



Vaccines

How it works?

Vaccines contain weakened or inactive parts of a particular organism (antigen)

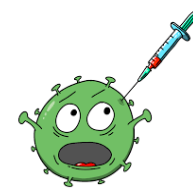
Newer vaccines contain the blueprint for producing antigens rather than the antigen itself

Regardless of whether the vaccine is made up of the antigen itself or the blueprint so that the body will produce the antigen

Some vaccines require multiple doses- This is sometimes needed to allow to produce long-lived antibodies and development of memory cells.

In this way, the body is trained to fight the specific disease-causing organism, building up memory of the pathogen to rapidly fight it when exposed in the future

A vaccine is a biological preparation that provides active acquired immunity



Side effects

- | | |
|----------------|-------------------------|
| Pain | Muscle pain |
| Redness | Fussiness |
| Swelling | Loss of appetite |
| Tiredness | Headache |
| Chills | Diarrhea |
| Fever | Lymphadenopathy |
| Nausea | Guillain-Barré Syndrome |
| Feeling unwell | Allergic reaction |



Build up a person's defences to common diseases that they are exposed to

Protect people and communities against deadly diseases

Prevent people from catching the disease in the vast majority of cases

Reduce the social and psychological toll of illness on people and lessens the burden on hospitals and healthcare systems

<https://www.who.int/news-room/feature-stories/detail/how-do-vaccines-work>

<https://www.cdc.gov/vaccines/index.html>

<https://www.cdc.gov/vaccines/vac-gen/side-effects.htm>