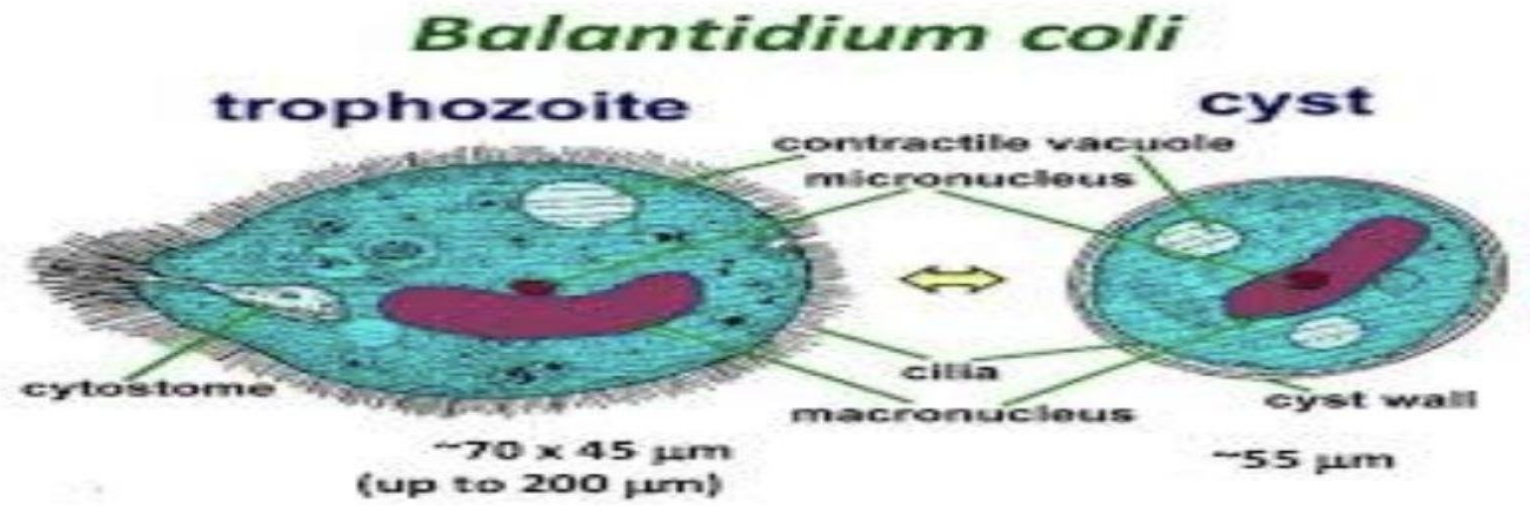
Balantidium coli

Assistant Lecturer :Wasan Jassim Hassan

Definition

- Protozoan parasite
- Only ciliate infecting humans
- Lives in large intestine

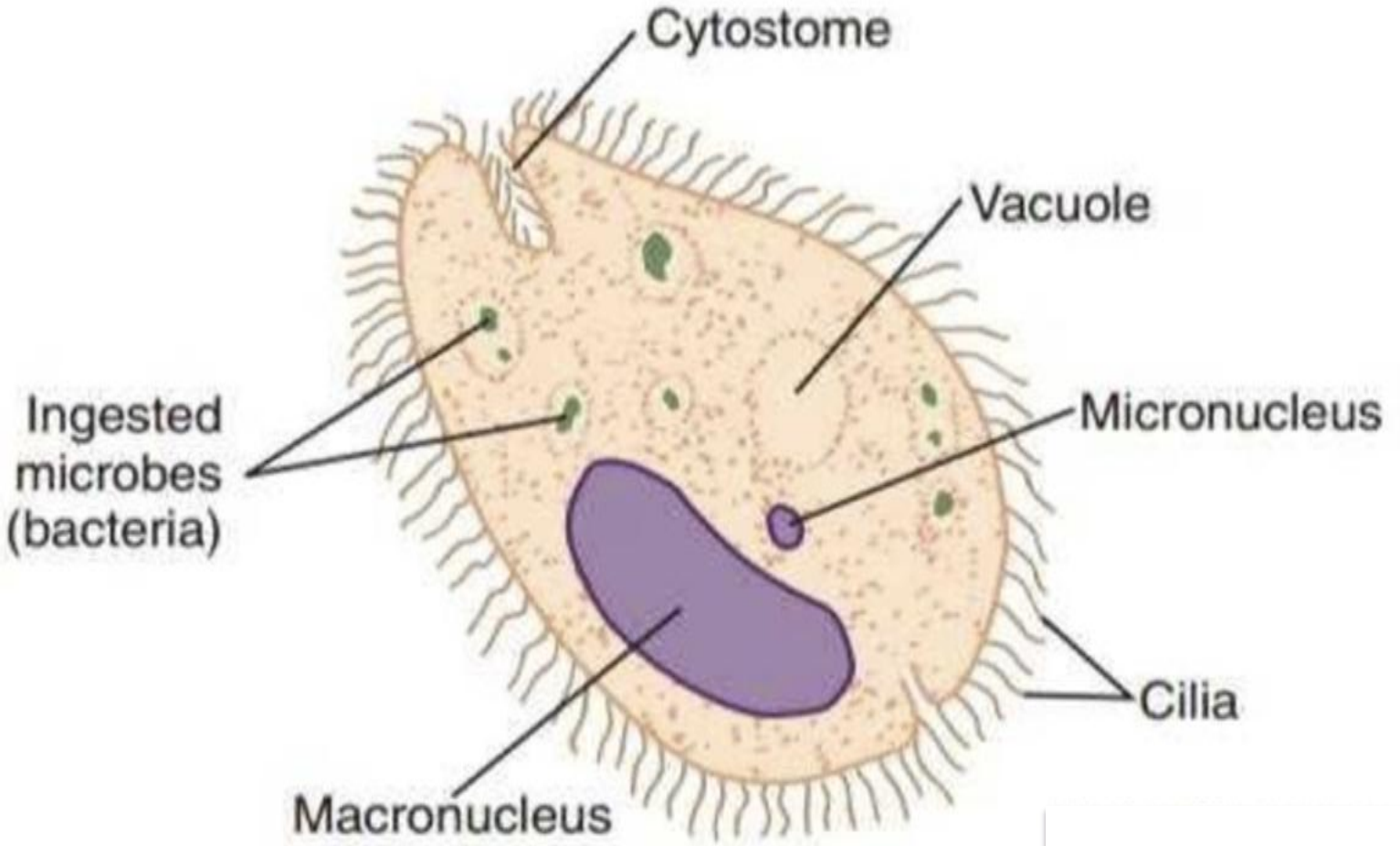


Morphology

1- Trophozoite

- Size: 50–200 µm
- Covered with cilia
- Macronucleus & Micronucleus
- Food vacuoles



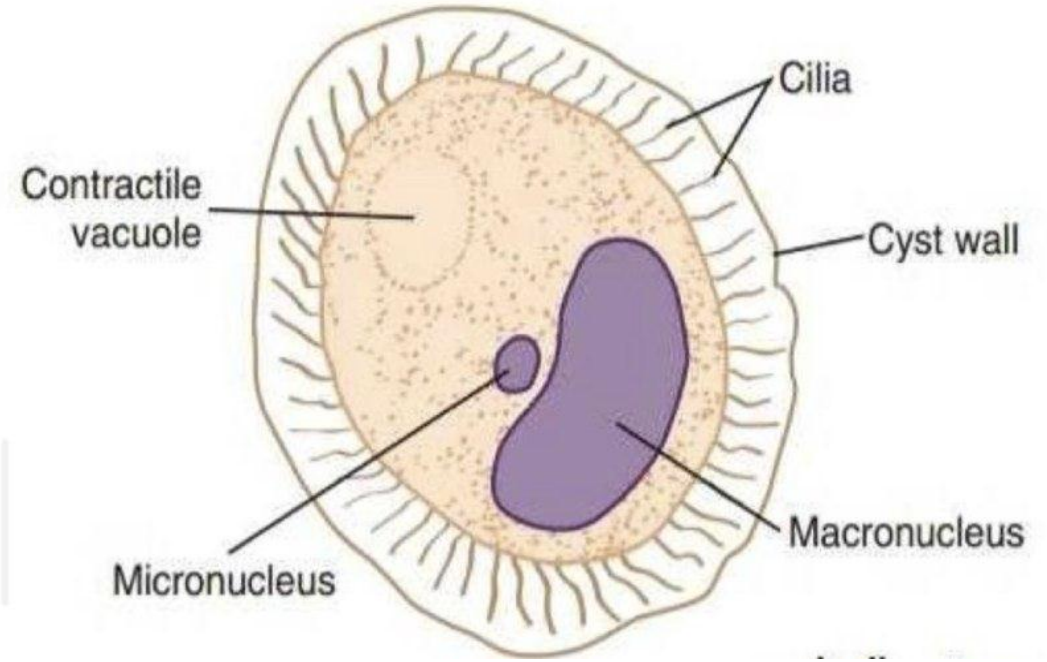

Cytostome
Vacuole
Ingested
microbes
(bacteria)
Micronucleus
Cilia
Macronucleus

Morphology

1- Cyst

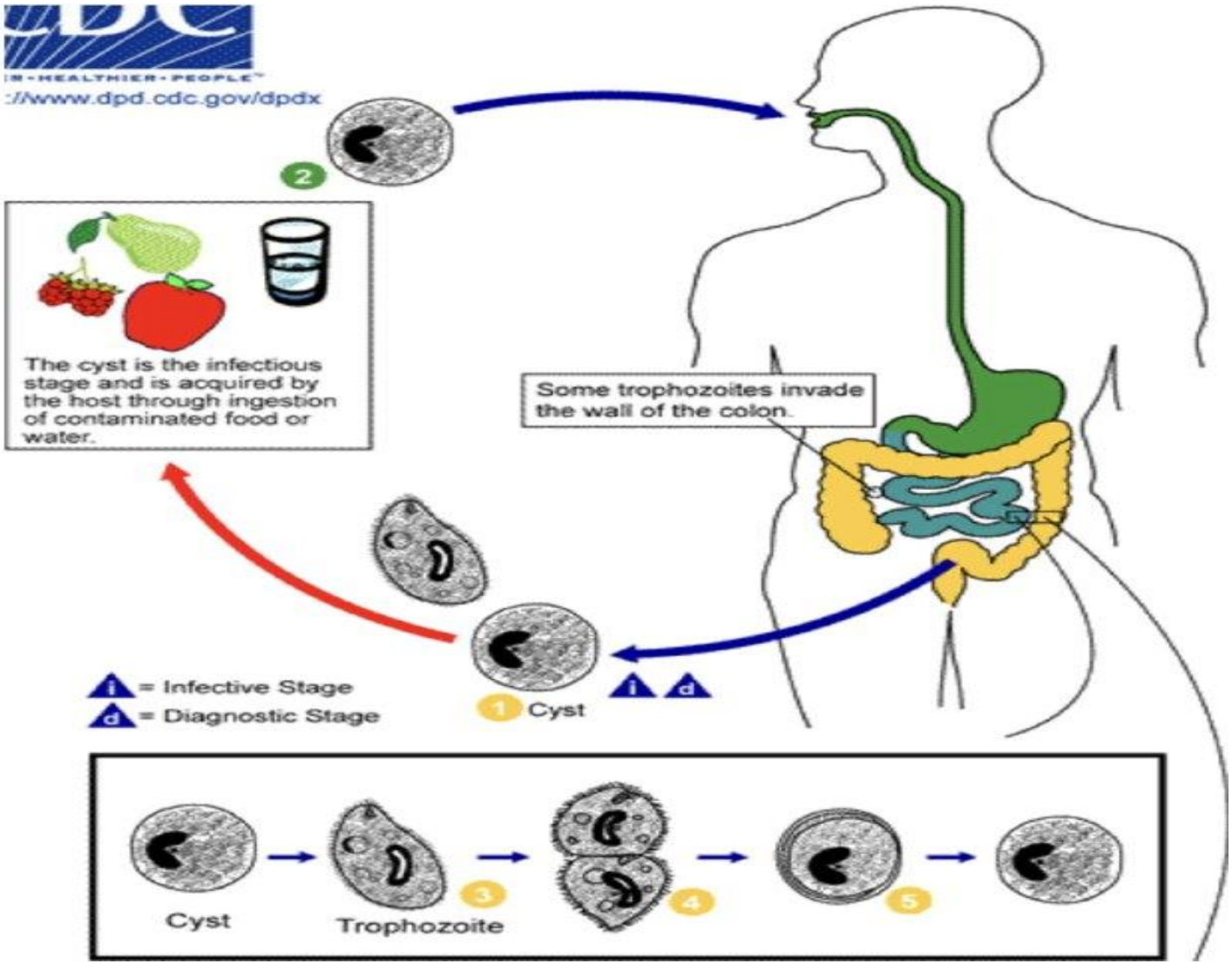
- Round/oval shape
- Thick wall
- Infective stage





Life Cycle

- Ingestion of cysts
- Excystation in small intestine
- Trophozoites in colon
- Binary fission
- Passed in stool


://www.dpd.cdc.gov/dpdx
2
The cyst is the infectious stage and is acquired by the host through ingestion of contaminated food or water.
Some trophozoites invade the wall of the colon.
i = Infective Stage
d = Diagnostic Stage
1 Cyst
i d
Cyst
3
Trophozoite
4
5

Transmission

- Fecal-oral route
- Contaminated water
- Unclean food
- Contact with pigs

Disease (Balantidiasis)

- Diarrhea (bloody)
- Abdominal pain
- Nausea
- Colonic ulcers

Diagnosis

- Stool examination
- Trophozoites or cysts
- Rapid ciliary movement

Treatment

- Tetracycline
- Metronidazole
- Iodoquinol

Prevention

- Clean water
- Hand washing
- Proper cooking
- Avoid animal contamination