Classroom Activity

10 Big Question: How do we unravel the causes of disease?*

Bacteria and Antibodies activity

You will need:
- Milk
- 2x sterile jars
- Yoghurt starter culture
- Ampicillin**

Pour milk into both the jars and add yoghurt starter culture (don't fill the jar right to the top as some gases are produced by the bugs, and you don't want the lid popping off).
Yoghurt starter contains *Lactobacillus*, a type of bacteria that lives in your gut. The bacteria eat the sugars in milk and make yoghurt.

In one of the jars, add the antibiotic ampicillin.
Seal up the jars and leave in a warm dark place for a couple of days.
See which jar turns to yoghurt first! You'll see that ampicillin doesn't only kill the bad bacteria; it will kill all sorts of bacteria, including the ones in your gut.

(VERY IMPORTANT please, don't eat the yoghurt in case it becomes rancid!)

This classroom activity was suggested by Thomas Tu - PhD student, School of Molecular and Biomedical Science, University of Adelaide.

* To find out more about the 10 Big Questions, go to:

** What is ampicillin?
Ampicillin is an antibiotic in the penicillin group of drugs. It fights bacteria in your body.
Ampicillin is used to treat many different types of infections caused by bacteria, such as ear infections, bladder infections, pneumonia, gonorrhea, and E. coli or salmonella infection.