

140 MBIO

# Lab 3: Culture Media Preparation.



# Microorganisms need food to grow

- ◆ Primary ingredients required by all living organisms include:
  - ◆ a carbon source, water, minerals, and a nitrogen source.
- ◆ These nutrients together make a **media**.
- ◆ Different microbes need different amounts of these nutrients.



# Culture media may be found in one of three states:



- ◆ Liquid (called broth).
- ◆ Semi-solid.
- ◆ Solid.

# Aim

To prepare solid and Liquid media.



# Requirement

1) Different media :

Nutrient broth - Nutrient agar - PDA/Malt Extract





# Requirement

- 2) Balance
- 3) Distilled water
- 4) Test tubes
- 5) Petri plates
- 6) Flasks
- 7) Burners
- 8) Autoclave



# Procedure

1- Weigh

2- Dissolve

3- Sterilize

4- Cool

5- Refrigerate  
till use

# 1- Weigh





## 2- Dissolve



### 3- Sterilize

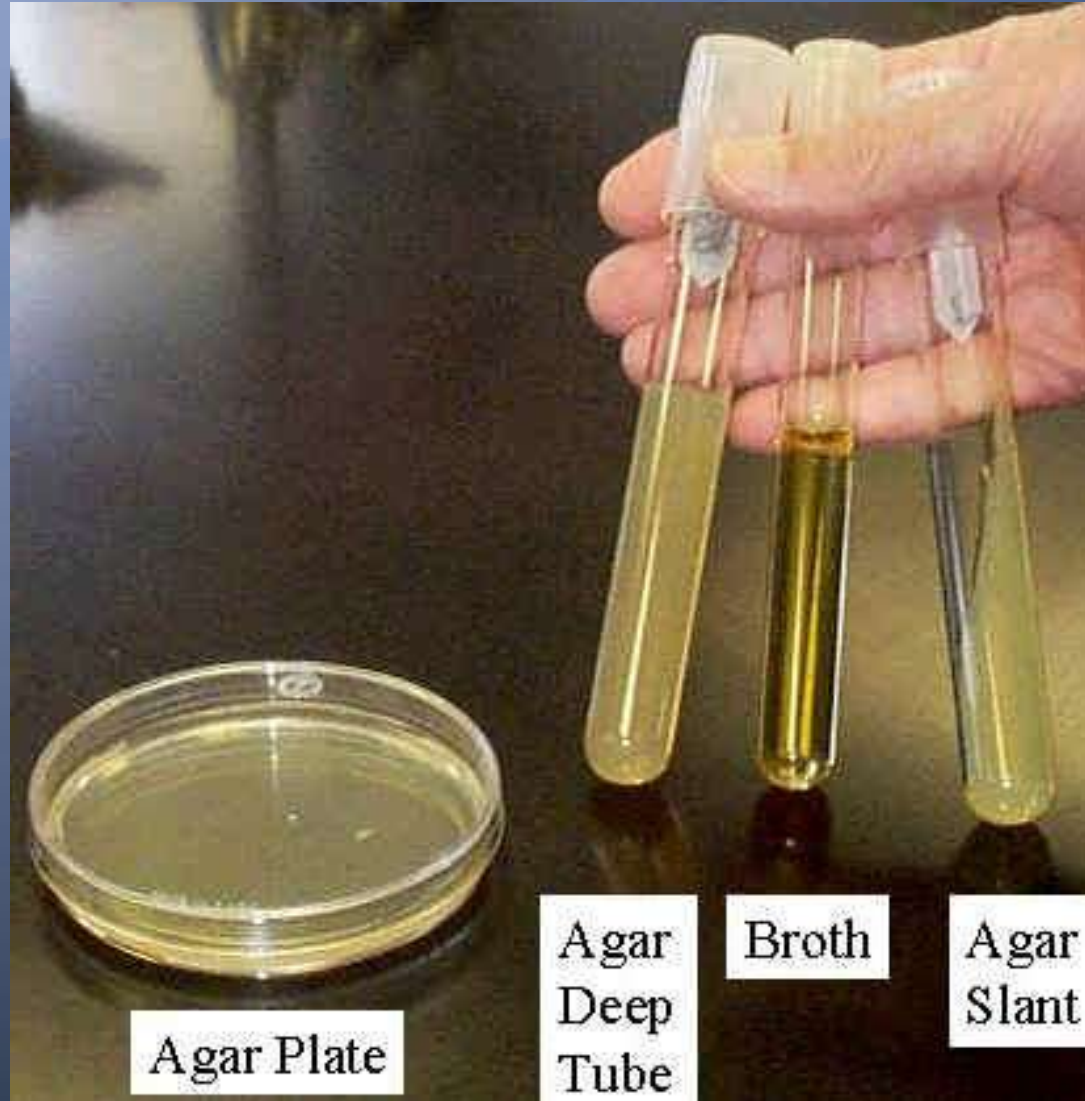


4- Cool

5- Refrigerate  
till use



# Who to make .....





# Pouring of Solid media

## - In petri plates :

- ◆ Remove the lid slightly
- ◆ Pour the media near bunsen burner
- ◆ Invert the plate
- ◆ Write date and time on the sides of plates



- **In tubes:**
  - **Making Slants:**

- ◆ After boiling, pour media in test tubes
- ◆ Autoclave
- ◆ Place in **slant** position till the media solidifies.





## - In tubes:

### Agar deep tube (Stab Agar):

- ◆ After boiling, pour media in test tubes
- ◆ Autoclave
- ◆ Place in **vertical** position till the media solidifies.





**Slant agar - Stab(Deep) agar**

## -In tubes:

### Making test tubes with broth media :

- ◆ Place the test tube near a burner and remove the cap.
- ◆ Pour the media in the tube and close the cap at once.
- ◆ Place the tube in upright position in the test tube stand.



# Thank you ....

