

Spud Smear

Obtain sterile agar petri plates and carefully label them with name, date, experiment and any other pertinent identification information. Do not open the lid until you are ready to inoculate (contaminate) the agar.

1. Expose the petri dish of agar medium to microorganisms by performing one or more of the following:
 - a. Sprinkle some yeast on the medium.
 - b. Using a cotton swab, rub across mold on cheese then rub on the medium in the petri dish.
 - c. Using an eye dropper, deposit a drop or two of pond water/ditch water onto the medium in the petri dish.
 - d. Rub your finger (after washing hand thoroughly) on your face and then rub same finger on medium in petri dish.
 - e. Place strand of hair on the medium in petri dish.
 - f. Place a fine layer of soil onto the agar
 - g. Others.
2. Seal petri dishes with clear tape.
3. Place the petri dishes in a drawer (or other warm dark place) overnight and observe the next day and after 3 and 7 days. This is the incubation period. Have students write on a piece of paper what they observed on each petri dish.
4. After incubation, observe the types of microorganisms that have grown on the surface of the plate. Many microorganisms will have formed visible colonies. A colony is a group of microbial cells resulting from the reproduction of one or more cells that were deposited on the medium surface and grew into a visible collection of cells.
5. Discuss with students what took place in the petri dishes.

