**PERFORMANCE PROPERTIES OF INGREDIENTS IN SPONGE CAKES**

Experiment 1: Traditional sponge cake using whole eggs (**GROUP 1) (GROUP 2)**

3 eggs

75g caster sugar

75g flour

Method:

1. Sieve the flour onto a paper towel
2. Whisk eggs and sugar together in a large mixing bowl until very thick and creamy and pale in colour.
3. **Sieve** the flour into the egg mixture and **fold** **in** using a large metal spoon (be gentle).
4. **Gently** pour the mixture into the cake tin
5. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
6. Turn onto a wire rack to cool.

Experiment 2: Traditional sponge cake using whole eggs (beat in the flour)

(**GROUP 3) (GROUP 4)**

3 eggs

75g caster sugar

75g flour

Method:

1. Sieve the flour onto a paper towel
2. Whisk eggs and sugar together in a large mixing bowl until very thick and creamy and pale in colour.
3. **Whisk** inthe flour into the egg mixture .
4. Pour the mixture into the cake tin
5. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
6. Turn onto a wire rack to cool.

Experiment 3: Traditional Genoese sponge cake using whole eggs (with butter)

(**GROUP 5) (GROUP 6)**

3 eggs

75g caster sugar

75g flour

50g melted butter

Method:

1. Sieve the flour onto a paper towel
2. Whisk eggs and sugar together in a large mixing bowl until very thick and creamy and pale in colour.
3. **Sieve** the flour into the egg mixture and **fold** **in** using a large metal spoon (be gentle).
4. **Fold** in the melted butter
5. **Gently** pour the mixture into the cake tin
6. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
7. Turn onto a wire rack to cool.

Experiment 4: Genoese sponge cake using the all-in–one method

**(GROUP 7)**

3 eggs

75g caster sugar

75g flour

50g melted butter

Method:

1. Sieve the flour onto a paper towel
2. Add all the ingredients into a large mixing bowl and whisk them all together ( eggs, melted butter, sugar and flour together in a large mixing bowl until mixed well together
3. **Gently** pour the mixture into the cake tin
4. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
5. Turn onto a wire rack to cool.

Experiment 5: Genoese sponge cake using the all- in – one method with added baking powder. **(GROUP 8)**

3 eggs

75g caster sugar

75g flour

1 level teaspoon baking powder

50g melted butter

Method:

1. Sieve the flour and baking powder onto a paper towel
2. Add all the ingredients into a large mixing bowl and whisk them all together ( eggs, melted butter, sugar and flour together in a large mixing bowl until mixed well together
3. **Gently** pour the mixture into the cake tin
4. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
5. Turn onto a wire rack to cool.

Experiment 6: Traditional sponge cake using separated eggs

**(GROUP 9)**

3 eggs

½ cup (100g) caster sugar

½ cup(75g) flour

Method:

1. Sieve the flour onto a paper towel
2. Separate the eggs making sure there is no egg yolk in the egg white.
3. Whisk the egg whites until stiff.
4. Add the sugar gradually until the sugar has dissolved.
5. Add the eggs yolks and beat until well blended.
6. **Sieve** the flour into the egg mixture and **fold** **in** using a large metal spoon (be gentle).
7. **Gently** pour the mixture into the cake tin
8. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
9. Turn onto a wire rack to cool.

Experiment 7: Sponge cake using separated egg yolks and whites with baking powder (added raising agent)

(**GROUP 10)**

3 eggs

½ cup (100g) caster sugar

½ cup(75g) flour

1 level teaspoon baking powder

Method:

1. **Sieve** the flour and baking powder onto a paper towel
2. Separate the eggs making sure there is no egg yolk in the egg white.
3. Whisk the egg whites until stiff.
4. Add the sugar gradually until the sugar has dissolved.
5. Add the eggs yolks and beat until well blended.
6. **Sieve** the flour and baking powder into the egg mixture and **fold** **in** using a large metal spoon (be gentle).
7. **Gently** pour the mixture into the cake tin
8. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
9. Turn onto a wire rack to cool.

Experiment 8: Sponge cake using separated egg yolks and whites with baking powder and corn flour

**( GROUP 11) (GROUP 12)**

3 eggs

½ cup (100g) caster sugar

½ cup(75g) corn flour

1 level teaspoon flour

1 level teaspoon baking powder

Method:

1. **Sieve** the flours and baking powder onto a paper towel
2. Separate the eggs making sure there is no egg yolk in the egg white.
3. Whisk the egg whites until stiff.
4. Add the sugar gradually until the sugar has dissolved.
5. Add the eggs yolks and beat until well blended.
6. **Sieve** the flours and baking powder into the egg mixture and **fold** **in** using a large metal spoon (be gentle).
7. **Gently** pour the mixture into the cake tin
8. Bake for 10-15 minutes at 200◦ C until golden brown and until the cake springs back when lightly touched.
9. Turn onto a wire rack to cool.

Experiment 9: Meringues

**(GROUP 12)**

2 egg whites

50g caster sugar

Method:

1. Whisk the egg whites until stiff but not dry
2. Add half the sugar and beat well.
3. Add the rest of the sugar and beat well
4. Pipe of spoon small amounts of the meringue onto a baking tray lined with baking paper
5. Bake at 100C until firm to touch and dry but not brown