

# Health & Food Technology

## Higher

### Food Product Development

1.1 – Explaining the impact of the **functional properties** of ingredients on the food product development process

Name..... Class.....

# Cheese Flan

## Ingredients

100g plain flour  
50g margarine  
4 tbsp cold water  
100ml milk  
1 egg  
50g cheese  
Seasoning

## Method

1. Set oven to 180°C.
2. Rub in flour & margarine until it resembles breadcrumbs.
3. Gradually add water until forms dough.
4. Clingfilm and chill for 15minutes.
5. Lightly knead dough then roll out to line flan case. Prick base with fork then fill with baking beans in clingfilm.
6. Blind bake for 10 minutes, remove beans then continue baking until base of flan is completely cooked.
7. Mix egg & milk together, add grated cheese.
8. Fill baked flan case with egg mixture then bake for 25 minutes until liquid has set.

**Select 2 functional ingredients then explain their function & how it might influence the way manufacturers develops a food product.**

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# Lemon Meringue Pie

## Ingredients

- 100g plain flour
- 50g margarine
- 25g icing sugar
- 1 lemon (rind & juice)
- 1 egg (yolk for pastry, white for meringue)
- 100ml water
- 15ml cornflour
- 75g caster sugar

## Method

1. Set oven to 180°C.
2. Rub in flour & margarine until it resembles breadcrumbs.
3. Add icing sugar & egg yolk then mix with knife until it forms dough.
4. Clingfilm and chill for 15minutes.
5. Lightly knead dough then roll out to line flan case. Prick base with fork then fill with baking beans in clingfilm.
6. Blind bake for 10 minutes, remove beans then continue baking until base of flan is completely cooked.
7. Grate rind and juice the lemon. Add water to make 200ml.
8. Blend some juice with cornflour then add remaining juice and 25g caster sugar to a small pan. Heat until thick.
9. Whisk egg white until light with peaks. Gradually add 50g caster sugar until glossy.
10. Fill flan case with lemon sauce then top with meringue leaving peaks. Sprinkle with sugar. Bake at 200°C for 10 minutes until golden.

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# Fish Cakes

## Ingredients

1 large baking potato  
15g margarine  
4 tbsp milk  
100g fish  
½ egg  
25g plain flour  
50g breadcrumbs  
15ml oil  
Seasoning

## Method

1. Wash, dry and prick surface of potato with a fork.
2. Bake in microwave on full power for 6 minutes turning over half way.
3. Leave to stand for 2 minutes.
4. Poach fish in milk for 5 minutes. Remove fish and retain milk.
5. Spoon out potato from skin into a bowl with the fish.
6. Add margarine and 4 tbsp of retained milk and mix together. Adjust consistency if needed.
7. Divide mixture into 2 and form into cakes.
8. Put egg in shallow bowl, flour on a plate and breadcrumbs in a separate bowl.
9. Cover the fishcake with flour then coat with egg then finally with breadcrumbs.
10. Heat frying pan with 15ml oil. Fry fishcake 5 minutes each side until golden.

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# Whisked Sponge Fruit Flan

## Ingredients

2 eggs  
50g caster sugar  
50g SR flour  
50g mandarin oranges  
100ml mandarin juice  
25g caster sugar  
10ml cornflour  
50ml double cream

## Method

1. Set oven to 210°C.
2. Line & grease flan case.
3. Sieve flour into separate bowl.
4. Whisk eggs & sugar until thick & creamy.
5. Sieve flour into mixture then very carefully FOLD the flour into the mixture using a metal spoon.
6. Pour cake mixture into prepared flan case then spread evenly.
7. Bake in the oven for 8 – 10 mins.
8. Carefully remove from tin and cool on cooling tray.
9. Blend cornflour with juice and sugar then boil until it thickens. Allow to cool.
10. Arrange mandarin segments in centre of sponge then pour glaze over to cover mandarins.
11. Whisked cream to soft peaks then pipe around edge of sponge for decoration.

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# Caramel Shortcake

## Ingredients

- 25g caster sugar
- 50g margarine
- 75g plain flour
- 50g soft brown sugar
- 50g margarine
- 1 tbsp syrup
- ¼ can condensed milk
- 100g milk chocolate

## Method

1. Set oven to 160°C.
2. Cream sugar & margarine together.
3. Gradually add flour & mix together until completely combined.
4. Press mixture into bottom of flan case and smooth over.
5. Bake in the oven for 15 minutes until golden.
6. Put sugar, margarine, syrup & condensed milk into pan.
7. Gently heat until the margarine has melted and the sugar dissolved. Bring to the boil then simmer until a small amount is dropped in a glass of cold water forms a soft ball.
8. Allow to cool slightly before pouring over shortcake base.
9. Break chocolate into small pieces. Microwave on full power for 30 seconds then stir. Repeat until completely melted then spread over caramel.
10. Chill until chocolate has set.

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# Bread

## Ingredients

180g strong bread flour  
15ml olive oil  
1.25ml caster sugar  
1.25ml salt  
5ml dried yeast  
100ml warm water

## Method

1. Set oven to 210°C.
2. Flour baking tray.
3. Sieve flour into baking bowl then add all dry ingredients.
4. Add oil & warm water and using one hand gradually mix mixture until all ingredients are combined.
5. Sprinkle some flour on the work surface then knead dough for 10 minutes.
6. Flour a clean baking bowl to put dough into it.
7. Leave the dough to prove for 15 – 20 minutes until it doubles in size.
8. Carefully remove from bowl then very lightly knead then shape.
9. Place dough on floured baking tray then bake for 30 minutes.
10. Bread should be risen, golden and if turned over should sound hallow if tapped..
11. Cool on a wire tray.

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# Mayonnaise

## Ingredients

- 2 egg yolks
- Salt and freshly ground white pepper
- 175ml/6fl oz extra virgin olive oil
- 175ml/6fl oz sunflower oil
- lemon juice, to taste

## Method

1. Place the egg yolks into a bowl with the salt and freshly ground white pepper. Gradually whisk together while very gradually trickling in the sunflower oil, followed by the olive oil. Once the mixture is becoming very thick, add a little lemon juice.
2. Continue beating, adding the oil a little faster and speeding up the beating speed. Add more lemon juice, salt and freshly ground black pepper to taste. Set aside in the fridge

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# Fruit Crème Brûlée

## Ingredients

- 2 egg yolks
- 25g caster sugar
- ¼ vanilla pod
- 150ml double cream
- 50ml whole milk
- 25g demerara sugar

## Method

1. Pour the cream into a non-stick saucepan and scrape the tiny seeds from the vanilla pod into the cream with a small knife.
2. Add the pod and place the cream over a medium heat until almost boiling.
3. Meanwhile, beat the egg yolks with the sugar until combined, but do not overbeat as you do not want it to become light and frothy.
4. Pour the cream onto the eggs, stir with a wooden spoon to combine and return to the saucepan.
5. Cook over a low heat until the custard has thickened, stirring constantly, but do not allow to boil.
6. Test to see if the custard is ready by running your finger through the custard on the back of a spoon. If the custard stays apart, it is ready.
7. Place the fruit in the bottom of a foil container.
8. Strain the custard over the fruit and allow to cool. Refrigerate for 30 mins.
9. A few minutes before serving sprinkle custard with a thin layer of demarara sugar. Using a mini blowtorch, caramelize the sugar evenly. Once caramelised do not refrigerate.

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# Wholemeal Chocolate Pudding

## Ingredients

### Cake

50g soft margarine  
25g caster sugar  
1 egg  
2-3 drops vanilla essence  
40g wholemeal flour  
2.5ml baking powder  
15ml cocoa

### Sauce

40g brown sugar  
15ml cocoa  
125ml warm water

## Method

1. Preheat oven to 190°C/gas 5
2. Cream Margarine and caster sugar in a large bowl using a wooden spoon.
3. Add the egg and vanilla, mix well.
4. Add flour, cocoa and baking powder, mix well.
5. Spoon mixture into a foil tray.
6. In a small bowl mix together the sauce ingredients then pour over the sponge mixture.  
Place on a baking tray.
7. Bake in the oven for 30 minutes.

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# Scottish Tablet

## Ingredients

- 225g caster sugar
- 31g butter
- 1/4 tin condensed sweetened milk
- 37ml milk
- Few drops of teaspoon vanilla extract

## Method

1. In a large deep pot place all ingredients except vanilla over medium heat until all melts, stirring frequently. Simmer for 40 minutes stirring now and again.
2. Bring to boil, add vanilla, remove from the heat stirring all the time; be careful.
3. Electric whisk for 5 minutes; mixture will thicken.
4. Spread mixture in a flat tray leave to cool for at least 1 hour.