

## Immunity

The term immunity refers to the general ability of a host to resist a particular infection or disease. There are two different types of immune responses:

1- The **nonspecific immune response** is also known as **innate** or **natural immunity**: it offers resistance to any microorganism or foreign material encountered by the vertebrate host. It includes general mechanisms inherited as part of the innate structure and function of each person (such as skin, mucus and acts as a first line of defense. The nonspecific immune response lacks immunological memory and nonspecific responses occur to the same extent each time a microorganism or foreign body is encountered.

2-The **specific immune responses**, also known as **acquired, adaptive immunity**: resist a particular foreign agent. The effectiveness of specific immune responses increases on repeated exposure to foreign agents such as viruses, bacteria, or toxins; that is to say, specific responses have “memory.”

Substances that are recognized as foreign and provoke immune responses are called **antigens**. The antigens cause specific cells to replicate and manufacture a variety of proteins that function to protect the host. One such cell, the B cell, produces and secretes glycoproteins called antibodies. **Antibodies** bind to specific antigens and inactivate them or contribute to their elimination.