

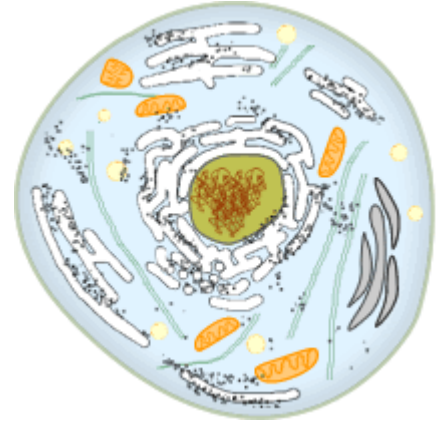
Objectives of This Lesson

After completing this lesson, you will be able to:

- Describe the general characteristics of eukaryotes
- Recognize the complexity of eukaryotic pathogens
- List the microorganism group or groups that are classified as eukaryotes

Characteristics of a Eukaryote

Eukaryotes are complex organisms whose cells contain a membrane-bound nucleus holding hereditary materials or DNA. The presence of a nucleus distinguishes eukaryotes from prokaryotes. The organelles of eukaryotes allow them to exhibit much higher levels of intracellular division of labor than is possible in prokaryotic cells.



Eukaryotes have the following characteristics:

- Complex structure
- May be unicellular or multicellular
- May or may not have cell walls
- Extensive membrane-bound organelles
- Membrane-bound nucleus to organize DNA
- Cells are larger

Pathogenic Eukaryotes

There are three types of pathogenic microorganism groups that are classified as eukaryotes:

- Fungi
- Protozoa
- Helminths (Worms)