



## Glossary:

**Aerobe:** The descriptive name given to a microorganism that can grow in conditions where oxygen is present.

**Anaerobe:** A microorganism that is capable of growing in the complete absence of oxygen.

**Antimicrobial:** A chemical agent that kills microorganisms or inhibits their growth.

**Bacterial growth:** Can exhibit at least four different phases: lag phase, growth phase, stationary phase and death phase.

**Cell junctions:** Specialized regions on the cell surface through which cells are joined to each other or to the extracellular matrix.

**Cell wall:** A specialized, rigid extracellular matrix that lies next to the plasma membrane, protecting a cell and maintaining its shape. It is prominent in most fungi, plants, and prokaryotes, but is not present in most multicellular animals.

**Cellulose:** A structural polysaccharide made of glucose units linked together by  $\beta(1\rightarrow4)$  glycosidic bonds. It forms long microfibrils, which are the major component of plant cell walls.

**Death phase:** The death phase occurs when cells are being inactivated or killed because conditions no longer support growth or survival.

**Enterotoxin:** Proteins produced by bacteria that are either ingested as preformed toxins or are produced by a pathogen that has colonised the gastrointestinal tract.

**Exotoxin:** Potent toxic substance formed and released extracellularly by species of certain bacteria.

**Exponential phase:** The period in which the cells of a defined bacterial population are growing and dividing continuously.

**Fermentation:** Enzymatic breakdown (catabolism) of carbohydrates generally in the absence of oxygen.



**Food contamination:** Food contamination occurs when something is found in food that shouldn't be there. It can be harmful.

**Food poisoning:** Food poisoning is an illness caused by eating contaminated food. The most common cause of food poisoning is from eating food contaminated by harmful bacteria.

**Food safety:** Food safety is ensuring that food is safe to eat.

**Food spoilage:** Food spoilage is when food goes 'off' (for example, sour milk or mouldy bread). The smell, taste and look of the food makes it unfit to eat and it should be thrown in the bin.

**Microorganism:** A living organism too small to be seen with the naked eye.

**pH:** Measure of the acidity or alkalinity of a solution, defined as the  $\log_{10}$  of the hydrogen ion concentration.