

Episode 1

Using the Cooker

It is important that when using the cooker and hob that you understand how to do this safely and effectively.



There are three different types of heat generated from the cooker.

Conduction- The process of heat travelling through an object.

Convection- The process of heat being transferred by movement through a fluid.

Radiation- The process of heat being transferred through waves.

Episode 2

Vegetarianism and Veganism

Vegetarians don't eat any food products made from meat, fish, shellfish, crustacea or animal by-products. Vegans don't eat any food products that come from animals, including dairy products and eggs.

A vegetarian and vegan diet consists of:



- Grains
- Carbohydrates
- Nuts and seeds
- Fruit and vegetables



It is important that vegetarians and vegans substitute the animal proteins in their diet with other protein to maintain a healthy lifestyle.

People who eat less meat, tend to weigh less and have a lower risk of heart disease. There is also evidence to suggest that eating less meat can contribute to improving the environment.

Episode 3



BECHAMEL

Milk + White roux



VELOUTE

white stock + blonde roux



ESPAGNOLE

Brown stock + Brown roux

HOLLANDAISE

Clarified butter + egg yolks



MAYONNAISE

Refined oil + egg yolks

TOMATO

Brown stock + Brown roux + Tomato puree



Year 9

Subject: Food and Nutrition

Episode 4

Highly Skilled Dishes

As you conclude year 9 you will be thinking about your next steps. In order to be a successful cook in the future you will be required to demonstrate a high level of skill in the execution of the dishes you make. **Examples of complex-level skills are below**

<u>Brunoise</u>	Baking Blind
Crimping	Caramelising
De-boning	<u>Emulsifying</u>
Filleting	Poaching
<u>Julienne</u>	Tempering
Laminating (pastry)	<u>Shaping</u>
Melting using a bain-marie	Unmoulding
Piping	Whisking (aerating)
Segmenting	

Those underlined are ones you have already tried!

Aeration

- **Aeration** is incorporating air in a mixture.
- This happens in different ways depending on the method used.

Creaming

- Sugar and fat beaten together traps air.

Sieving

- Flour traps air in the flour particles

Whisking

- Eggs and sugar together traps air.



We are going to add to these skills by using **aeration** in a baked cake. We will use all of the methods described here to do this.

Key Terminology

Terminology	Definition
Conduction	The process of heat travelling through an object.
Convection	The process of heat being transferred by movement through a fluid.
Radiation	The process of heat being transferred through waves.
Vegetarian	A person who does not eat food products made from meat, fish, etc.
Vegan	A person who does not eat any food products from an animal.
Sauce	A liquid substance served with food to provide moisture or flavour.
Aeration	Incorporating air into a mixture.

Episode 1

Using the Cooker at Home

Check with an adult first, and practice using the cooker at home to cook dishes. Below is some safety information to abide by when using the cooker and hob.

Oven and Hob Safety



- When using the oven ALWAYS wear oven mitts.
- Keep saucepan handles away from heat sources AND not protruding.
- Make sure you check your food (through the glass door)
- Don't place any other items on the hobs.



Episode 2

Question	Answer
What is Vegetarianism?	A person who doesn't eat any food products made from meat, fish, shellfish, crustacea or animal by-products.
What is Veganism?	A person who doesn't eat any food products that come from animals, including dairy products and eggs.
What needs to be added to a vegetarian or vegan diet to ensure it is balanced?	Other protein as a substitute for animal protein to maintain a healthy lifestyle.
What positive impact could having a vegetarian or vegan diet have?	Weight loss, a lower risk of heart disease and a contribution to improving the environment.

Episode 3

Ingredients	
50g	Butter
50g	Plain Flour
500ml	Whole Milk

Roux Sauce

Melt the butter in a saucepan, then add the plain flour. Stir continuously until a paste forms. Continue cooking for 2 mins.

Add the milk to the roux gradually, stirring as you go, until you get a smooth sauce. Cook for 5-10 mins, stirring continuously, until the sauce has thickened. Season to taste.

This is a good sauce to practice making as it is the base of lots of different sauces that you might make in the future. You can add to a roux by infusing the milk, adding stock instead of milk or including cheese at the end.

Year 9 Subject: Food and Nutrition

Episode 4

Question	Answer
Describe Brunoise	A chopping technique which provided diced cubes about 3mm or less in size.
Describe Julienne	A chopping technique where food is cut into long thin strips.
Explain Emulsification.	The process of missing to products together that normally don't mix such as oil and water.
What is aeration?	The process of adding tiny pockets of air to a something. In baking this involves adding air through creaming, sieving or whisking, leaving the product light in texture.

Recipe Practice

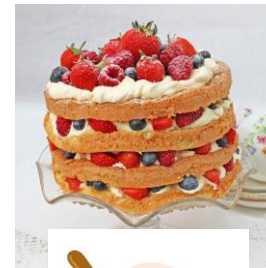
Genoise Sponge

Ingredients	
50g	Butter, melted
250g	Plain Flour
250g	Caster sugar.
8	Eggs

Ideas for optional ingredients:

400g punnet of strawberries, 180g punnet of blueberries, 150g punnet of raspberries and 600ml pot of double cream. Icing sugar to dust

Exchange the fruit for your own choice if you have your own favourites.



Method

- Heat oven to 190C/170C fan/gas 5. Brush 2 x 20cm cake tins with melted butter, line the bases with baking paper, then dust well with flour tipping out any excess. Set aside.
- Put the sugar and eggs in a large heatproof bowl, then set it over a pan of barely simmering water. Whisk with an electric hand whisk for about 7 mins or until the mixture is pale and has trebled in volume. Remove from the heat, then slowly pour in the butter folding it in as you pour until it is completely mixed in.
- Gently fold the flour and a pinch of salt into the egg mixture, then pour into your prepared cake tins. Cook for 20 mins until the cake is golden and risen – a skewer pushed into the cake should come out clean. Allow the cakes to cool for a few mins in the tin, then remove and cool completely on a wire rack.
- To assemble the cakes, cut each one in half horizontally and use cream and your choice of decoration to each layer.