

Episode 1

Weighing Ingredients

As you become a more competent cook it is important that you can use different equipment to weigh your ingredients.



Digital Scales

Used to measure the weight of ingredients.

Measuring Spoons

Used to measure smaller quantities of dry and wet ingredients.



Measuring Jug

Used to measure the volume of liquids.

Episode 2

Pastry

Shortcrust Pastry

This is a French-style dough, with a crumbly texture. This style of dough is short because there is normally twice as much flour to fat. This pastry is used for tarts, pies and party nibbles.



Flaky Pastry

Is a light and thin unleavened pastry that is similar to puff pastry. Flaky pastry relies on large lumps of butter mixed into the dough, which when baked creates the flakes. Flaky pastry is used to make pastries, turnovers, sausage rolls and plaits.

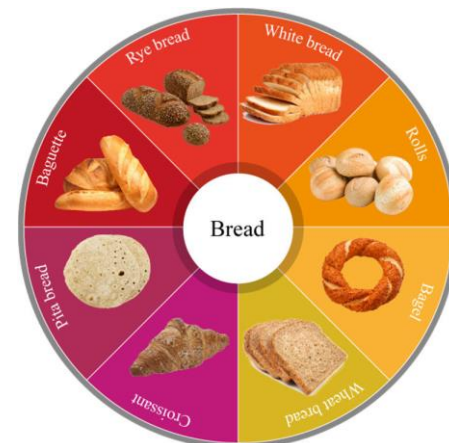


Episode 3

Bread

Bread is product of baking a mixture of flour, water, salt, yeast and other ingredients, depending on the variety.

When the flour is moistened or stirred, beaten or kneaded, gluten develops to give the dough 'stretch'. The gluten holds the gas created by yeast, helping the dough to rise.



Year 8

Subject: Food and Nutrition

Episode 4

MACROS

There are three macronutrients – protein, fat, and carbohydrates. These macronutrients make up the calories in our food. By understanding the purpose of each macronutrient and how much we need, you can plan your short-term and long-term nutrition goals.

CARBS

- 4 calories per gram
- Provides your body with energy
- Improves exercise endurance
- Remainder of your calories will be carbs
- Target 25 - 35 grams of fiber per day



FATS

- 9 calories per gram
- Required for vitamin absorption, protects organs and promotes healthy joints
- Limit saturated fats
- Avoid trans fats
- Target: 0.3 - 0.6 g/lb Lean Body Mass



PROTEIN

- 4 calories per gram
- Provides your body with amino acids - the building blocks of muscle
- Protein recommendations:
 - Minimum: 0.4 g/lb Lean Body Mass (LBM)
 - Optimizing Muscle Growth 0.8 - 1.2 g/lb LBM



Key Terminology

Terminology	Definition
Weight	The relative mass of ingredients.
Volume	The amount of space that a liquid occupies.
Short	A high proportion of fat to flour in a pastry.
Unleavened	Made without an ingredient that helps it rise.
Gluten	The protein found in flour.
Macronutrient	A type of food required in large amounts in our diet.
Carbohydrate	Provides the body with energy.
Fat	Supports vitamin absorption.
Protein	Provides the body amino acids.

Episode 1

Weighing Ingredients

Practice your weighing skills at home. Dry pasta is a good ingredient to practice with as you can return it to its bag afterwards, with no wastage.

To practice, place a bowl on your scales and set to 0. Now try weighing out the following amounts of pasta:

25g
50g
100g
200g



Episode 2

Question	Answer
What is texture does shortcrust pastry have?	A crumbly texture.
What is the ratio of flour to fat in shortcrust pastry?	There are two parts flour to one part fat, so 2:1.
What is shortcrust pastry used for?	Tarts and pies.
How is the fat added to flaky pastry?	In lumps after rolling.
What happens to the fat as the flaky pastry is baked?	The fat melts, leaving gaps between the pastry, making it flaky in texture.
What is flay pastry used for?	Pastries, turnovers, sausage rolls and plaits.

Episode 3

Question	Answer
What are the main ingredients in bread?	Flour, water, salt and yeast.
What actions can be used when breadmaking?	Stirring, Beaten, Kneaded
What is created from flour as the dough is formed?	Gluten
Explain what gluten does to help bread rise?	When yeast is added to the bread mixture, gluten helps to trap the gas created by the yeast, which helps the bread rise before and during baking.
Name different types of bread.	White, Rye, Pitta, Baguette, Croissant, Bagel, Roll

Year 8

Subject: Food and Nutrition

Episode 4

Question	Answer
What is a macronutrient?	Macronutrients make up the calories in our food.
What are the three macronutrients?	Carbohydrates, Fats and Proteins.
Explain what carbohydrates do.	Provides your body with energy and endurance during exercise.
Explain what fats do.	They are required for the absorption of vitamins, protect your organs and support healthy joints.
Explain what proteins do.	Provide your body with amino acids, the building blocks for creating and maintaining muscle.

Recipe Practice

Homemade Butter

Ingredients	
600ml	Double-cream

Method

Pour the cream into a jar with a clean marble inside. Screw the lid on tightly. Shake the jar continuously for 5 mins (you can take turns shaking with someone else). The movement of the marble acts as a whisk and helps the butter to churn. You can do it without the marble, it just takes longer. At first the cream will thicken to whipped cream, then it will get even thicker. After about 5 mins you will hear sloshing in the jar – give it a few more vigorous shakes, and that's the butter churned.

Scrape out the contents into a sieve sitting over a bowl – the liquid that drains out is buttermilk (which can be kept and used for baking or in pancakes), and the fatty solid in the sieve is the butter.

With clean hands, squeeze the butter between your fingers over the sieve to squeeze out any more buttermilk, while working it into a ball. 'Wash' the butter in a bowl of ice-cold water to get rid of any residual buttermilk. Beat in a small pinch of salt. Will keep in the fridge for up to one week.

