

Lab 2B: The Presence of Microorganisms

For this exercise, work in pairs. These plates will be used for the observation of isolated colonies of bacteria during the Prokaryote lab next week.

Note: Read Appendix IV (Aseptic Technique) before beginning these procedures.

Experimental Procedure:

1. Obtain a Petri dish containing a nutrient agar growth medium. Using a lab marker (do not use pen or pencil, it will wash off), label the bottom plate with your name (or initials), your partner's name, lab period, date and the source of bacteria (inoculant).
2. Obtain a sterile cotton swab and brush some surface inside or outside the lab (*e.g.*, a door knob, the floor, handrail, *etc.*), and transfer to the surface of the agar by gently streaking the swab over the surface of the agar as indicated in Figure 1. Do not dig into the agar with the swab.

Note: **DO NOT inoculate the plate with any mucous secretions (*i.e.*, from your mouth or nose).**

3. Note the source of the bacteria on your plate and return the plate to the front bench. The plates will be incubated at 38°C for 24 hours in an inverted position to prevent moisture from accumulating on the agar surface, then refrigerated until your next lab.

4. Following incubation, diagram the appearance of the colonies on your agar plate.

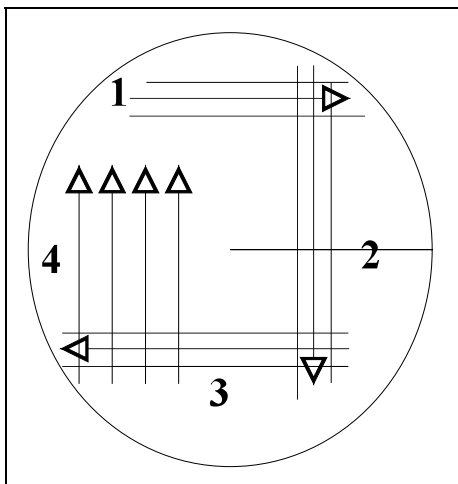


Figure 1 Preparation of a streak plate. The lines represent streaks with the inoculating loop or swab on the agar surface in the direction of the arrows.

Question:

1. How many different types of bacteria, judging by the appearance of the colonies, did you culture?