

Major types of microbes

Major types	Description	Examples
Bacteria	Small single cell organisms. Have cell wall but no nucleus. Can be Spherical, Spiral or Rod shaped	Escherichia coli (E. coli) – found in the gut; some strains cause food poisoning. Lactobacillus – used in yogurt production.
Fungi	Eukaryotic organisms; can be unicellular (like yeast) or multicellular (like molds)	Candida albicans – causes yeast infections. Penicillium – used to make the antibiotic penicillin. Aspergillus – can cause respiratory infections.
Algae	Photosynthetic, eukaryotic organisms; found in aquatic environments	Chlorella – used in food supplements. Diatoms – produce oxygen and form part of marine plankton. Spirogyra – filamentous green algae.
Viruses	Non-living outside a host; they reproduce only inside host cells. Made of genetic material (DNA or RNA) and a protein coat.	Influenza virus – causes flu HIV – causes AIDS Coronavirus (SARS-CoV-2) – causes COVID