

Nutrition of Fungi

Week 5

- **Heterotrophs** are living organisms which can not produce their own food. They must take the food from other autotrophs or heterotrophs to live. All animals and **fungi** and also several bacteria species are belong to heterotrophs.
- **According to the nutritional requirements Heterotrophs are:**
- **1. Holozoic** forms (digest their food by taking in solid tiny pieces. Ex: several animals) According to the food type they use:
 - a- Herbivor (fed with only plants)
 - b- Carnivor (fed with only meat)
 - c- Omnivor (fed with both meat and plants)
- **2. Saprophytic** Forms (living organisms that absorbes organic compounds directly by cell membrane). Ex: Yeasts, molds, most of the bacteria)
- **3. Parasitic** Forms (plant or animal parasites resides on/in plant or animal hosts and take their food from host)

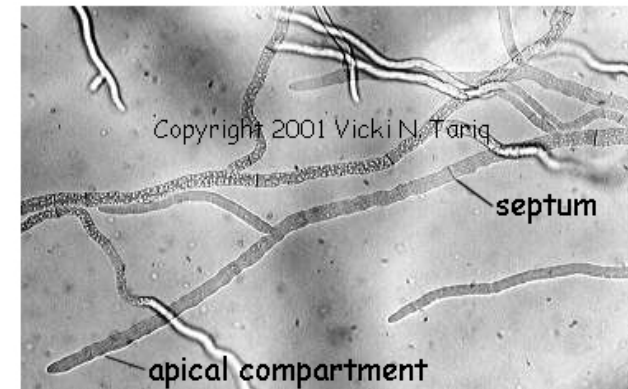
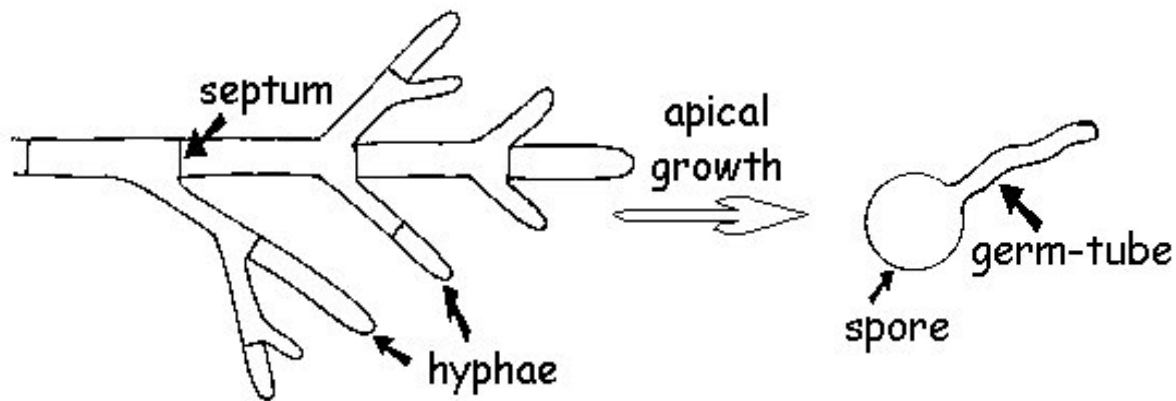
- **Autotroph organisms**, are living organisms that use **inorganic compounds** to produce complex and long molecule chains named as **organic compounds**.
- **Autotroph canlılar**, synthesised all necessary **organic compounds** directly from **inorganic compound** to live.
- On the contrary to Heterotroph organisms, autotrophs **can produce their own food**. Means that they synthesised organic compounds by degrading carbondioxide with mostly sun light and chemical energy.
- For synthesising Organic compounds which are full of energy;
- Living organisms that use sun light are called **Photosynthetic organisms** or **Phototrophs**;
- Living organisms that use chemical energy are called **Chemosynthetic organisms** or **Chemotrophs**

In fungi the hyphae that are responsible for nutrition and penetrating in substrate is called **vegetative hyphae**.

Other hyphae which takes role in reproduction are called **aerial (reproductive, fertile) hyphae**.

The web-like structures made up of Hyphae are called **mycelium**.

Myceliums are the vegetative body of the fungi.



Branching septate hyphae.