

Research the process

There is a variety of factors that influence your end result: fat percentage, temperature, kind of bacteria, time and acidity. You can measure the temperature with a thermometer and adjust the heating time. Curious about the acidity? Measure the pH levels with your own pH meter. The instructions for this and additional information about yogurt making can be found at togethersciencebus.eu.

Adding (specific) yogurt bacteria at various temperatures to the milk, your yogurt will get another taste or texture. With the instructions on the inside, you can make both a thin stirred yogurt or a Greek style, thick yogurt.

Variate the yogurt recipe:

Instead of pasturised milk from the supermarket, you can try to get some fresh milk directly from the farmer and pasturise it yourself by heating it up until 72°C. At this temperature, harmful bacteria and fungi are destroyed, but the taste is preserved.

Introduction

Yogurt originates from Turkey. Now it is worldwide a popular product and made in many varieties. In Greece yogurt is thicker than Bulgaria. But what exactly makes the difference between a thin or thick yogurt? And what is the role of our tiny friends, bacteria, in this process?

Yogurt is made through fermentation. This is a natural process in which micro-organisms eat the sugars and poo them out as acid, gas or alcohol. Yogurt is made by adding bacteria to the milk (at a certain temperature). These bacteria will then convert the sugars into acid. Acid makes the proteins in the milk clot and will form a jelly-like substance; yogurt!

The yogurt you buy at the supermarket contains (unnecessary) ingredients to extend the shelf life of the product. Making yogurt yourself is much more fun and tastes better! Just follow the instructions on the inside of this leaflet to make your own yogurt and enjoy the natural thing.

This is what you need to make your own yogurt:

- 1 litre pasturised, unskimmed milk (tip: even better, get some fresh milk from a farmer!)
- 4 tbsp (60 ml) biologic yogurt (start culture)
- A glass jar with lid
- Heat source (cooker or stove)
- Large pan
- Spatula
- Something to keep the jar warm (with a blanket or with hay)
- (Cooking) thermometer

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make your own yogurt

Make your own yogurt


Making yogurt yourself is easy, healthy and delicious. Discover below how to transform ordinary milk into yogurt with the help of some friendly bacteria:

1




Make sure that the jar in which you are going to keep the yogurt is clean. Put the jar in a big pan with boiling water for at least 15 min or put it in the dish washer first and let it dry.

2




Heat the milk in a large pan. For a thick yogurt until 44°C. For a thin yogurt until 34°C. Are you using fresh, unpasteurised milk from the farm? Then initially heat the milk until 72°C for pasteurisation (see also inside).

3



When the milk reaches the correct temperature, add the organic yogurt (your starter culture). To avoid clotting, stir well.

4




Pour the mixture quickly (to prevent heat loss) in the clean jar and close this with the lid.

5




Wrap the jar in a large blanket, sleeping bag or (like back in the old days) in a wooden chest filled with hay. Keep your jar warm for 12-24 hours. For thick yogurt 4-24 hours.

6




Subsequently, put the jar in the refrigerator to incubate for 12 hours. The thickness of the yogurt will increase by cooling it. And of course chilled yogurt is much more delicious to eat.

7



After 12 hours in the fridge you can eat your homemade yogurt. It will stay fresh for about 2-3 weeks if kept cool and in the fridge.
Tip: Experiment with the time and temperature. Which yogurt do you like most?



Tip: keep your bacteria
Is your yogurt the way you love it? You can keep the bacteria for a long time, by freezing them. Pour the yogurt in an ice cube mold and use 4 cubes (per litre) the next time you are making yogurt.



Share your recipe!
Do you have a much better recipe to make your own yogurt or special insider's tips? Let us know via the website: togethersciencebus.eu or by using #sciencebus on twitter or instagram.