

Al- Mustaqbal University
College of Science
Medical Physics Department
First Stage



General biology

Lecture (Lab) : 5

Lab media and its types

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Lab media and its types

Culture media: Balanced mixture of different nutrients necessary for the growth of microorganisms, it may be simple or complex composition in each case serves to provide the energy and basic units for building cells.

The purpose of using Culture media: Growing and preserving fungi.

Study the effect of single nutrients found in media on the growth of fungus
Inducing fungi to produce and forming some material. Classification of fungi and study the cultural characteristics.

Culture media are divided According to the chemical composition into three types:

1. **Natural media**
2. **Synthetic media**
3. **Semi Synthetic media**

Natural media: Use of natural materials without additions, ex: Extracts of the roots of potatoes or carrots, Prepared from wheat or barley or corn.

Synthetic media: Must be known composition, consists of metal salts have added some sources of carbon or nitrogen can be prepared each time the same precision ex: Czapek's Agar (CZ).

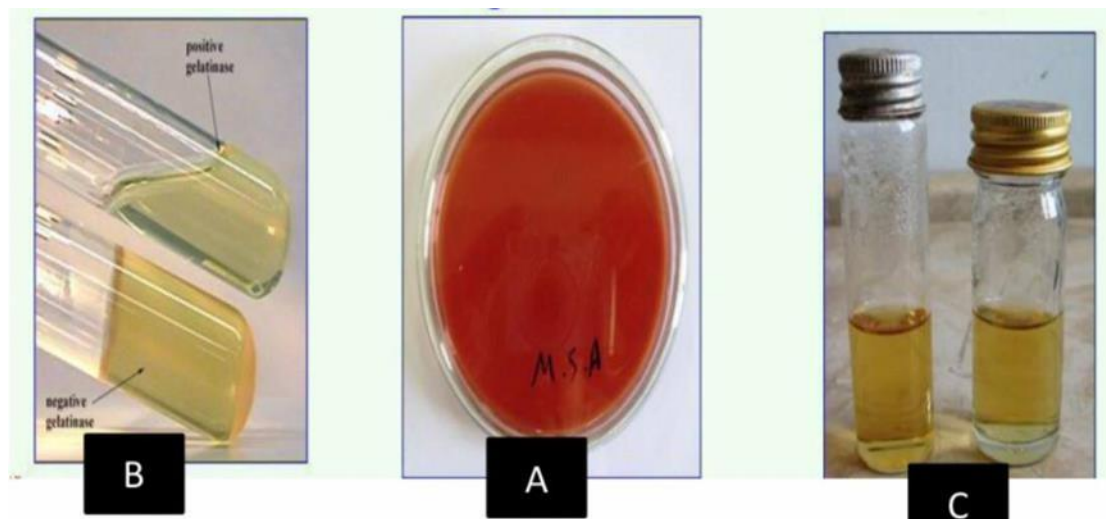
Semi Synthetic media: Not have a specific composition, composition changed depending on the nature of the material prepared, Difficult prepared each time the same precision ex: Potato Dextrose Agar (PDA), Corn Meal Agar (CMA), Malt extract agar.

Culture media are divided According to the physical condition into three types:

A_ Solid media: It may be natural such as potato chips, or it may be artificial, such as (PDA) Containing (Agar).

B_ Semi solid media: Contains a half or a quarter of the amount Agar added to solid media.

C_ Liquid media: Not contains Agar such as (PD) artificial(Milk) natural.

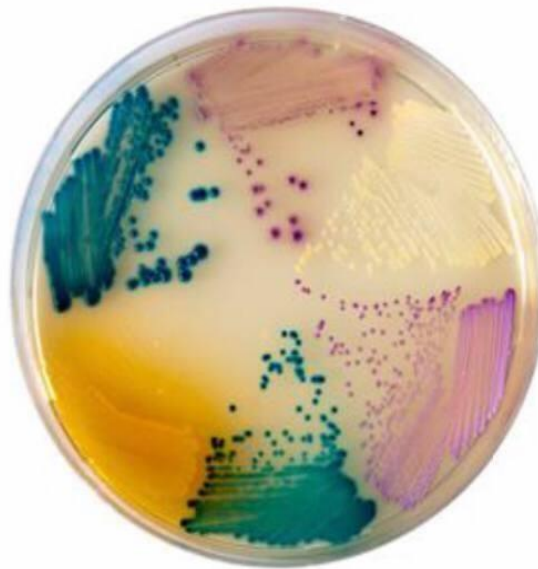
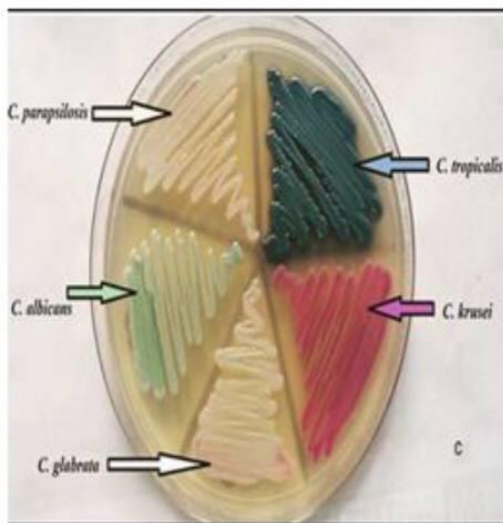


powder in Preparation of Culture Media General

- 1- Broth & agar media are prepared by dissolving specified amount of distilled water.
- 2- Boiling is often required to dissolve the powder by autoclave in 121 C° for 15-20 min.
- 3- Cool the flask containing the culture media to about 50 C°
- 4- Pour the culture media on the Petri dishes let it until Solidify.

CHROMagar Media :

This test is performed by inoculating CHROM agar Candida medium which is prepared previously from Candida isolate culture grown on SDA for 24 h, and then incubated at 30°C for 24-48 h. CHROM agar test is used for the presumptive identification of Candida species by production of different colors on this medium (C. albicans = green/ blue green, C. dubliniensis = dark green, C. tropical = blue, C. parapsilosis = cream white, and C. krusei = pink)



Culture media of fungi