

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

140 micro

Lab 3: Culture Media



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

Deffrent media :

Nutrient broth - Nutrient agar - PDA/malt extract



Requirement

- 1- Balance
- 2- Distil wate
- 3- Test tubes
- 4- Petri plates
- 5- Flaskes
- 6- Burners
- 7- Autoclave



Procedure

1- Weigh

2- Dissolve

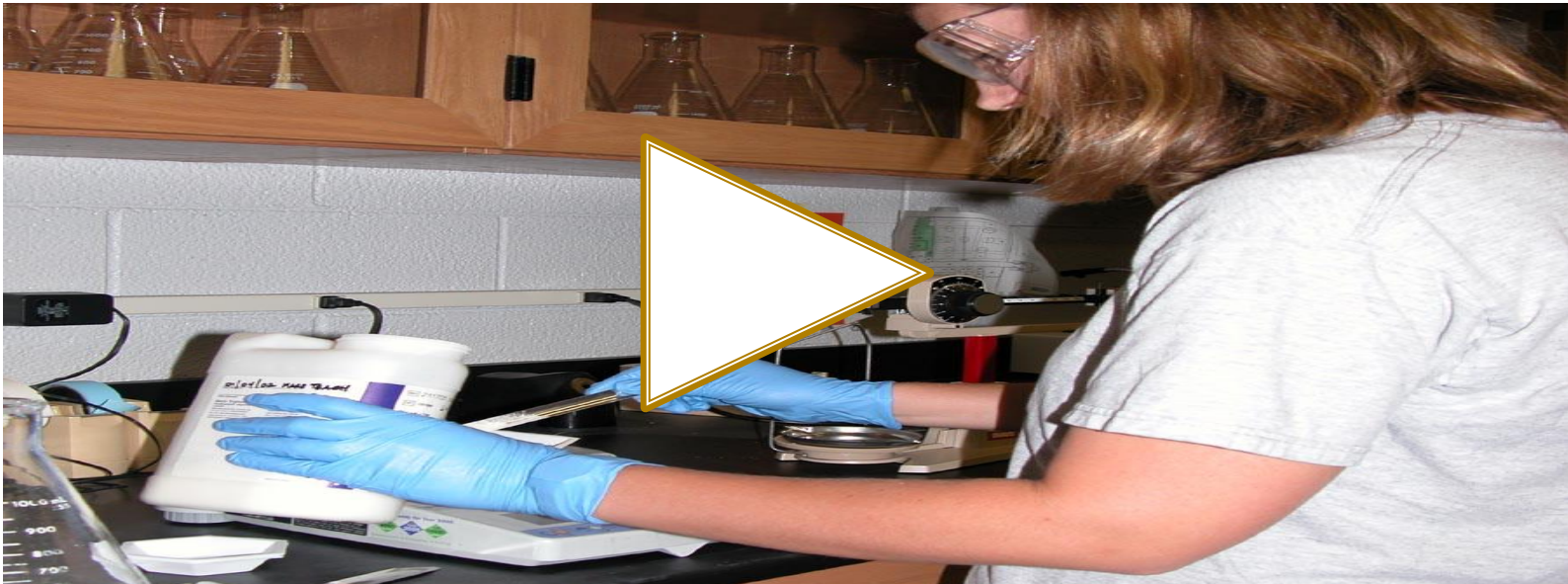
3- Sterilize

4- cool

5- refrigerate
till use

1- Weigh

When lab personnel make media they measure out a quantity of **dry powdered nutrient media**, add **water** and check the **pH(7)**.

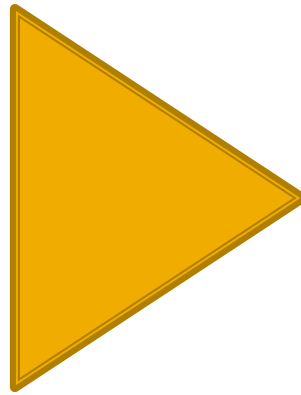


2- Dissolve

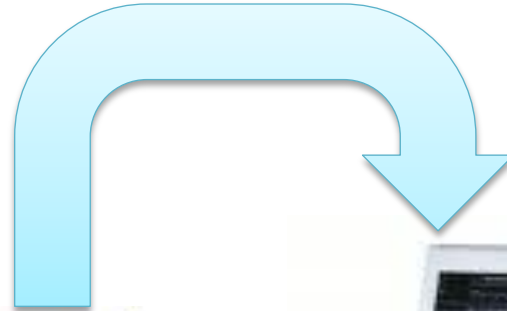


make cotton plug

Play videos



3- Sterilize



4- cool

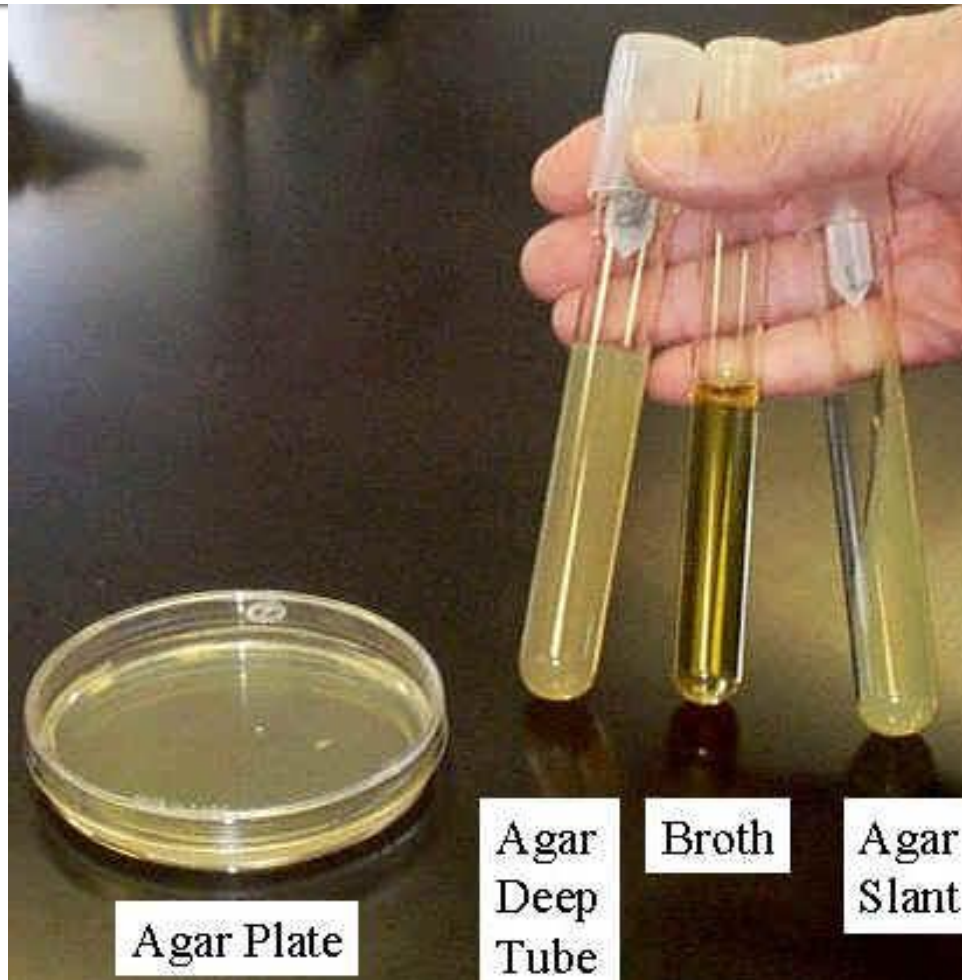
5- refrigerate
till use



Pouring Media



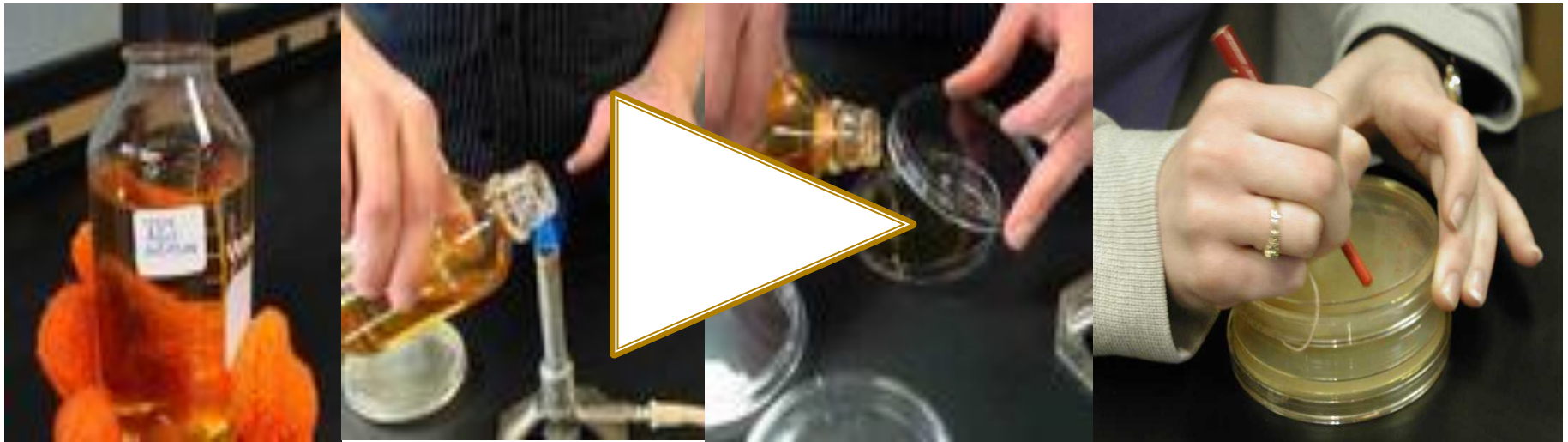
Who to make



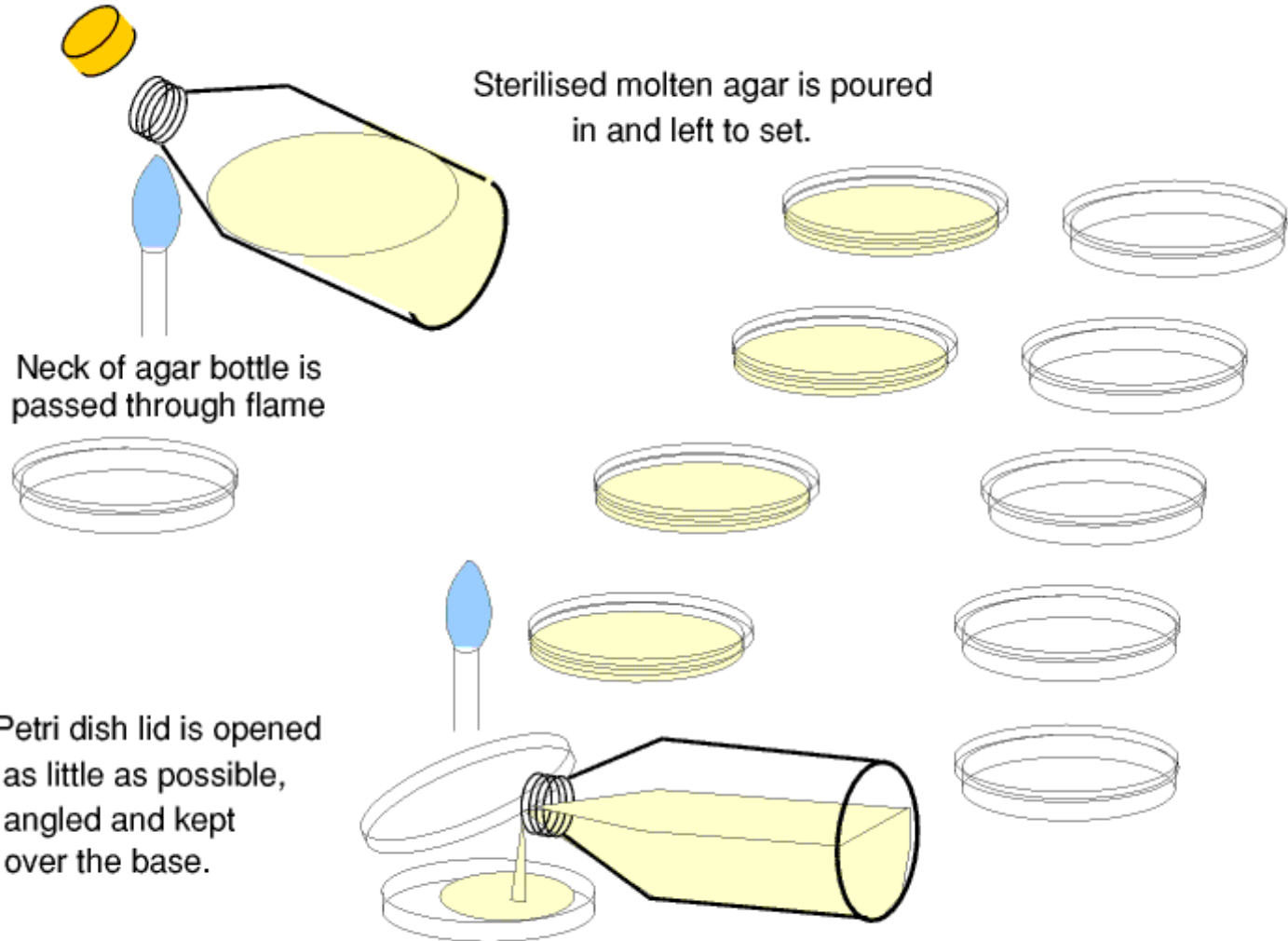
Pouring of Solid media

- Petri plates :

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



"Pouring a Plate"



Neck of agar bottle is passed through flame

Petri dish lid is opened as little as possible, angled and kept over the base.

Each Petri dish hold about 20 ml, so 200ml will do for 10.

Agar plates are stored upside down to prevent condensation.



- Making of Slants:

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



- Agar deep tube :

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

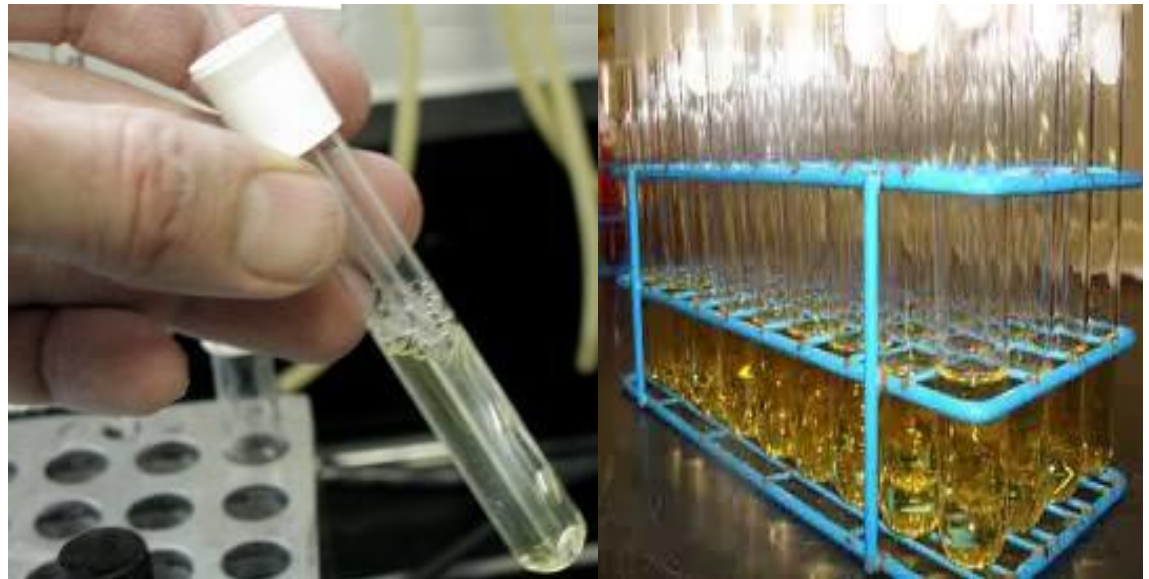




Slant agar - Deep agar

-Making of 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

