

Design Brief: To make Fairtrade chocolate cupcakes.

Strand of DT



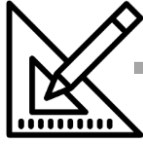
cooking & nutrition



DT process



Product Research



Design



Make



Evaluate



AIMS OF EDUCATION



REST, PLAY, CULTURE, ARTS

Vocabulary

combine	to stir two or more ingredients with a spoon
modify	make partial or minor changes to something
Fairtrade	a system of certification that aims to ensure a set of standards are met in the production and supply of a product or ingredient

What?



- For farmers and workers, Fairtrade means workers' rights, safer working conditions and fairer pay. For shoppers it means high quality, ethically produced products.
- Flour - Forms the structure of the cake and a golden surface.
- Fat - Adds colour and flavour, creates texture and volume, and increases the shelf life.
- Sugar - Sweetens and adds flavour
- Raising agents - Aerates the mixture increasing volume and resulting in a light texture
- Eggs - Trap air when whisked into a foam and adds colour, flavour and nutritional value



- Nutrition labels can help you choose between products and keep a check on the amount of foods you're eating that are high in fat, salt and added sugars.
- These labels include information on energy in kilojoules (kJ) and kilocalories (kcal), usually referred to as calories.
- They also include information on fat, saturates (saturated fat), carbohydrate, sugars, protein and salt.



- Design criteria:
- Correct measurement of ingredients.
  - Ingredients are Fairtrade.
- They are tasty.
  - Equipment is used safely.
  - Cupcakes are all the same size (even amount of mixture in each).
  - The cupcakes have a flat surface on top as it is the easiest to decorate – less baking-power or self-raising powder.
  - Cupcakes are not burnt.
  - Cupcakes are not sunk in the middle (e.g., opening the oven too early, imprecise ingredients).
- Nutritional analysis allows ideas for recipes to be tested before they are made. Changes to recipes might look to reduce the fat, salt or sugar provided or increase fibre. The recipe should be cooked to ensure that it looks, smells and tastes good.



- Preheat your oven to 160°C.
- Cream the butter and sugar using an electric beater until pale and fluffy.
- Add the melted chocolate to the sugar and butter mixture and combine.
- Add the eggs one at a time, mixing slowly.
- Add the flour and the milk and beat until the mixture is smooth.
- Use a spatula to fold the batter a few times to reduce the amount of air in the mixture.
- Spoon the batter into the cupcake cases until they are half-full.
- Bake for 18-20 minutes or until a skewer inserted into the middle of a cupcake comes out clean.
- Leave the cupcakes to cool in the tin for a couple of minutes then put on a cooling rack.
- Melt the chocolate in the microwave in short bursts, ensuring it doesn't burn. Set aside to cool slightly.
- Once cooled, add the butter, icing sugar and cream. Mix with an electric beater until smooth.
- Ice each cupcake with buttercream and decorate as desired.

Skills



mix and measure



Finished product



- Designers evaluate their finished products in order to test whether they work well and if the design can be corrected or improved.