7.2: The Cell Wall

Skills to Develop

1. State which eukaryotic organisms possess a cell wall and which lack a cell wall.
2. State the function of the cell wall in those eukaryotic cells that have one.

When present, the cell wall (Figure 32 and Figure 36) is quite simple. In algae and plant cells, the cell wall is usually composed of cellulose. In molds it is composed of chitin and/or cellulose. Animal cells and protozoans lack cell walls. As with bacteria, the rigid, tightknit molecular structure of the cell wall determines shape and helps resist osmotic lysis.
Summary

1. Algae, fungi, and plant cells have a cell wall; animal cells and protozoans lack cell walls.
2. The rigid, tightknit, polysaccharide molecular structure of the cell wall helps the cell resist osmotic lysis.

Contributors

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