

### **Definitions of Immunological Terms**

**Immunity:** The set of defense mechanisms of an organism against foreign elements, particularly infectious agents (viruses, bacteria, or parasites).

**Immunocompetence:** The body's ability to produce a normal immune response after exposure to an antigen.

**Immunodeficiency:** A state in which a person's immune systems are weakened.

**Immunosuppression:** The inhibition of the activation of the immune system. It can be induced by intoxication (e.g., lead), radioactivity, certain diseases (HIV/AIDS), or naturally triggered by the body under certain conditions. It is sometimes deliberately induced for medical reasons (e.g., to prevent graft rejection).

**Antigen:** Any molecule capable of inducing an immune response and specifically reacting with the products of that response (e.g., antibodies).

**Antibodies:** Glycoproteins produced by B lymphocytes that can specifically bind to antigens.

**Agglutination:** A reaction between a particulate antigen and a soluble antibody.

**Septicemia:** A syndrome of severe and generalized infection of the body by pathogenic agents, literally meaning "blood infection."

**Immunogenicity:** The potential of an antigen to induce an immune response.

**Antigenicity:** The ability of an antigen to be recognized by the immune system. A substance can be antigenic but not immunogenic.

**Note:** A substance can be antigenic but not immunogenic.

**Hapten:** A low molecular weight substance (usually a polysaccharide) whose structure varies with each antigen and determines its specificity. It reacts with the corresponding antibody but cannot alone provoke its formation. This formation occurs only after the hapten is associated with a protein or polysaccharide carrier, such as Hemocyanin or Bovine Albumin; this association is essential to confer antigenic properties to the hapten.

**Note:**

- A hapten is reactive but alone is not immunogenic.
- A hapten can become immunogenic after binding to a carrier.

**Allergen:** An antigenic substance for certain individuals that provokes a hypersensitivity or allergic immune response.