

the same organisms that spoil food also make it, brew it, and clean up after us

Microbes in food

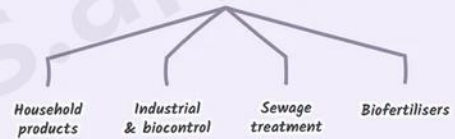
- curd forms when lactic acid bacteria, mainly *Lactobacillus*, multiply in milk, and the process also improves the milk's nutritional quality
- bread dough is left to rise using the yeast *Saccharomyces cerevisiae*, whose fermentation releases carbon dioxide that puffs the dough up
- idli and dosa batter ferments and puffs up the same way, but mainly through lactic acid bacteria, not yeast
- toddy, a traditional fermented beverage, is made by microbial fermentation of the sap of certain palms

Microbes in cheese

- the large holes in Swiss cheese come from a bacterium that produces large amounts of carbon dioxide gas as it grows through the cheese
- Roquefort cheese gets its characteristic flavour from being ripened by letting a specific fungus, a species of *Penicillium*, grow through it

Four areas, one chapter

Microbes in welfare



the same idea, four different settings: household food, industrial production and crop protection, cleaning up waste water, and enriching soil

*a microbe doesn't know it's being useful.
It's the same fermentation, curdling and
gas release either way, just aimed
somewhere on purpose*