

Short Note 1: Life Cycle of *Entamoeba histolytica* (Trophozoite Stage)

Entamoeba histolytica, the causative agent of amoebiasis, undergoes its life cycle primarily in humans. It has two main forms: the trophozoite and the cyst. The cycle starts when a human ingests mature cysts, typically from contaminated food or water. Inside the host's intestines, the cysts undergo excystation, releasing the trophozoites. These trophozoites invade the colonic mucosa, where they cause tissue damage and inflammation, leading to symptoms such as diarrhea and abdominal pain. Some trophozoites may be passed out in the feces, while others encyst in the colon, forming cysts, which are then expelled into the environment, completing the cycle.

Short Note 2: Life Cycle of *Entamoeba histolytica* (Cyst Stage)

The cyst stage of *Entamoeba histolytica* is resistant to environmental conditions and is responsible for transmission. After trophozoites damage the colonic mucosa, some will encyst in the colon. These cysts are shed in the feces and can survive in the external environment for long periods. When another host ingests the cysts through contaminated water or food, they reach the intestines, where excystation occurs, and the life cycle begins again. The cyst is the infective form and plays a crucial role in the spread of the parasite.

One-Line Questions with Answers on the Life Cycle of *Entamoeba histolytica*

1. **Q:** What is the infective form of *Entamoeba histolytica*?
A: The cyst is the infective form.
2. **Q:** How does *Entamoeba histolytica* spread to humans?
A: It spreads through the ingestion of mature cysts from contaminated food or water.
3. **Q:** Where does excystation occur in the life cycle of *Entamoeba histolytica*?
A: Excystation occurs in the small intestine.
4. **Q:** What happens after excystation in the host?
A: Trophozoites are released and migrate to the colon.
5. **Q:** In which part of the body do *Entamoeba histolytica* trophozoites cause tissue damage?
A: Trophozoites cause tissue damage in the colon.
6. **Q:** What forms when trophozoites encyst in the colon?
A: They form cysts.
7. **Q:** What is the role of the cyst stage in the life cycle of *Entamoeba histolytica*?
A: The cyst stage is responsible for transmission and survival outside the host.
8. **Q:** Can trophozoites be transmitted directly from person to person?
A: No, trophozoites are not infectious; only cysts are.
9. **Q:** How are cysts of *Entamoeba histolytica* passed from one host to another?
A: Cysts are passed through feces and contaminating food or water.

10. Q: What are the symptoms associated with the trophozoite stage of *Entamoeba histolytica*?

A: Symptoms include diarrhea, abdominal pain, and intestinal ulceration.