**The Secret Life of Snot**

**Snot, what’s it all about?**

**Why Do We Make It?**

The nose is the dirtiest organ in the body. Why? Because it acts as a filter cleaning the air that we breathe, removing harmful dirt and germs from the air that goes to our lungs.

Mucus is our body’s equivalent to fly paper, it lines the nose trapping the dirt and germs stopping them from damaging the lungs. But it does better than just sticking to them - mucus is loaded with protective proteins that kill and disable germs, like bacteria and viruses.

The final step is to remove them from the body, and this is done by coughing or sneezing but most of it is actually eaten!!!! Yes that’s right, eaten, where anything that was living is destroyed by stomach acid.

**What’s In It?**

How does our body make something that is quite so disgusting and gloopy? Well it’s all thanks to a group of proteins called MUCINS, these large proteins are covered with sugar that absorb water giving mucus its sticky gooey consistency.

The remaining proteins in mucus give it a protective function, these include:

- Antibodies - activate the immune system
- Lysozyme - an enzyme that chops up bacteria

**What About The Colour?**

While most of the time mucus is clear, it can turn bright yellow or green. We all know that this means we’re sick, but why has the mucus changed colour?

NEUTROPHILS are part of the immune system’s rapid response system. Once on the scene they swallow bacteria and viruses (phagocytosis) and spray antiseptic chemicals to kill nearby germs. Sadly however they also kill themselves doing this and end up in the mucus like the germs. These neutrophils have a green colour (due to iron within the cell) which is why your snot turns green when you’re sick!