CONBAT+

# CONTENT BASED TEACHING
# ConBaT+
# YOGHURT

## For the Teacher

**Anu Parts**

**[Pick the date]**

EMPOWERING LANGUAGE PROFESSIONALS
VALORISER LES PROFESSIONNELS EN LANGUES
SPRACHLEHRENDE IN IHRER ROLLE STÄRKEN

European Centre for Modern Languages
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COUNCIL OF EUROPE CONSEIL DE L'EUROPE

# YOGHURT

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## INTRODUCTORY INFORMATION

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**INSTITUTE:** **Tallinn English College, Estonia**

**TARGET GROUP:**

14-16

**SUBJECTS:**

Biology, chemistry

**AIMS:**

1. To know the composition of yoghurt and its history.
2. To understand the role of acidity for the precipitation/turning souer of milk.
3. To prepare yoghurt.
4. To know the importance of milk and yoghurt as basic food.
5. To become knowledgeable citizens who can distinguish between healthy and nonhealthy food products.

**KEY COMPETENCIES REGARDING:**

**COMMUNICATION IN LANGUAGE(S):**

- Development of discussion competences
- Oral fluency
- Writing skills

**LEARNING TO LEARN:**

- Organizing information
- Planning a laboratory work
- Development of cognitive competences such as: data search, data analysis, argumentation and decision making.

**DIGITAL COMPETENCES:**

- Use mind mapping programs

**SOCIAL AND CIVIC COMPETENCES:**

- Development of collaboration competences.
- Development of attitudes and values: responsibility, respect and tolerance.

## TIMING OF THE OVERALL ACTIVITIES:

4 x 45 minutes



# SOME INFORMATION ABOUT YOGHURT

**Timing**: 45 min

**Material required:** Worksheet, notebook

**Grouping:** 

**Focus on content:** Cultural and biological reasons for using milk turned into yoghurt.

**Focus on language:** English, all the other languages in the classroom

**Worksheet 1: *tune in* tasks**

## 1. SPEAKING ACTIVITY: ME AND YOGHURT

In pairs talk about your yoghurt biography for 2 minutes. Use the word yoghurt in your mother tongue. Then get ready to report to the class what you learnt about your partner's yoghurt experience/attitude etc.

The whole class then brainstorms about yoghurt. Write the ideas on the board.

## 2. READING

a) Skim the following text individually and choose your favourite word related to yoghurt. In groups share your word and explain why you like it. Try to make a sentence with that word.

 Translate the word into your mother tongue and any other languages you know within your group.

| | |
|---|---|
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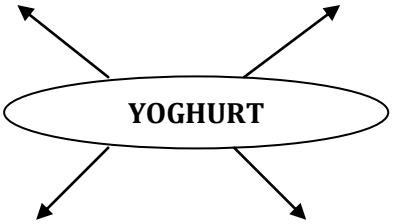
| | |
| | |

**Yoghurt**

Yoghurt is a dairy product. It is produced by the fermenting action of live bacteria. In yoghurt this bacteria is either *Lactobacillus bulgaricus (*called *L. bulgaricus)* or *Streptococcus thermophilus* (called *S. thermophilus*). The fact that the bacteria are live is critical to the formation of yoghurt. It is the activity of the live bacteria that converts the lactose (a form of sugar) in the milk into lactic acid, which in turn, because of its acidity, reacts to cause the proteins in the milk to solidify (or at least thicken).

Some yoghurts are then pasteurised to kill the bacteria before they are sold. The container will be marked to indicate whether there are live bacteria present. Most people prefer the live bacteria versions for health reasons. 100 grammes of yoghurt cancontain 10 billion live bacteria.

Organize the information about yoghurt.




Discuss the categories in groups of 4. Add more arrows (for more categories) if necessary.

b) Read the following text about the history of yoghourt. In groups. Replace 10 words by the equivalent word in your mother tongues. Give the changed text to next group and ask them to name the used languages.

## HISTORY OF YOGHURT

The first evidence of yoghurt being eaten dates back to 2500 BC.

Certainly the first yoghurt was discovered accidentally, with milk being left too long in the sun or a warm place. How long it took before somebody discovered that the rancid milk had become a tasty dessert is less clear...

It is probable that the climate in India, Asia and southern Europe was responsible for yoghurt being found there long before more cool climates. It has also been suggested that the nomadic Bulgars perhaps found yoghurt spontaneously produced on their goatskin bags, and brought it to Europe with them in the second century AD.

Yoghurt remained in India, Asia and southern and central Europe for the next couple of thousand years, little known in the rest of the world.

In the early 20th century the suggestion arose that Bulgarian peasants owed their long and healthy lives to the substantial amounts of yoghurt they ate, which was the first step towards yoghurt conquering the world.

The second step was a business called Danone, the first commercial yoghurt producer. Started in 1919, and still a very successful company to this day (better known under the Dannon name in North America) the company successfully launched yoghurt on the world.



## 3. LANGUAGE STRUCTURES

Finish the sentences. Use the information from the texts.

- If you pasteurise yoghurt, the bacteria will_____
- If you prefer live bacteria versions of yoghurt, _____
- If some milk hadn't been left in the sun/a warm place too long, _____

  _____
- The proteins in the milk would not thicken unless_____
- If the nomadic Bulgarians hadn't used goatskin for making bags _____
- _____

Form 2-3 conditional sentences on your own (related to the topic).



## VOCABULARY

Match the following definitions with the words from the text

| | |
|---|---|
| Connected with milk (adj) | |
| Changing chemically through the action of organic substances (noun) | |
| Become firm, hard (verb) | |
| Heat milk to certain temperature and then chill it in order to kill harmful bacteria (verb) | |
| Tasting and smelling bad because of staleness (adj) | |
| a farmer (noun) | |
| Put into action, set going (verb) | |
| Substance found in meat, eggs etc that is an important body-building part of the diet of humans and animals (noun) | |
| Change from one form or use of another (verb) | |
| Large in amount (adj) | |



## ANSWER SHEET

| | |
|---|---|
| Connected with milk (adj) | dairy |
| Changing chemically through the action of organic substances (noun) | Fermenting action |
| Become firm, hard (verb) | solidify |
| Heat milk to certain temperature and then chill it in order to kill harmful bacteria (verb) | pasteurise |
| Tasting and smelling bad because of staleness (adj) | rancid |
| a farmer | peasant |
| Put into action, set going | launch |
| Substance found in meat, eggs etc that is an important body-building part of the diet of humans and animalls | proteins |
| Change from one form or use of another (verb) | convert |
| Large in amount (adj) | substantial |



# MAKING YOGHURT

**Timing**: 2 x 45 min

**Material required:** Worksheet, notebook, computer

**Grouping:** 

**Focus on content:**

- Cultural and biological reasons for using milk turned into yoghurt.
- The process of making yoghurt, factors that have influence on it

**Focus on language:**

- English, all the other languages in the classroom

## WORKSHEET 1

1. Promoting yoghurt

Read the advertisements on different yoghurts. Which qualities and characteristics are focused on? Make a list of 10 keywords.

http://www.stonyfield.com/OurProducts/

2. Writing: It's me – the yoghurt

Use your mother tongue word for yoghurt and write about your

- past (when and how were your born?)
- present (how were your produced?). You may also concern marketing, advertising, promoting
- future (what will you be like?)

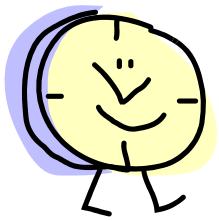
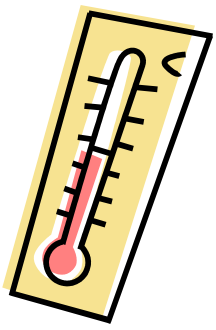
3. Practical work

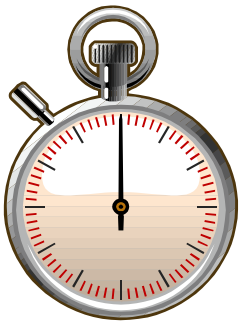
Read the instructions on http://www.eatyoghurt.com/yoghurtmaking.php .

In pairs:

a) discuss the steps of making yoghurt and explain the necessity of every step;

b) add graphic information (symbols, drawings, photoes etc) to make the information more comprehensible .



| | |
|---|---|
| Yoghurt is formed by the bacterial fermentation of milk. It can be made from any milk, but cow's milk is usually used. Bacteria cause the sugar in the milk to ferment. That produces lactic acid. This then reacts with the protein in the milk to form yoghurt. | |
| Explanation | Graphic information |
| Boil a liter of milk (this kills any non-yoghurt bacteria in the milk), then allow it to cool to about 45 degrees. Don't start making the yoghurt before the milk has cooled sufficiently, because the heat will kill the good bacteria. | |
| Explanation | Graphic information |
| Now add the pot of live yoghurt and stir it. Then pour the mixture into the cups supplied with your yoghurt-maker machine or similar glass pots etc. and keep warm according to the method you have chosen. | |
| Explanation | Graphic information |
| The process of yoghurt making takes 8-10 hours: too short and the yoghurt will be of a less thick consistency; too long and the curds and whey start to separate. | |
| Explanation | Graphic information |
| The yoghurt will last several days in the fridge. Any flavouring, fruit or sugar can be added at the time of serving rather than straight after manufacturing it. | |
| Explanation | Graphic information |

4. Make as many inquiry questions as you can in 3 minutes' time.
5. Compare the questions in pairs or groups of 4 and choose the most interesting one. Ask opinion and advice from your teacher.
6. Plan the laboratory work according to your question and the instruction.

# YOGHURT AND BIOTECHNOLOGY

**Timing:** 45 min

**Material required:** Worksheet, notebook, computer

**Grouping:** 

**Focus on content:**

- Cultural and biological reasons for using milk turned into yoghurt.
- The process of making yoghurt, factors that have influence on it

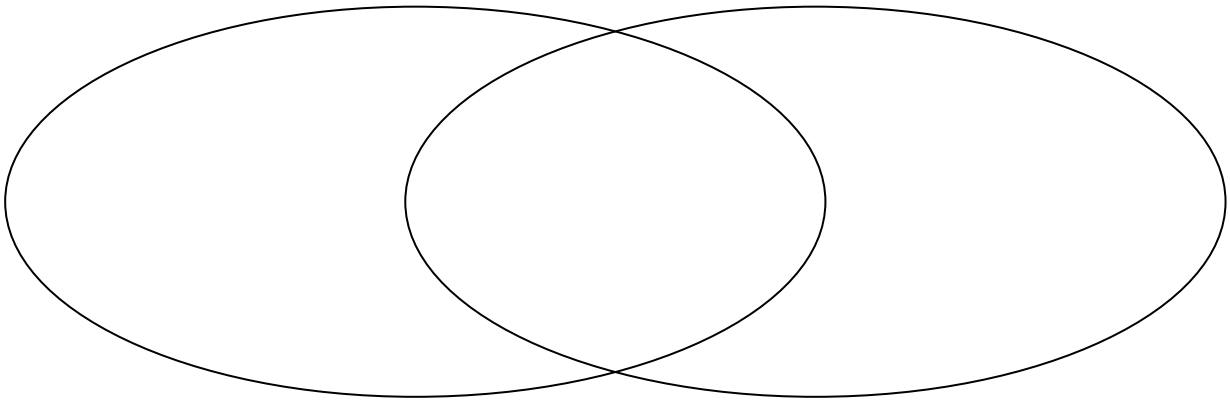
**Focus on language:**

- English, all the other languages in the classroom

## WORKSHEET 1

1. Comparison

Search the Internet and make a list of other fermented milk products (kefir, cheese, sour cream…). Compare (the production of) two different milk products. Draw a Venn diagram to chart similarities and differences. One of the possible websites that can be used: http://benm.myweb.uga.edu/ .



2. Reading

In pairs, read the following text about cottage cheese.



**COTTAGE CHEESE**

Cottage cheese is a cheese curd product with a mild flavor. It is drained, but not pressed so some whey remains and the individual curds remain loose. The curd is usually washed to remove interesting acidity giving *sweet curd* cheese. It is neither aged nor coloured. Different styles of cottage cheese are made from milk with different fat levels and in small curd or large curd preparations. Cottage cheese that is pressed becomes hoop cheese, farmer cheese, pot cheese or queso blanco.

Cottage cheese may be eaten straight. It is also eaten with fruit, with fruit puree, on toast, in green salads or as an ingredient in recipes like jello salad and various desserts. It can be used to replace grated cheese or ricotta cheese in most recipes (such as lasagna).

The term "cottage cheese" is believed to originate from simple cheese being usually made in cottages from any milk left over after making butter. The term was first used in 1848.

The curd size is the size of the "chunks" in the cottage cheese. The two major types of cottage cheese are small curd, high-acid cheese made without rennet, and popular large curd, low-acid cheese made with rennet. Rennet is an enzyme that speeds curdling and keeps the curd that forms from breaking up. Adding it shortens the cheese making process, resulting in a lower acid and larger curd cheese, and reduces the amount of curd poured off with leftover liquid (the whey). Sometimes large curd cottage cheese is been called "chunk style".

Cottage cheese is popular among dieters and some health food devotees. Cottage cheese is a favorite product among bodybuilders and weightlifters for its high content of casein protein while being relatively low in fat.

a) Underline all the different kinds of cheese mentioned in the text.
b) Using information from the internet describe these products in brief.
c) Name the underlined words in the text in different languages.

Speaking: a drama activity

CONTENT BASED TEACHING + PLURILINGUAL/CULTURAL AWARENESS CONBAT

YOGURT

Your school has been asked to help with a yoghurt campaign. In groups, prepare a sketch about how yoghurt can be advertised during lunch breaks. Introduce your ideas or act them out in the class. Use as many languages as you can and try to make yourself understood.

## ASSESSMENT

- Knowledge dimension (correct concept use)
- Reasoning dimension (information selection; critical analyse of the text; quality of the conclusions)
- Communicational dimension (presentation and discussion of conclusions).

## REFERENCES

Yoghurt By A. Y. Tamime, Richard Kenneth Robinson

http://www.landlearn.net.au/print/making_yoghurt.htm