

Keeping Balanced

How Smart is your Immune System?

What do you know about the term 'immune system'? When have you heard it being used?

Establish that the immune system is the body's defence against infectious organisms and other invaders, it figures out the cells that 'aren't us' and don't belong in the body so sets to work in dealing with them.

Demonstrate a basic explanation of how it works using the children to act as body cells and antigens. Act out the antigen (such as the chicken pox virus) being introduced to the body cells and how they get in, eg nose and mouth. State how people get ill to varying degrees, we don't all experience illness in the same way, some of us may be mildly ill while others more so (eg two children in the same family, one may only have a few spots and not feel too bad while the sibling may be covered with spots and feel really poorly).

Narrate the effect the chicken pox virus is having on the body. The body cells recognise that these are new cells and not part of 'us' and so the antibodies get to work with figuring out how to manage these new invaders. Some of the antibodies study the antigens to send defences to lock onto them; they're the Intelligence Team. Other antibodies are like soldiers, sent in to destroy the antigen using the information from the intelligence team. After days of figuring out and fighting, the antibodies 'defeat' the antigen. The antibody team use all that they have learnt about these unfamiliar cells to help them 'keep watch' ready to deal with that antigen if it were ever to be encountered again.

Through a series of steps called the immune response, the immune system attacks organisms and substances that invade body systems and cause disease.

Older children could look into this process in greater detail:

http://kidshealth.org/parent/general/body_basics/immune.html is a useful website for explaining more.

Your immune system has been learning all about different illnesses since you were just a baby. You were born with some immunity, kind of like an App that was downloaded from your mum when you were growing inside her; your mum's cells shared the information with your cells.

What do you think happens when a child starts playgroup or school? Invite responses.

Your immune system has been learning about all of the bugs you come into contact with, such as the ones your friends have brought to school in their bodies and shared around through coughing, sneezing, picking noses, sucking thumbs, chewing pencils, going to the toilet AND NOT WASHING YOUR HANDS PROPERLY!! all sorts of bug sharing opportunities!

So, How Smart is your Immune System?

Let's find out. Everyone stand up.

Sit down if you have ever had slapped cheek syndrome....

Repeat stand up sit down for a collection of common childhood illnesses; choose those that have been prevalent in your school community

Chicken pox....

Hand, foot and mouth

Tonsillitis

Scarlet fever

Whooping cough....

A cold!

... and you're all here to tell the tale so your immune systems are all really smart; they've learned how to fight off all of those illnesses and help your body to regain its balance.

Being ill is a part of life, it's completely normal. Most of the time, our bodies get better from most illnesses by themselves. Sometimes our bodies might need a bit of help to get better a bit quicker and sometimes we may need specialised help but for most of the time, our bodies figure it out for themselves. You see, it's really important that we look after our bodies as best as we can while our immune systems are busy helping us to be well.

Your challenge for this week - Think about what you could do to help your immune system to keep up the good job, the things we do to help our bodies to be healthy and happy! Draw, write or photograph the things you do to help yourself and we could make a display to share all your great ideas with the rest of our school community.