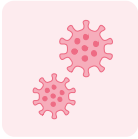


Pack 7: The Immune System



Bacteria

Tiny living invaders, the kind that cause infection. Most bacteria are harmless or helpful, but some can multiply inside you and make you sick until your immune system clears them.



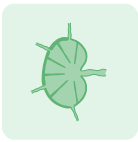
Virus

Not quite alive on their own. A virus is a tiny packet of instructions that breaks into your cells and uses them to make thousands of copies of itself.



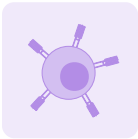
Dendritic cell

The messenger. Dendritic cells patrol your body, pick up pieces of invaders, and carry them to your lymph nodes so the rest of your immune system knows what to fight.



Lymph node

Where the immune response happens. Lymph nodes are small bean-shaped meeting points scattered through your body, where immune cells gather, share information, and coordinate the fight against an invader.



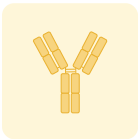
T cell

The defender. T cells learn what an invader looks like, then find any cells of yours that have been infected and clear them out before the infection can spread.



B cell

The antibody maker. When a B cell meets an invader, it produces millions of Y-shaped antibodies that match. Some B cells stay behind and remember the invader for next time.



Antibody

A tiny Y-shaped protein that fits one kind of invader perfectly. Antibodies stick to their target, tag it for removal, and block it from infecting more of your cells.



Vaccine

A safe preview of a real invader. Vaccines teach your immune system what to fight, so your body already has antibodies ready the first time the real thing shows up.