

# Introduction

## DEFINITIONS

- ⊕ **Symbiosis** : Interaction in which one organism lives with, or in, or on the body of another.
- ⊕ **Commensalisms** : Kind of symbiosis in which one organism, (the commensal), is benefited whereas the other organism, (the host), is neither harmed nor helped by the association.
- ⊕ **Parasitism** : Symbiosis in which an organism, (the parasite) benefits from the association with another organism (the host), whereas the host is harmed in some way.
  - **Obligate parasite** : Organisms that cannot exist without a host.
  - **Facultative parasite** : Organisms that may live as free-living or as parasites (opportunist).
  - **Ectoparasite** : Parasites that lives on the outer surface of its host.
  - **Endoparasite** : Parasite that lives inside its host.
  - **Spurious parasite (false parasites)** : Some free-living organisms or parasites of animals that are recovered from human feces not due to true parasitism.
- ⊕ **Infection** : The entry and development and multiplication of an infectious agent in the body of man or animals. The result may be in apparent (asymptomatic) infection, or manifest (symptomatic) infection.
- ⊕ **Host** : A person or other living animal which harbors an infectious agent under natural conditions.
  - I. **Definitive host** (primary host) : A host in which the parasite passes its sexual stage.
  - II. **Intermediate host** (secondary host) : A host in which the parasite passes its larval or asexual stages.

- ⊕ **Carrier** : A person or animal that harbors a specific infectious agent in the absence of discernible clinical disease and serves as a potential source of infection.
- ⊕ **Autoinfection** : When an infected person is his own direct cause of exposure.
- ⊕ **Pathogenesis** : Production and development of disease.
- ⊕ **Pathogenicity** : Capability of an infectious agent to cause disease in a susceptible host.
- ⊕ **Endemic** : Constant presence of a disease or an infectious agent within a geographic area.
- ⊕ **Epidemic** : The occurrence in a community or region of cases of an illness clearly in excess of expectancy.
- ⊕ **Zoonosis** : Disease of animals that is transmissible to humans.

## Classification of parasites

Protozoa	Helminths
Unicellular : (Single cell for all function)	Multicellular : (Specialized cells)
<ul style="list-style-type: none"> <li>• <u>Amoebae</u> : ✓ move by pseudopodia.</li> <li>• <u>Flagellates</u> : ✓ move by flagella.</li> <li>• <u>Ciliates</u> : ✓ move by cilia</li> <li>• <u>Apicomplexa</u>: ✓ (sporozoa) Tissue parasites</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Round worms</u> - (Nematodes) elongated , cylindrical, Unsegmented</li> <li>• <u>Flat worms</u> : 1-Trematodes: ✓ leaf-like, unsegmented.</li> <li>2-Cestodes: ✓ tape-like, segmented</li> </ul>