

Table 27.1 Major Nutritional Modes

Mode of Nutrition	Energy Source	Carbon Source	Types of Organisms
Autotroph			
Photoautotroph	Light	CO ₂	Photosynthetic prokaryotes (for example, cyanobacteria); plants; certain protists (algae)
Chemoautotroph	Inorganic chemicals	CO ₂	Certain prokaryotes (for example, <i>Sulfolobus</i>)
Heterotroph			
Photoheterotroph	Light	Organic compounds	Certain prokaryotes (for example, <i>Rhodobacter</i> , <i>Chloroflexus</i>)
Chemoheterotroph	Organic compounds	Organic compounds	Many prokaryotes (for example, <i>Clostridium</i>) and protists; fungi; animals; some plants