

## Protocol: YPD Media

Adapted from Cold Spring Harbor Protocols (<http://cshprotocols.cshlp.org/content/2010/9/pdb.rec12315.full>)

YPD (Yeast Extract, Peptone, Dextrose) is a rich growth medium for yeast. While an excellent growth medium for yeast, the specific concentrations of nutrients are not specifically defined, as they are in Synthetic Complete Medium.

### Reagents

Bacto agar (Becton, Dickinson and Company) (if preparing agar plates)

Bacto peptone (Becton, Dickinson and Company)

Yeast extract

diH<sub>2</sub>O

Glucose (40% w/v, sterilize by filtration)

**Note:** When autoclaving liquid, the rule of thumb is to make sure the final volume of your liquid is no more than ½ the max volume of the container (e.g., no more than 500 ml of liquid in a 1 L Pyrex bottle.)

1. To an autoclavable bottle, add:

Reagent	Amount to add per 500ml final volume		Amount to add per 250 mL final volume	
	Liquid	Agar Plates	Liquid	Agar Plates
Bacto agar	--	10 g	--	5 g
Bacto peptone	10 g	10 g	5 g	5 g
Yeast extract	5 g	5 g	2.5 g	2.5 g
diH <sub>2</sub> O	475 ml	475 ml	238 ml	238 ml

- a. Weigh out and add dry reagents to autoclavable Pyrex bottle.
  - b. Using a graduated cylinder, measure out the appropriate volume of diH<sub>2</sub>O.
  - c. Add diH<sub>2</sub>O to the dry reagents and swirl.
2. Autoclave the mixture (**You MUST get trained on how to use the autoclave before doing this!**)
    - a. Make sure the screw-caps are **LOOSLEY** screwed on, allowing gas to escape the bottle.
    - b. Place a piece of autoclave tape across the cap, making sure one end is taped to the glass bottle.
    - c. Autoclave for 25 minutes (use "SLOW EXHAUST" setting).
  3. For YPD liquid medium:
    - a. Place the bottle in a 55°C in a water bath to allow the temperature of the media to come down.
    - b. Add 25 ml of 40% glucose (per 500 ml final volume) or 12.5 ml of 40% glucose (per 250 ml final volume).
    - c. Gently swirl the media to mix glucose and allow to cool to room temperature before tightening the cap on the media for storage.

### For YPD agar plates

- a. Place the bottle in a 55°C in a water bath to allow the temperature of the media to come down.
- b. Add 25 ml of 40% glucose (per 500 ml final volume) or 12.5 ml of 40% glucose (per 250 ml final volume)
- c. Gently swirl the medium to mix glucose (avoid bubbles).
- d. While still warm, pipette 25ml of media into 10cm diameter plastic petri dishes using a serological pipette.
- e. Allow agar mixture to cool and solidify overnight.