@ HOME SCIENCE DISCOVERY MISSIONS – HOMEMADE YOGHURT

What Do We Need?

- A bottle of raw milk (cow, sheep, goat; depends on your likings)
- Stove
- Yoghurt (bought from the store)
- Blanket or rug
- Jars

Protocol

1. Pour the raw milk in a pot.
2. Put the pot on the stove. Milk has to go through thermal treatment as it contains dangerous for the body bacteria.
3. After brewing it, divide the milk in the jars.
4. Take about a half of a teaspoon of yoghurt and put this portion in each one of your jars.
5. Stir well. Lactobacillus bulgaricus, the bacteria causing milk fermentation, transfers from the yoghurt into the hot milk.
6. Seal the jars and wrap them tightly in a blanket or a rug. In order for the fermentation to happen, the milk has to maintain constant temperature of about 45˚C.
7. After 3-4 hours the process is done. Unwrapping the jars, you can see that the milk has changed its physical state!

YOUR MISSION REPORT

- Where do you see science in this mission?
- Was the consistency similar to the store-bought yogurt? If not, how can you improve it?
- What other milk products can you make at home?
- What other things did you try to make?

Did you know?
The bacteria causing milk fermentation was found in 1905.

Learn more!

Video here:
http://bit.ly/bgyoghurt

Student feedback - How did you like this mission?

☐ not at all ☐not much ☐ a bit ☐ liked it ☐ liked it a lot ☐ liked it best

Family feedback - How did you like this mission?

☐ not at all ☐not much ☐ a bit ☐ liked it ☐ liked it a lot ☐ liked it best

Did you use the 'Learn more!' resources? ☐ Yes ☐ No

What was good/bad about this mission?