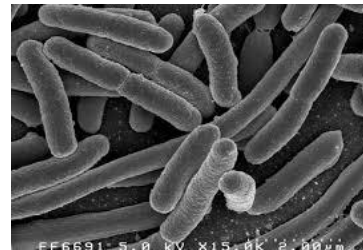


Achieved
 NZQA Intended for teacher use only

Microorganism

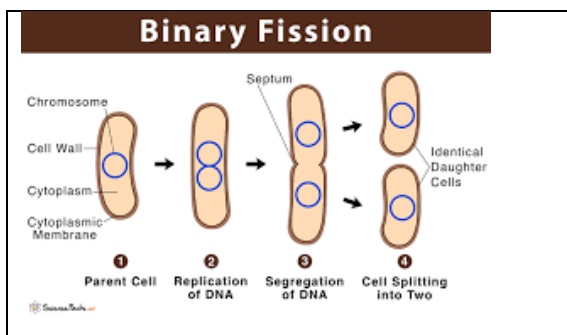
E.coli

The type of microbe that E.coli is, is a bacterium. E.coli are found in the intestines of people, animals and in our environment. It causes food poisoning. E.coli can be spread through contaminated food. Most warnings come from raw chicken and water or from infected animals or people.



MRS GREN-Reproduction

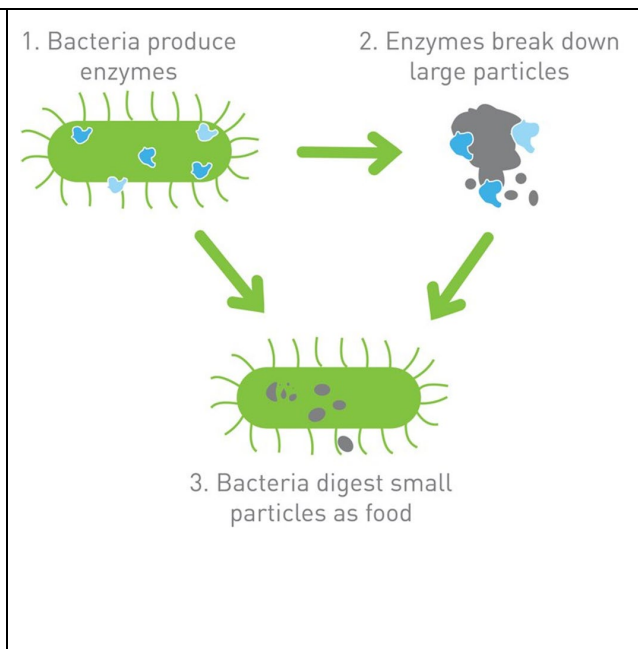
Binary Fission









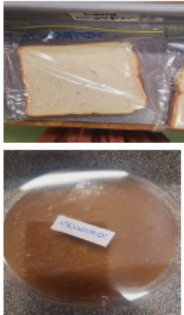



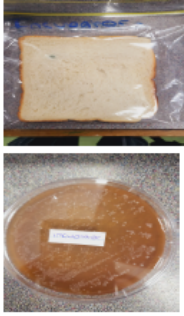
E.Coli reproduce by Binary Fission. This is asexual reproduction where E.Coli divides into two new bacteria cells. Each part carries one copy of the bacteria genetic material. A single E.Coli cell called the parent cell splits into two daughter cells. E. Coli can then become high in numbers really fast but this also means the daughter cells are identical clones of the parent.

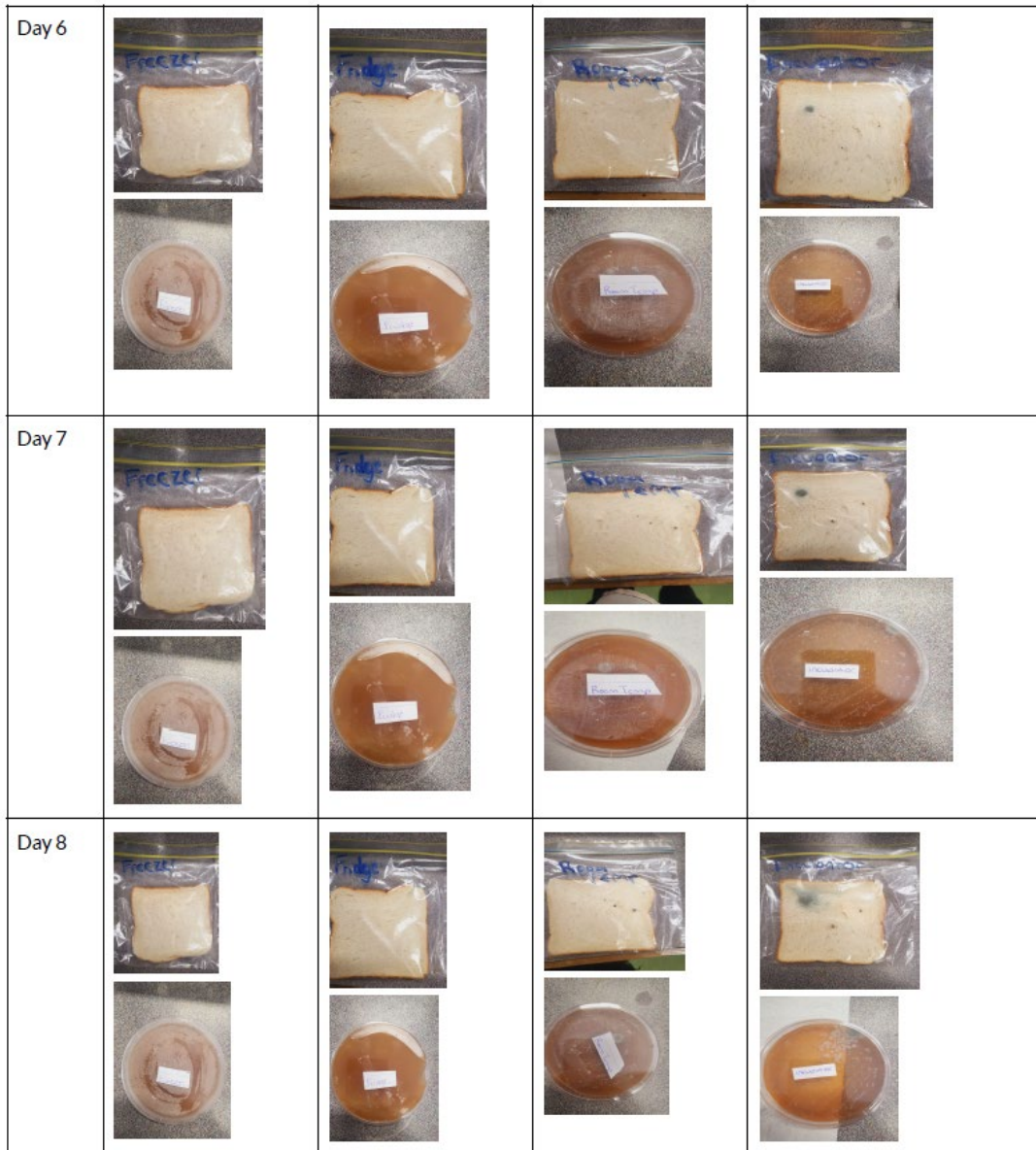
Nutrition
 E. coli is able to use extracellular digestion to digest food by secreting enzymes from their cell walls. The enzymes break down the food into smaller pieces and then the bacteria absorb the nutrients.

Abiotic/Biotic factors
 Temperature is an abiotic factor that affects E.coli in the human body. This is a non-living factor. When we get sick we often get a fever which stops the E.Coli from reproducing more. Growth beyond 40 degrees C can be restrictive for E. Coli as it can no longer reproduce at this high temperature.



Experimental results:

	Freezer	Fridge	Room Temp	Incubator
Day 0				
Day 2				
Day 5				



In our experiment we have put bacteria on agar plates and grew fungi on bread in zip lock bags placed in different environments. The temperature has affected the growth, as you can see the Fridge and freezer has a slow process because of how cold it is and has stopped spreading and reproduction, as for the room temp and incubator(26°C) they grow much faster because they are more warmer because they reproduce more faster. Any higher than this and the growth would slow again as about 40 °C, reproduction and growth of E. Coli is restrictive. So in our body when we get a higher temperature close to 40, this would slow the reproduction of E. Coli. The Bacterai denatures and dies at these high temperatures.

Bibliography

Micro-organisms - Pass NCEA Biology

Pass NCEA Biology

<https://www.passbiology.co.nz> › biology-level-1 › micro...

Binary Fission | Cell Biology

YouTube · sci-ology

106.6K+ views · 4 years ago