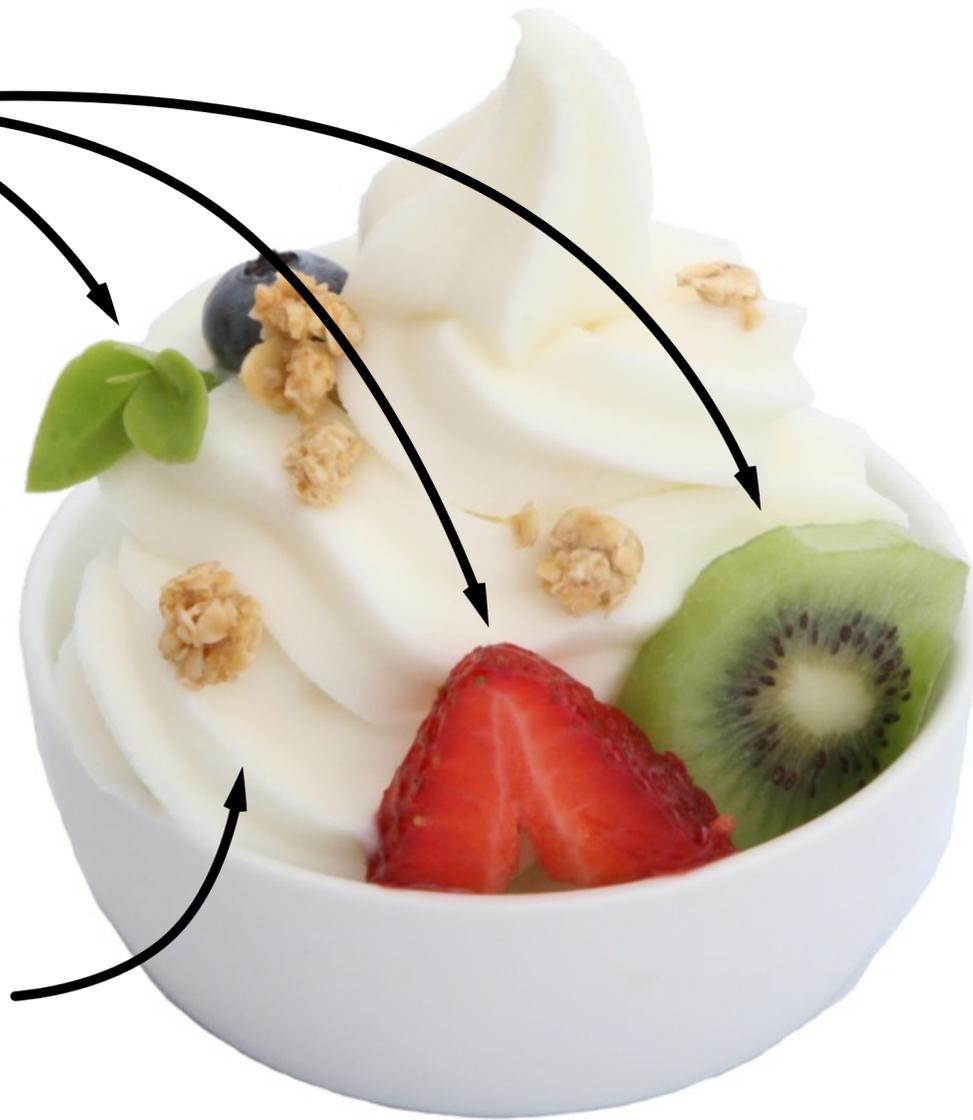


A close-up, slightly blurred photograph of a white bowl filled with white yogurt. The yogurt is topped with several fresh fruits: a sliced kiwi, a strawberry, and a blueberry. The background is a soft, out-of-focus green, suggesting a natural setting. The text is overlaid on a semi-transparent white horizontal band across the middle of the image.

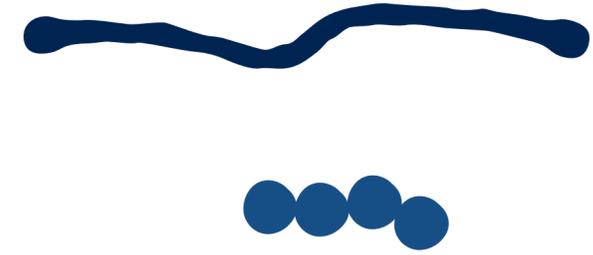
# Yogurt

Fermented milk through bacterial action.

Toppings



Fermented milk



# yoğurt

Turkish word for curdled or coagulated, thickened.

# Why eat yogurt?

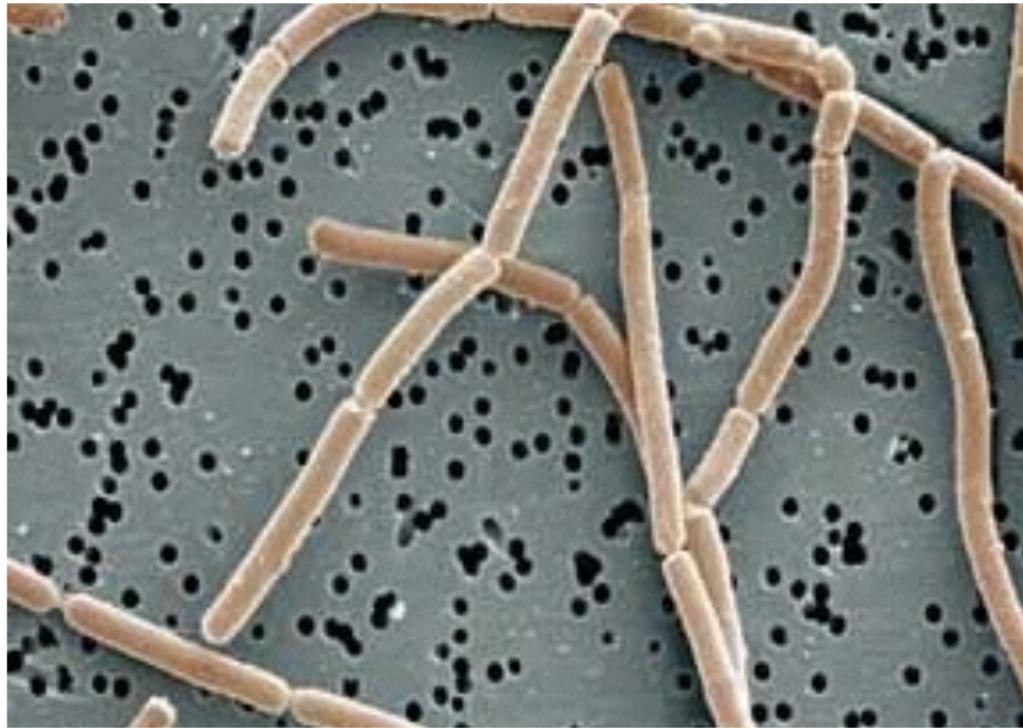
Rich in protein, calcium, riboflavin, vitamin B6 and vitamin B12.

Eating low-fat yogurt can promote weight loss.

Can help keep harmful gut bacteria at bay.

May discourage vaginal infections

# How is yogurt made?



*Lactobacillus delbrueckii*  
subsp. *bulgaricus*



*Streptococcus*  
*thermophilus*

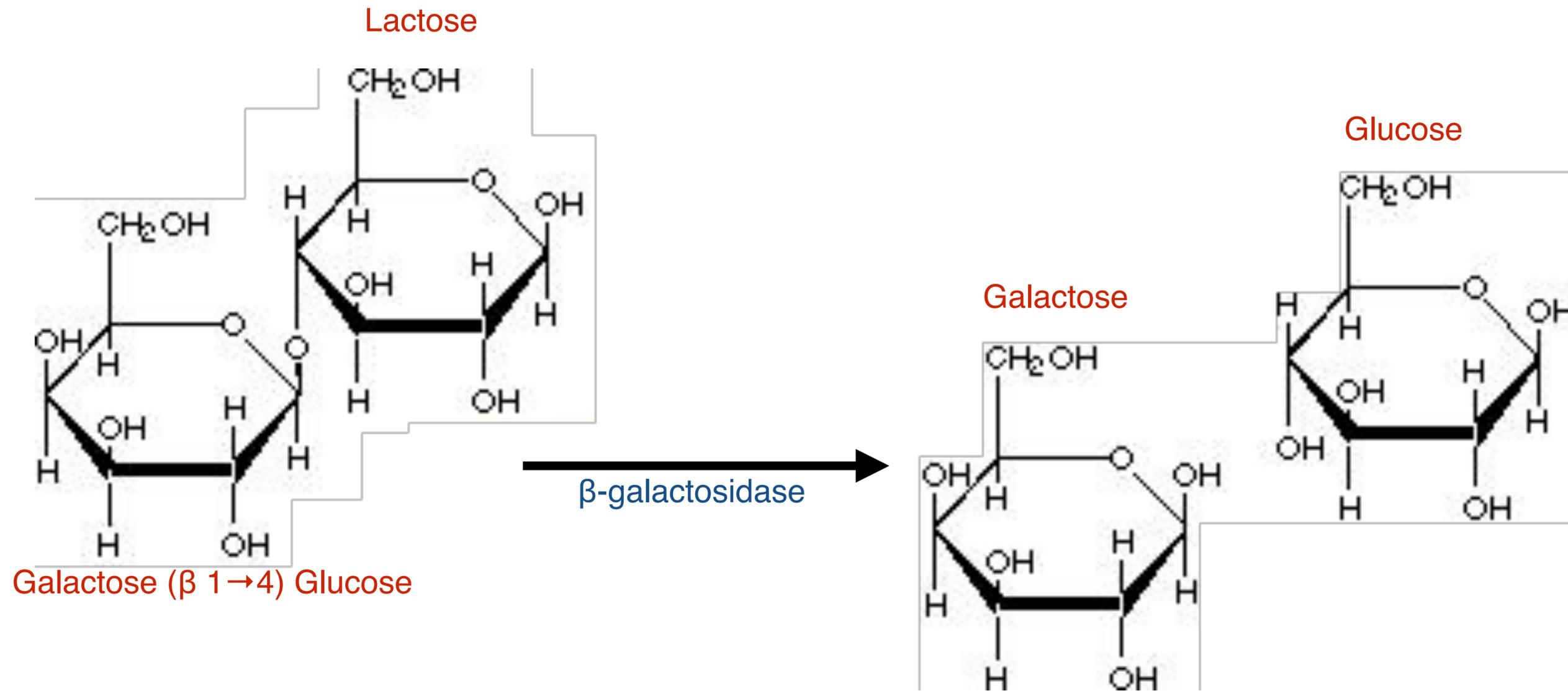
# How is yogurt made?

*L. d. bulgaricus* and *S. thermophilus* are used together to produce lactic acid.

Lactic acid coagulates milk proteins to give yogurt its thick consistency.

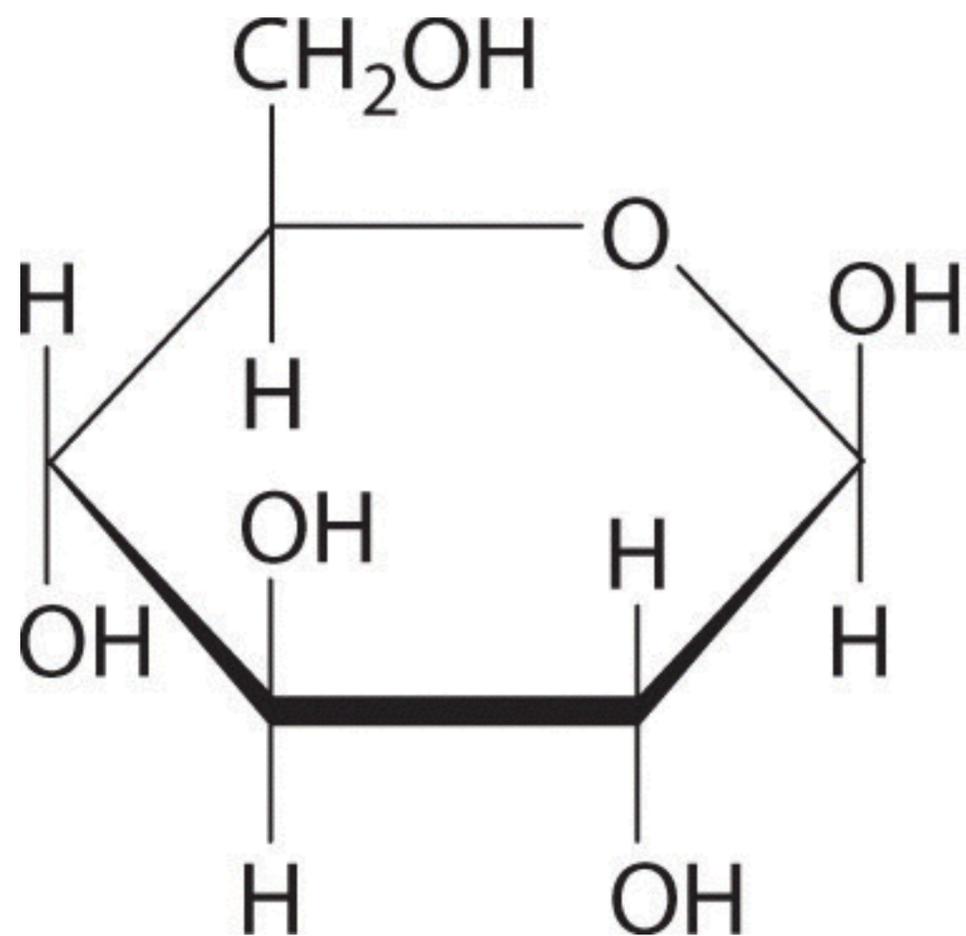
*L. d. bulgaricus* produces acetaldehyde, a major compound responsible for the aroma of yogurt.



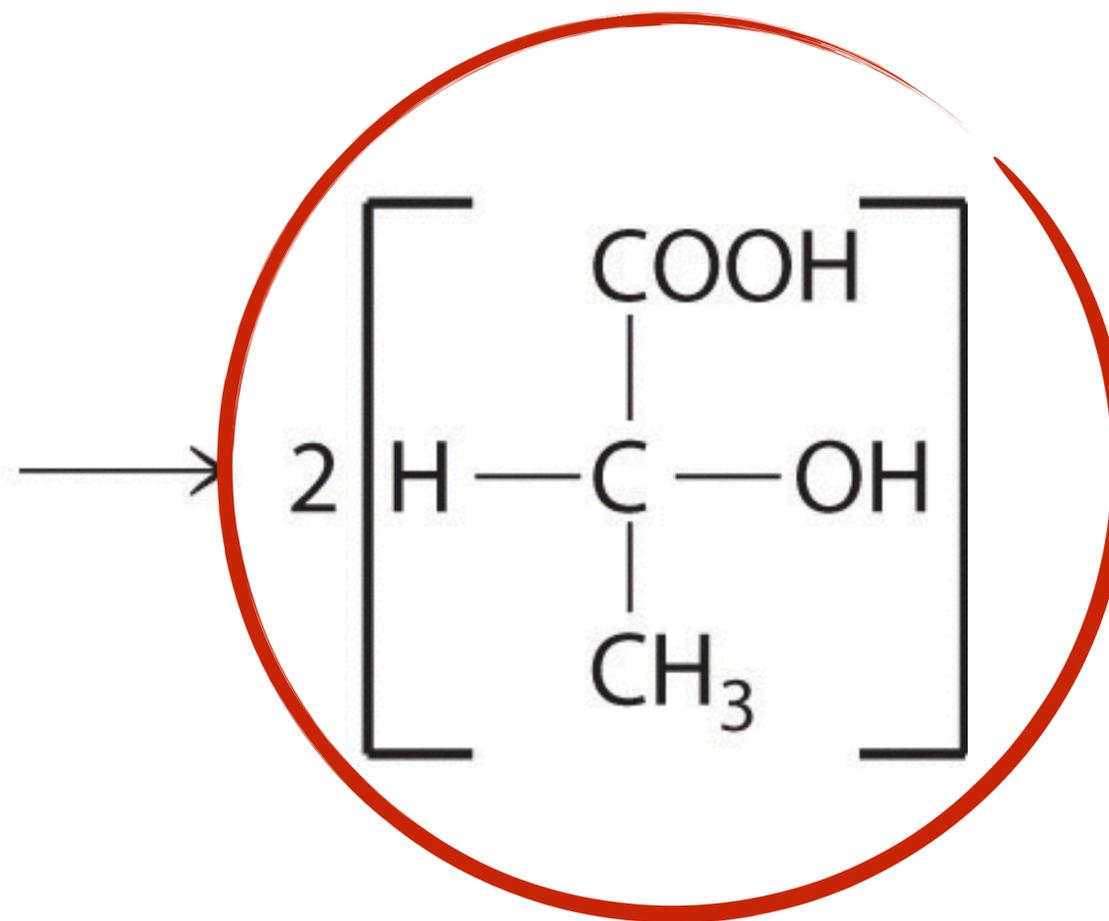


# $\beta$ -galactosidase

Enzyme catabolizes lactose into galactose and glucose.



Glucose



Lactic acid

## Embden-Meyerhof-Parnas Pathway

Enzymes convert glucose to lactic acid.

# Why homemade yogurt?

It tastes better.

No additives.

It's less expensive.

Just because you can.



# Ingredients

1 litre of milk

3 tbsp plain yogurt as starter

large pot with lid

spoon to stir

thermometer



# Sanitize

You are incubating bacteria!

Need to sanitize equipment to prevent contamination.

Easiest method: put your stuff in the pot and boil water to steam.



# Heat the milk

Using the thermometer, heat the milk to 80°C for ~10 min.

This denatures the milk proteins and yields a smoother texture.

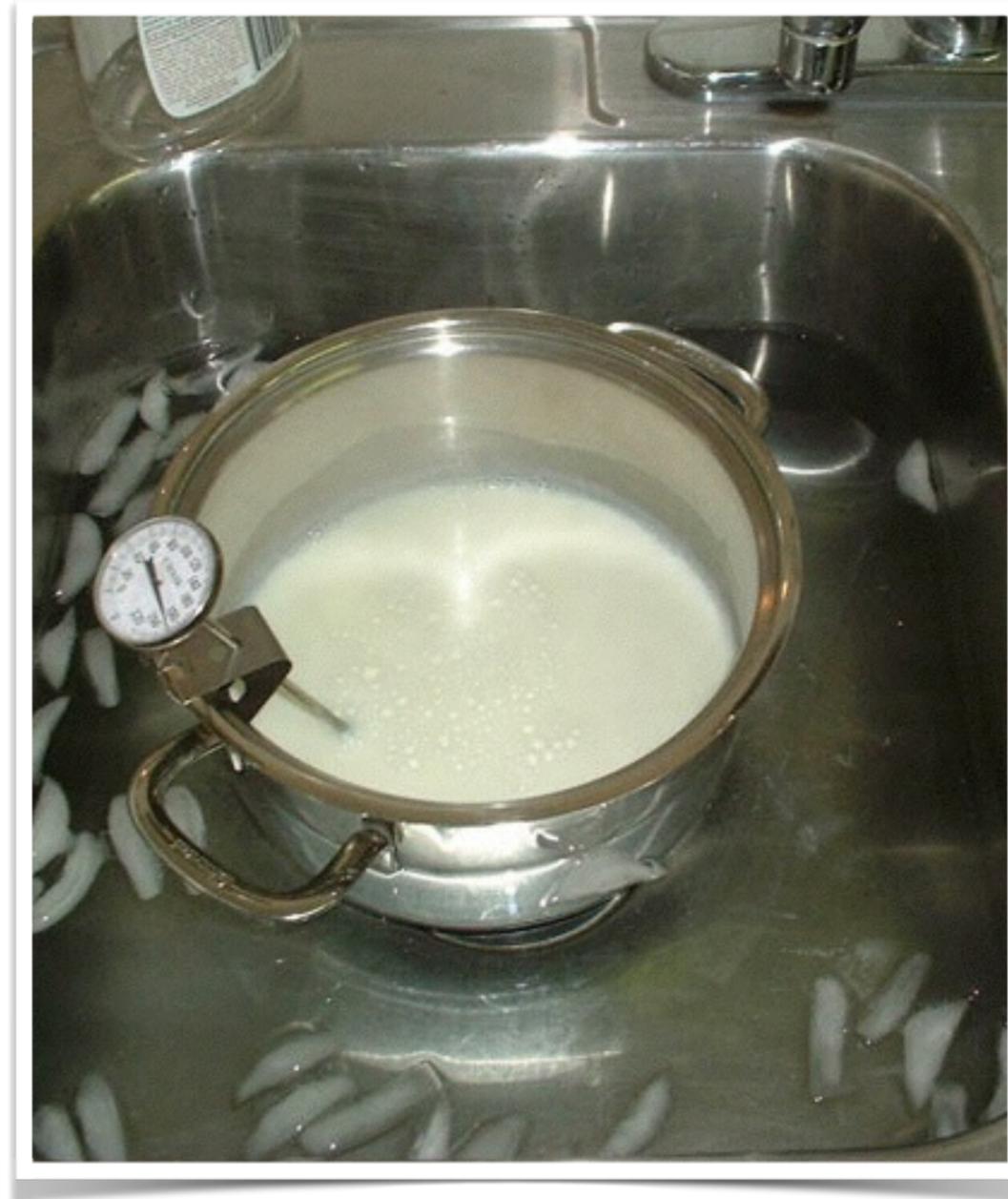
Careful not to burn the bottom!



# Cool the milk

Using the thermometer, cool the milk to 45°C.

If too hot, it will kill the bacteria!



# Add starter culture

Introduce *L. d. bulgaricus*  
and *S. thermophilus*  
using the starter yogurt.

Stir well.



# Keep warm overnight

Now we incubate for 8-12 hours.

The longer you wait, the thicker and tangy it gets.



# Stir and chill

Stirring and chilling stops bacteria metabolism.



# You've made yogurt!

Enjoy with your favourite flavour 😊