£0.06	£0.12	£0.03
Yeast, instant, compressed	10g	£0.05	£0.12	£0.03
Sugar	5g	£0.06	£0.06	£0.01
Oil	100g	£0.14	£0.14	£0.06
Egg yolk	10g	£0.30	£0.06	£0.02
Totals			£7.90	£1.52

**Deadline:
10th February**

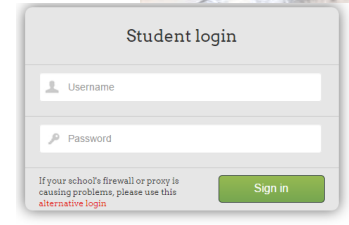


Jenny Ridgewell info

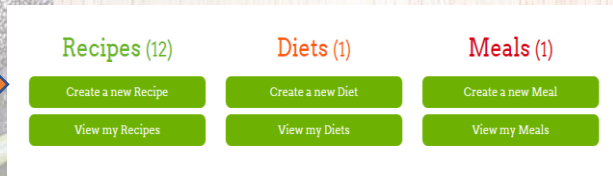
Google nutrition programme and select Jenny Ridgewell login page or use address:

<https://www.nutritionprogram.co.uk/login>

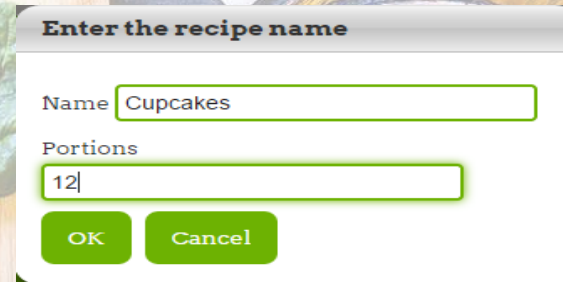
At the log in screen enter your username and password that have been given to you.



Select create recipe:



Put in the title of your dish and how many servings that your dish served.



Enter each ingredient one at a time. It works like a search engine so put a simple name and select from the list it generates.

cupcakes

Find Ingredient

Show

When you see your ingredient on the list click on the green plus sign.

flour, wholemeal self raising, wheat



Put in the amount that you will use in grams. Use the guidance below to help

Amount (grams)

OK

Cancel

portion = 1 level tbsp = 20g [1 heaped tbsp = 30g]



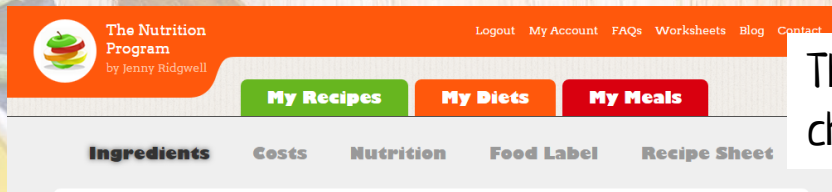
Jenny Ridgewell info

Continue with each ingredient on your list until all your ingredients are added. You will see them on a list on the right hand side of the screen.

If anything is not right you can press the red symbol on the side of the ingredient.

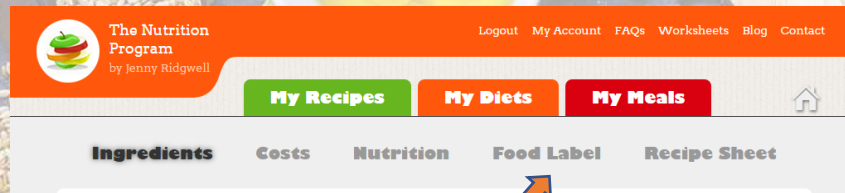
Ingredient	Amount (g)	
butter	50	⊖
sugar, caster, white	50	⊖
flour, white self raising, wheat	50	⊖
eggs, whole, raw, chicken	50	⊖
Total 200g		

Scroll to the top of the screen and select cost

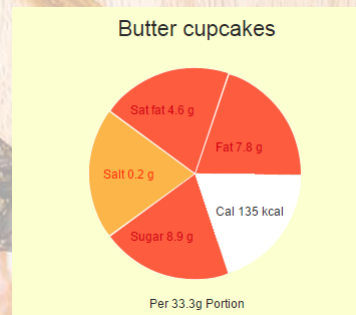


This will display the costing chart

Name	Amount used	Cost for 100g	Cost for recipe	Cost for portion
butter	50g	£0.44	£0.22	£0.04
sugar, caster, white	50g	£0.16	£0.08	£0.01
flour, white self raising, wheat	50g	£0.09	£0.04	£0.01
eggs, whole, raw, chicken	50g	£0.50	£0.25	£0.04
Totals	200g	£0.30	£0.59	£0.10



For traffic light labelling select food label



Ingredients			
eggs (25%), flour (25%), sugar (25%), butter (25%)			
	Per 100g	Per portion (33.3g)	RI
Energy kJ	1690 kJ	563 kJ	7%
Energy kcal	404 kcal	135 kcal	7%
Protein**	5.5 g	1.8 g	4%
Carbohydrate**	45 g	15 g	7%
of which sugar**	27 g	8.9 g	10% ⊖
Total Fat**	24 g	7.8 g	11% ⊖
of which saturates**	14 g	4.6 g	23% ⊖
Fibre**	0.8 g	0.3 g	1%
Salt	0.7 g	0.2 g	4% ⊖



Notes

