



Tikrit University
College of Veterinary Medicine

Lect.5: biology

Subject name: Euglena

Subject year: First stage

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SCAN ME

Lecturers link

Protozoa : Mastigophora

Euglena

Euglena is a unicellular eukaryote. Euglena has characteristics of both plants and animals. Euglena is flagellated. Euglena has plastids and performs photosynthesis in light, but moves around in search of food using its flagellum at night. There are around 1000 species of Euglena found. They are found in freshwater, saltwater, marshes and also in moist soil.

Euglena Classification

Phylum: Sarcomastigophora

Subphylum: mastigophora

Class: phytomastigophora

Order: Euglenas

Family :Euglenaceae

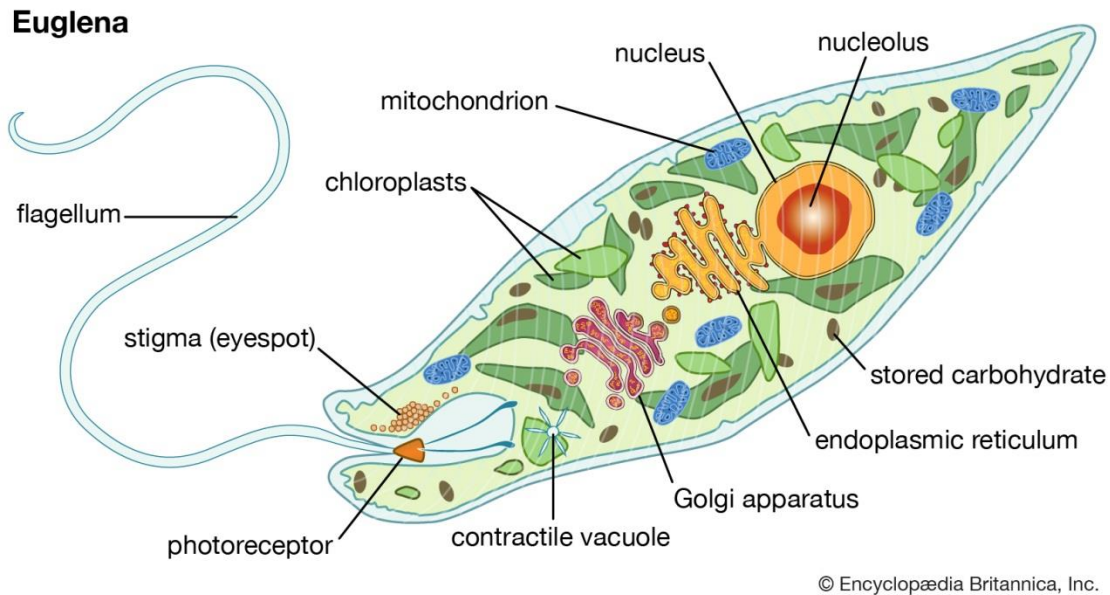
Genus: *Euglena*

Nutrition

- Euglena contains chloroplast having chlorophyll. These chloroplasts have the green algal origin and seemed to have acquired due to endosymbiotic relationship

Reproduction

- Euglena reproduces asexually by binary fission, they divide longitudinally



Giardia duodenalis, also known as *Giardia intestinalis* and *Giardia lamblia*, is a flagellated parasitic microorganism, that colonizes and reproduces in the small intestine, causing giardiasis. The parasite attaches to the epithelium by a ventral adhesive disc or sucker, and reproduces via binary fission.

G. lamblia trophozoites are pear-shaped cells, 10 to 20 micrometers long, 7 to 10 micrometers across, and 2 to 4 micrometers thick. They are motile by way of four pairs of flagella, which propel the trophozoites through the intestine. Notably, each *G. lamblia* cell has two nuclei, both of which actively transcribe genes. Adjacent to the nucleus, *G. lamblia* cells have an endoplasmic reticulum that extends through much of the cell. Trophozoites about to differentiate into cysts also contain prominent vesicles termed encystation-specific vesicles that disappear once cyst wall construction begins. Unlike most other eukaryotes,

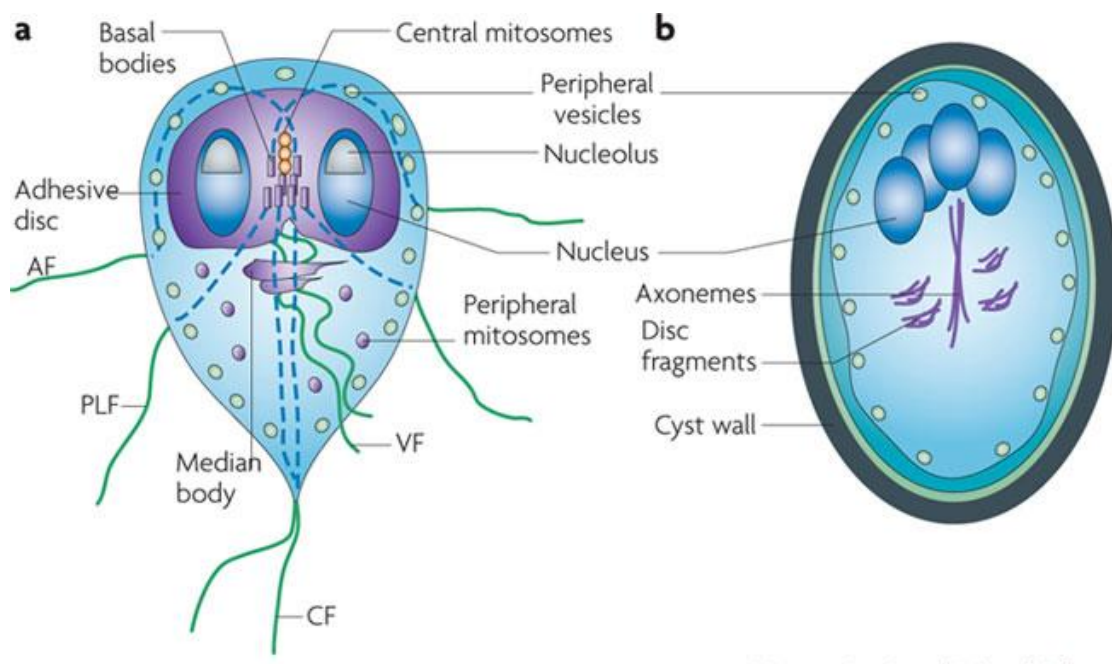
Phylum: Sarcomastigophora

Subphylum: mastigophora

Class: Zoomastigophora

Family: Hexamitidae

Genus: *Giardia lamblia*



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