

WJEC England Biology

A-level

SP C1 04 - Bacteria in Milk

Flashcards

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Why does milk turn sour?



Why does milk turn sour?

The metabolism of bacteria in milk converts lactose into lactic acid, which is sour.



How is the bacteria content counted?



How is the bacteria content counted?

Select a concentration of milk where colonies are discrete and easily countable. Count the number of colonies per plate, and multiply the number by the dilution.



List a few aseptic techniques to be used in this practical.



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- Wash hands and disinfect work area before and after the practical.
- Leave a Bunsen burner on nearby to sterilise the air.
- Sterilise all equipment by passing it through a Bunsen flame before and after its use.
- Keep petri dishes closed, open for the minimal amount of time.



Why are the petri dishes incubated upside down?



Why are the petri dishes incubated upside down?

To prevent condensation from forming on the lid and dripping down to the agar plate, which may disrupt the formation of colonies.



What is the difference in the bacteria count of milk with distant and close use-by dates?



What is the difference in the bacteria count of milk with distant and close use-by dates?

Milk with a close use-by date has a much higher bacteria count.



What is a serial dilution?



What is a serial dilution?

A dilution where successive concentrations decrease in a logarithmic fashion, eg. by a factor of ten.

