LEGEND



Hey, cake fans!

How do you bake a great cake?

What happens if you leave out an **important ingredient**?

Ο

Miks pannakse koogi

sisse **muna**, **jahu** või küpsetuspulbrit?

NB! Safety precautions! **START**

Be sure to use oven gloves! Let the cakes **cool** before tasting.

Eggs contain all vitamins

(except vitamin C) and a lot of proteiin, which

makes them one of the

best and nutritious

foods.

Beat the eggs

Gradually add flour and

Pour the mix into

cake tins.

with sugar.

Add milk and oil.

baking powder.

RECIPE C

4 tbsps FLOUR ¹/₂ tsp BAKING POWDER 2 tbsps SUGAR 2 tbsps OIL 0,3 dI MILK

Leavening agents (e.g. yeast or baking D powder) create **air or gas bubbles** in the dough, making the cake **lighter** and fluffier.

Teaduskeskus AHHAA

What will cake A be like?

Beat the eggs

with sugar.

Add milk and oil.

Gradually add flour.

Pour the mix into

cake tins.

0.0

And cake B?

RECIPE A

4 tbsps FLOUR 1/2 tsp BAKING POWDER 2 tbsps SUGAR 1 EGG 2 tbsps OIL o,3 dl MILK

DESCRIPTION

OF THE EXPERIMENT

Split into **4 smaller** teams (A, B, C, D). Each team uses a different recipe to bake **a cake**.

RECIPE D

1/2 tsp BAKING POWDER 2 tbsps SUGAR 1 EGG 2 tbsps OIL 0,3 dI MILK

> 1 Beat the eggs with sugar.

> > Add milk and oil.

Gradually add baking powder.

Pour the mix into cake tins.

Mix together flour, sugar and baking powder.

Add milk and oil. Pour the mix into

cake tins. 3.

What will cake C be like?

Cake D?

When you fry or bake food at **high temperatures**, they develop a distinct golden crust.

RECIPE B

4 tbsps FLOUR 2 tbsps SUGAR 1 EGG 2 tbsps OIL 0,3 dI MILK

> When the dough has been poured into tins, place the cakes in the oven and bake.

In a microwave oven: 700-800W, 4-8 min

In a regular oven: 1800, 10-15

This is caused by reactions between certain amino acids and sugars the Maillard reactions.

> FINIŠ What are the **roles** of ingredients?

Share your cake with all the other teams.

> Compare different cakes: appearance, smell, consistency and taste

Let every team rate the cakes on a scale from 1 to 5

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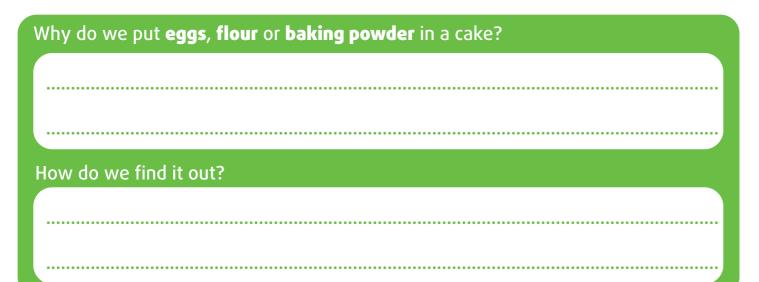
When you use wheat flour in a cake, its **baking characteristics** are determined by the amount of gluten (a type of protein). Combined with water, it becomes strong and sticky and helps to **"bind"** the cake.

Flour is made by grinding raw grains.

In Estonia, wheat, rye, oat and barley flour are most commonly used.

KITCHEN CHEMISTRY

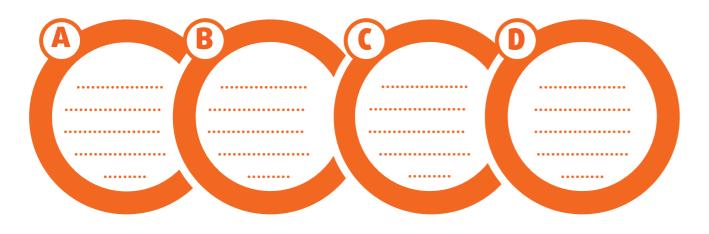
How to bake a great cake? Do you know why we put eggs, flour or baking powder in a cake?

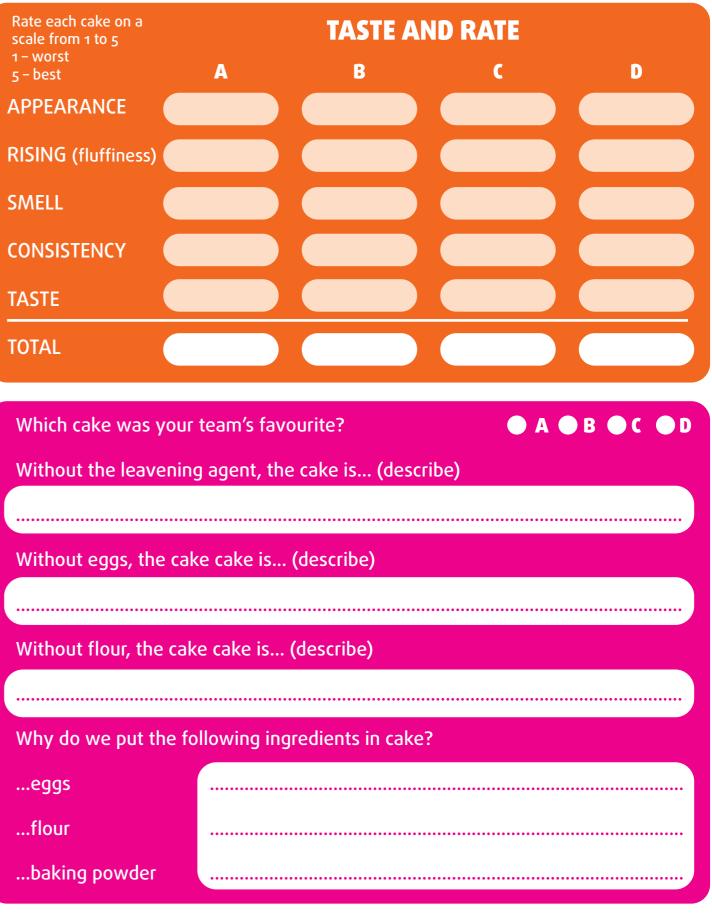


4 DIFFERENT CAKES



Try to guess what the different cakes will be like:





| Which cake was your team's favourite? | |
|---|--|
| Without the leavening agent, the cake is. | |
| | |
| Without eggs, the cake cake is (describe | |
| | |
| Without flour, the cake cake is (describe | |
| | |
| Why do we put the following ingredients | |
| eggs | |
| flour | |
| baking powder | |

ADDITIONAL INFORMATION: toitumine.ee