



### كلية الرشيد الجامعة

# قسم تقنيات المختبرات الطبية الطفيليات الطبية

## Balantidium Coli المرحلة الثانية ــ النظرى

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#### Balantidium Coli

#### morphology

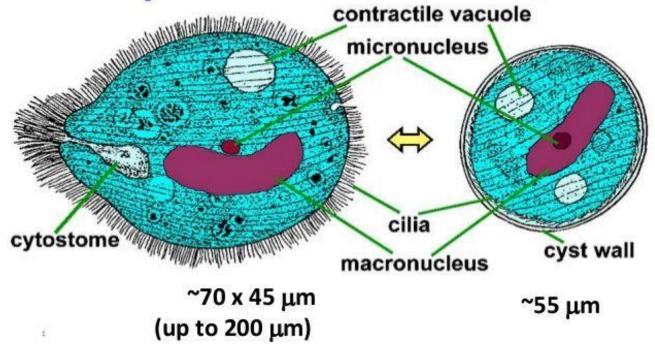
Balantidium coli has two stages:

- 1- Trophozoite: In trophozoites, the two nuclei are visible. The macronucleus is long and sausage-shaped, and the spherical micronucleus is nested next to it, often hidden by the macronucleus. The opening, known as the peristome, at the pointed anterior end leads to the cytostome, or the mouth. body surface is covered with rows of cilia responsible for active motility.
- 2- Cyst: Cysts are smaller than trophozoites and are round and have a tough, heavy cyst wall made of one or two layers. Usually only the macronucleus and sometimes cilia and contractile vacuoles are visible in the cyst, however, both nuclei are present because nuclear multiplication does not occur when the organism is a cyst.

## Balantidium coli

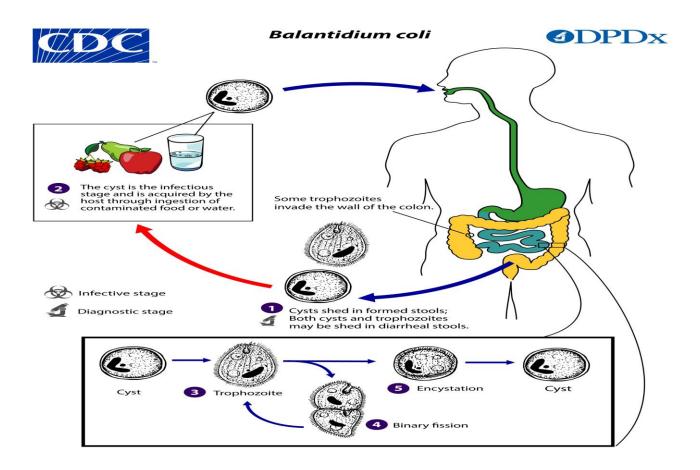
cyst

trophozoite



#### Life Cycle

The life cycle of *Balantidium coli* is simple, involving ingestion of infectious cysts, excystation, and invasion of trophozoites into the mucosal lining of the large intestine, caecum, and terminal ileum in human and pigs. The trophozoite is covered with rows of hair like cilia that aid in motility.



#### **Pathogenesis (symptoms)**

Symptomatic disease is characterized by abdominal pain, nausea, anorexia, and watery stools with blood and pus.

#### **Diagnosis**

Microscopic examination of faeces for trophozoite and cysts is performed