

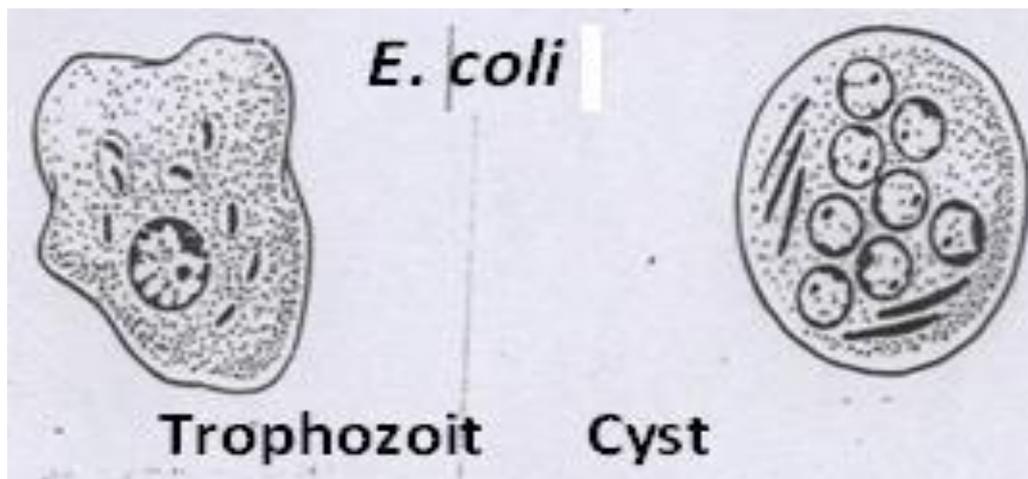
1. E.coli

The most common amoebic parasite of man (commensal).

- It habits large intestine.
- It has trophozoite & cyst stages, both of them are larger than those of *E. histolytica*. The trophozoite size is (1550) μ , no RBCs seen in food vacuoles.

There is no sharp point between ectoplasm & endoplasm in Trophozoite stage.

- In cyst stage (its size 10-33 μ m), the mature cyst contains 8 nuclei, each of them has same feature of Trophozoite nuclei.
- The shape of chromatoidal bodies in of *E. histolytica* is cigarette, rounded in shape, but it is needle shaped in the *E. coli* if presented.
- The *E. coli* is not parasitism but commensalisms.
- The presence of *E. coli* in stool of some bodies means the food of this patient contaminated with fecal material, how? By the *Musca domestica*, filth fly, or others.
- The presence of *E. coli* in the host means his food been contaminated.



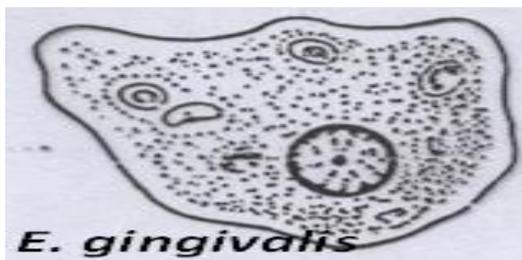
There are 2 things for differentiation between E. histolytica & E. coli

The difference	<u>E. histolytica</u>	<u>E. coli</u>
Karyosome	Central	Eccentric
Chromatin line nuclear membrane	Fine & regular distributed	Course & irregular distributed

2. **E.gingivalis**

Only trophozoite been reported in E. gingivalis .

- The size of the trophozoite is (15-30) μm .
- It is nonpathogenic but opportunistic (in diseased gum or tonsils).
- The karyosome is central or somewhat eccentric.
- It is found in diseased gum & tonsillitis as a phagocytic (opportunistic).
- It is transmitted through saliva droplets or intimate contact.



Trophozoite

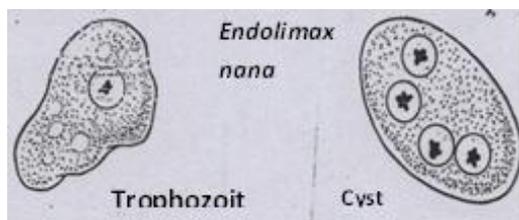
3. **Endolimax nana**

Like the *E. coli*, its presence means the food of the person been contaminated with stool (fecal matter) of other person

-It has trophozoite & cyst stages. The trophozoite has one nucleus, and the cyst has 4 nuclei. The karyosome consisting from one or more granules, commonly eccentric in position.

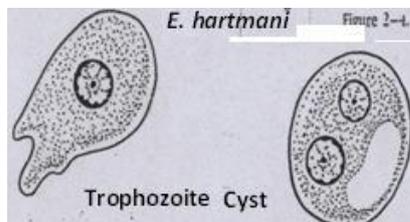
-The size of the trophozoite is (8-10) mm, the endoplasm finally granular with numerous vacuoles.

-In the cyst chromatoidal bodies, if present are short curved rods or comma shaped.



4. *Entamoeba hartmanni*

Small race of *E. histolytica*, sometimes it is mistaken with *E. nana*, fortunately both of them are nonpathogenic.



5. *Iodamoeba buetschlii*

- Cosmopolitan, commensal, living in lumen of large intestine
- It has **2 stages**:
- Trophozoite:** (8-10) **sluggish motility with little** evidence of pseudopodial extensions.
- Cyst:** (5- 18)m
- We can differentiate between I. buetschlii & others by:**

- The trophozoite & cyst have one nucleus & both of them have glycogen vacuoles, so in stain with iodine to give brown mass.
- A large karyosome in nucleus found centrally or somewhat eccentrically.
- Only the trophozoite of this amoeba has one or two distinct glycogen vacuoles.
- The cyst has only one nucleus, it has large glycogen vacuoles which stained with iodine in deep brown color.

So these differences are very important.

