

Spread Plate Method of Isolation

Purpose The Spread Plate technique is used to count the number of bacteria on a Petri Dish.

Principle The spread plate technique is essentially a method to evenly distribute bacteria across the plate to make the calculation of the number of bacteria colonies easier, especially when estimating. Each colony is considered "pure," since theoretically, the colony began with an individual cell.

1. Begin by transferring .5ml – 1.0.ml of inoculated nutrient broth to a sterile Petri dish
2. Remove the glass spreader (hockey stick) from the Ethyl Alcohol.
3. Pass the spreader through a Bunsen burner flame to ignite the alcohol. Wait for the alcohol to burn away. You are not leaving the spreader in the flame. The alcohol sterilizes the spreader. The flame is just removing the excess alcohol prior to touching the agar.
4. Open the petri dish and use the spreader to evenly distribute the transferred broth over the entire surface of the plate.
5. Return Hockey Stick to alcohol.
6. Incubate Plate