

Immunity **Supplement**

What is an antigen?

Immunity **Supplement**

What is an antibody?

Immunity **Supplement**

Why is each antibody specific?

Immunity **Supplement**

Define active immunity.

Immunity **Supplement**

How is active immunity gained?

Immunity **Supplement**

Outline vaccination.

Immunity **Supplement**

What do memory cells do?

Immunity **Supplement**

How does vaccination control the spread of disease?

A protein that binds to an antigen, leading to direct destruction of the pathogen or marking it for destruction by phagocytes.

A molecule on a pathogen. Each pathogen has its own antigens with specific shapes.

Defence against a pathogen by antibody production in the body.

Its shape is complementary to one antigen, so it only fits that antigen.

Weakened pathogens or antigens are put in; lymphocytes make antibodies; memory cells give long-term immunity.

After an infection by a pathogen, or by vaccination.

Fewer people can be infected, so the pathogen is passed on less often.

They give long-term immunity by responding quickly if the same pathogen enters again.

Immunity **Supplement**

Define passive immunity.

Immunity **Supplement**

How do antibodies pass to a baby?

Immunity **Supplement**

Why is breast-feeding important for infants?

Immunity **Supplement**

Why is passive immunity only short-term?

Across the placenta and in breast milk.

Short-term defence against a pathogen by antibodies acquired from another individual.

Memory cells are not produced.

Milk contains antibodies, giving the baby passive immunity while its own immune system develops.