

Membrane Filter Method

Advantages of the MF Technique

- Permits testing of large sample volumes.
- Reduces preparation time as compared to many traditional methods.
- Allows isolation and enumeration of discrete colonies of bacteria.
- Provides presence or absence information within 24 hours.
- Effective and acceptable technique. Used to monitor drinking water in government laboratories.
- Useful for bacterial monitoring in the pharmaceutical, cosmetics, electronics, and food and beverage industries.
- Allows for removal of bacteriostatic or cidal agents that would not be removed in Pour Plate, Spread Plate, or MPN techniques.

1. Collect the sample and make any necessary dilutions.

2. Select the appropriate nutrient or culture medium. Dispense the broth into a sterile Petri dish, evenly saturating the absorbent pad.



3. Flame the forceps, and remove the membrane from the sterile package.

4. Place the membrane filter into the funnel assembly.



5. Flame the pouring lip of the sample container and pour the sample into the funnel.

6. Turn on the vacuum and allow the sample to draw completely

Membrane Filter Method

through the filter.



7. Rinse funnel with sterile buffered water. Turn on vacuum and allow the liquid to draw completely through the filter.

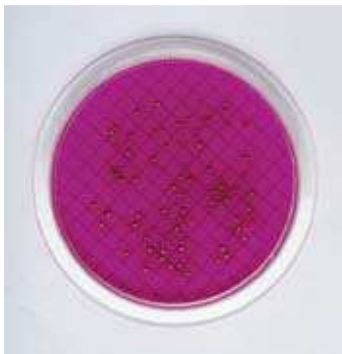


8. Flame the forceps and remove the membrane filter from the funnel.



9. Place the membrane filter into the prepared Petri dish.

10. Incubate at the proper temperature and for the appropriate time period.



11. Count the colonies under 10 - 15 X magnification.

12. Confirm the colonies and report the results.

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