

# The Fungi of Medical Importance

# Research(15): no less than 15 pages

## Final Exam(15)

- **-The content of presentation:**
- 1- Name of disease
- 2- Name of the fungi that causes disease
- 3- Describe the fungi
- 4- The symptom of disease
- 5- How to diagnose the disease
- 6- Cure
- 7- References

# Fungi as infections agents

- Mold & yeast are widely distributed in air, dust, fomites & normal flora
- Humans are relatively resistant
- Fungi are relatively nonpathogenic
- Of the 100,000 fungal species, only 300 have been linked to disease in animals
- Fungi are the most common plant pathogens

# Fungi as infections agents

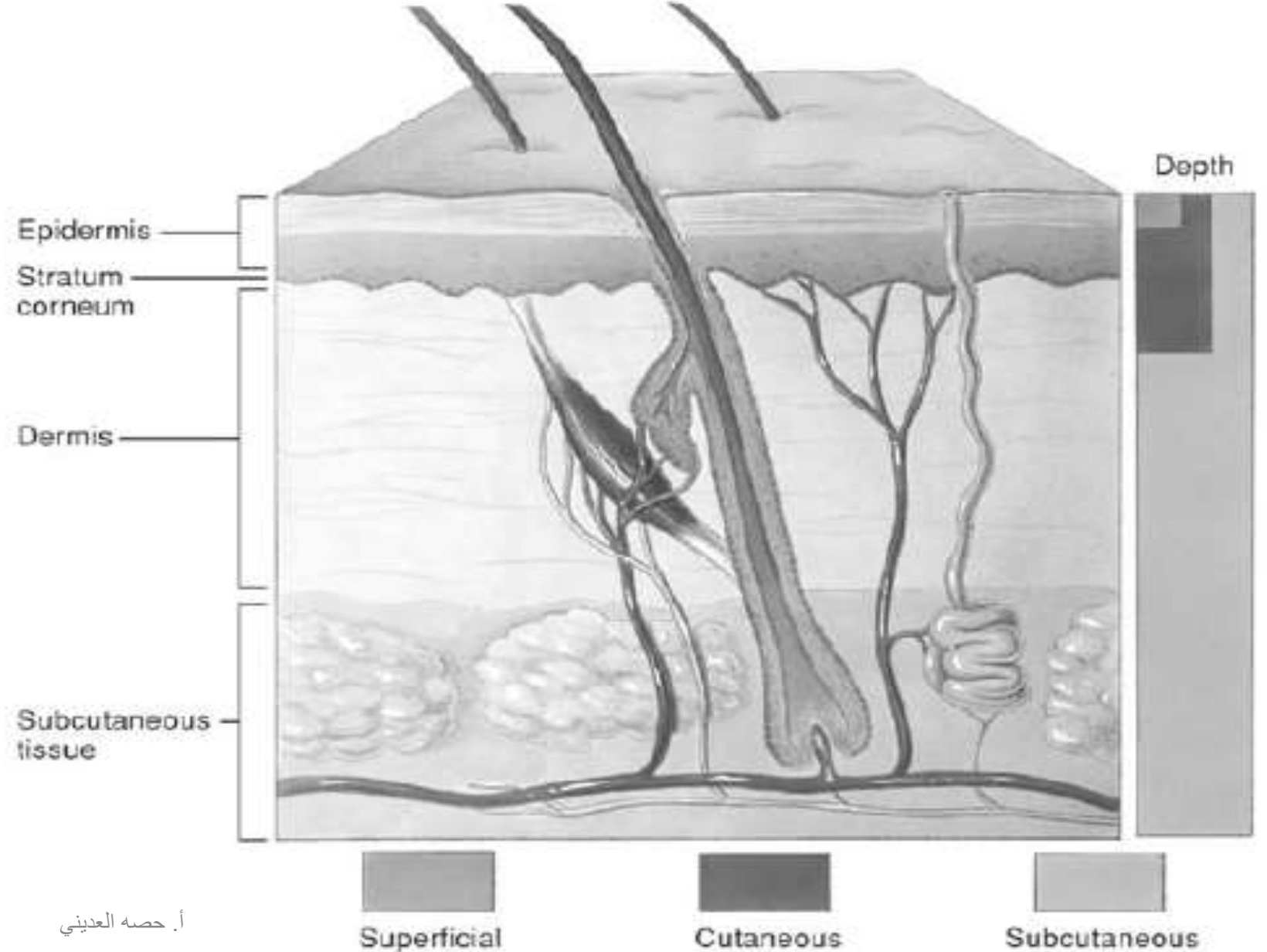
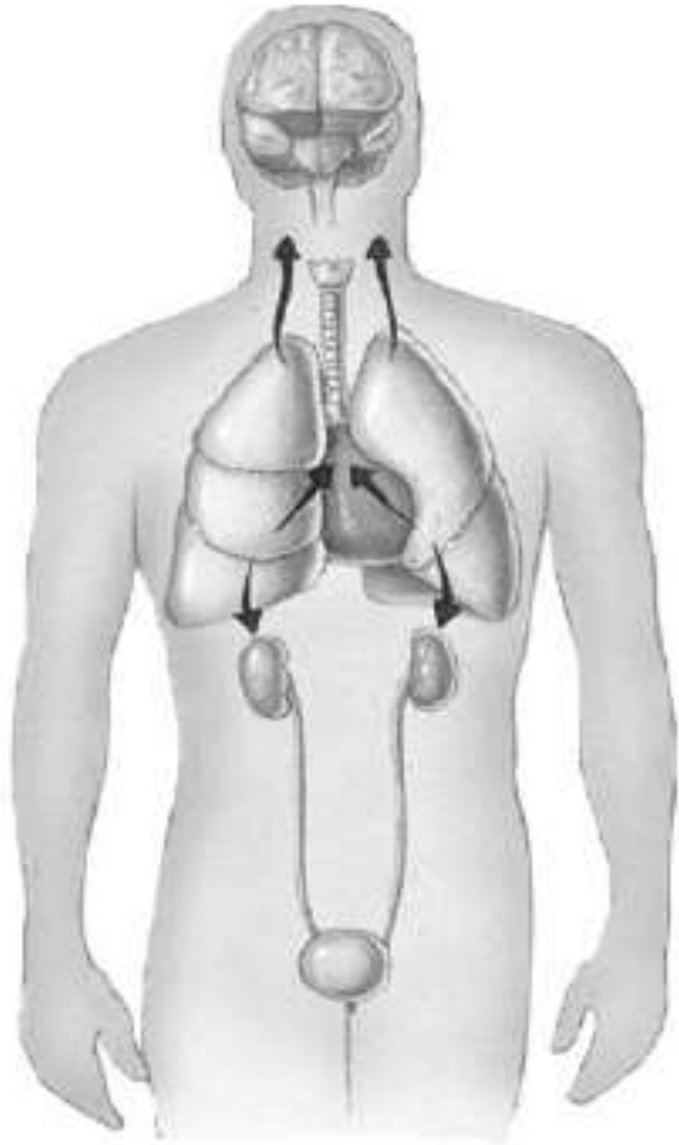
- **Mycosis(or mycoses)** – disease process caused by fungi
- Infectious fungi can be grouped based on the virulence of the organism and **level of involvement of the disease**
  - Systemic
  - Subcutaneous
  - Cutaneous
  - Superficial

# Fungi as infections agents

- Fungi pathogens can be classified in 2 categories:
  - Primary (true) pathogens : have virulence factors that allow to invade and grow in healthy host
  - Opportunistic pathogens : weak virulence ; causes disease in only weakened or compromised hosts

# Levels of invasion

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# Pathogenesis of Fungi

- Enter body through respiratory, mucous, and cutaneous routes
- In general, primary pathogens have a respiratory portal of entry
- Spores, hyphal elements, and yeast can all be infectious; more often spores due to their durability
- Mycoses are not usually communicable (except dermatophytes and *Candida* species)

# Mycoses

- most fungal pathogens do not require a host to complete their life cycles and infections are not communicable
- dermatophytes & Candida sp naturally inhabit human body & are transmissible
- dermatophytoses most prevalent
- systemic, subcutaneous, cutaneous or superficial infections



# Mycoses

- diagnosis & identification require microscopic examination of stained specimens, culturing in selective & enriched media & specific biochemical & serological tests
- control involves intravenous amphotericin B, flucytosine, azoles & nystatin