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*The following article was written by **Sélène**, a Year 12 student who has chosen biotechnology as her field of study. This article is part of the work students do during the techclass in English on Monday afternoons.*

1. What is the goal of the experiment?

The goal of the experiment is to count bacteria in the milk by putting bacteria into a nutrient agar plate so that they can grow.

2. The description of the experiment.

First, we put the milk that contains bacteria directly on the dish. As there would be too many bacteria to count, we are going to dilute the milk several times in sterile water.

Then, we label the dishes with our initials, the date and the name of the dilution and pour a warm liquid layer into the plate to allow bacteria to multiply. We then add a few drops of the diluted milk into the liquid.

We wait for the agar to solidify and we add a second thin layer to trap bacteria and prevent them from becoming too large.

Finally, we place the dishes in an incubator to allow bacteria to grow. Once bacteria have developed, we count them.

3. The result of the experiment.

In the pictures below, we can see white dots which are bacteria: they form colonies. We can count the living bacteria in the milk in order to check their quality, their freshness and their sanitary compliance.

