ACTIVITY #5: MAKE A HUNGRY MACROPHAGE JELLY

What we will do:

Make a jelly macrophage full of fruit microbes and covered in cell surface receptors.

What you will need:

- Jelly Crystals (your favourite flavour)
- Some 'microbes' for your hungry macrophage to eat (we suggest using some healthy fruit and berries)
- Some colourful fruit or treats to act as receptors on the surface of your jelly macrophage

* Don't add fresh pineapple, kiwi or paw paw as the jelly won't set, I wonder why?

Instructions:

1. Wash and cut up your favourite fruits to use as microbes in your jelly macrophage. Viruses and bacteria come in all different shapes and sizes so use lots of different kinds of fruit too ☺.

2. Mix your jelly crystals according to the instructions on the packet or use a little less water than recommended to get a firmer jelly.

Please ask an adult to boil the water and help you make the jelly!

3. You can either add your fruit to the bowl first before pouring the jelly, try adding the fruit just before the jelly sets or even do layers of fruit and jelly.

Example:
https://www.youtube.com/watch?v=pERYv5hSXxk

4. Once your jelly macrophage is set stick some surface receptors on the outside, you can use more fruit or some lollies.

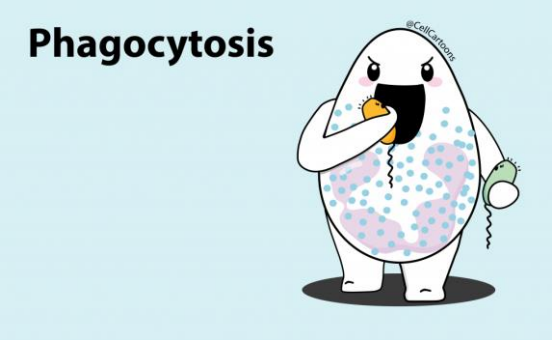
5. Enjoy your jelly macrophage full of fruit microbes, yum and share a picture with us @dayofimmunologywa

Macrophage Facts:

1. Macrophages are the biggest of your immune cells!

2. They are always hungry, roaming around looking for viruses or bacteria to gobble up.

3. Macrophages don't eat cells the same way you might eat your food. Instead, they bulge out and around their food, engulfing the microbe. This is called phagocytosis.



4. Once they are eaten by the macrophage, the bacteria or virus is destroyed by mixing with enzymes stored in special bubbles within the macrophage, called lysosomes.

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