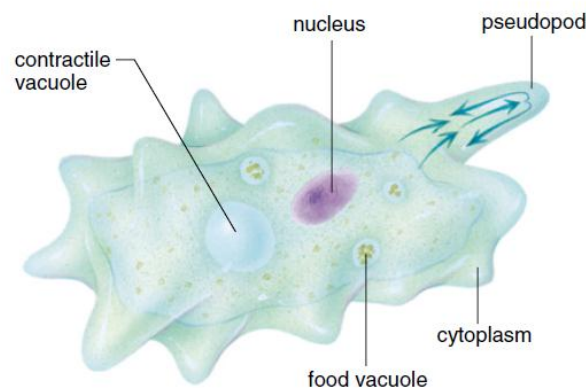


Phylum Sarcodina

Amoeboids

Are protists that move and engulf their prey with **pseudopods**. the pseudopods surround and engulf the prey, which may be algae, bacteria, or other protozoans and digestion then occurs within a food vacuole. Example: *Entamoeba histolytica* is a parasite that can infect the human intestine and cause amoebic dysentery. Complications arise when this parasite invades the intestinal lining and reproduces there. If the parasites enter the body proper, liver and brain impairment can be fatal.



Ciliates

The **ciliates** such as those in the genus *Paramecium* are the most complex of the protozoans. Ciliates have two types of nuclei: a large *macronucleus* (controls the normal metabolism of the cell) and one or more small *micronuclei*. Hundreds of cilia, which beat in a coordinated rhythmic manner, project through tiny holes in a semirigid outer covering, or pellicle.

When a paramecium feeds, food is swept down a gullet, below which food vacuoles form. Following digestion, the soluble nutrients are absorbed by the cytoplasm, and the indigestible residue is eliminated at the anal pore.

Zooflagellates

Protozoans that move by means of flagella are called **zooflagellates**.

Trypanosoma brucei, transmitted by the bite of the tsetse fly, is the cause of African sleeping sickness. The white blood cells in an infected animal accumulate around the blood vessels leading to the brain and cut off

circulation. The lethargy characteristic of the disease is caused by an inadequate supply of oxygen to the brain.

