

5.1

STRUCTURE OF THE CELL MEMBRANE

One of the challenges faced by all living things, be they amoebae or humans, is to separate their internal environment from the external environment. Critical nutrients must get into the cells, and waste must get out. To make matters more complex, cells need to be able to regulate that movement, letting the materials cross sometimes and preventing them from crossing at others. Another challenge is finding a way for cells to communicate with each other. Cells in the brain, for example, need to be able to tell cells in the heart to beat faster. The solution to these challenges lies in the properties of the cell membrane (also called the **plasma membrane**). This delicate structure is essential to the life of cells. When the membrane loses its ability to carry out these processes, the cell dies.

In this lesson, we will study this amazing structure. We will learn how it allows some things to readily cross and prevents others. Hopefully, you will gain an appreciation of its complexity and come to realize how important it is to cellular function.

Fluid Mosaic Model of the Membrane
Membrane Phospholipids
Membrane Proteins
Carbohydrates



This content is provided to you freely by BYU-I Books.

Access it online or download it at

https://books.byui.edu/bio_264_anatomy_phy_l/51_structure_of_the

