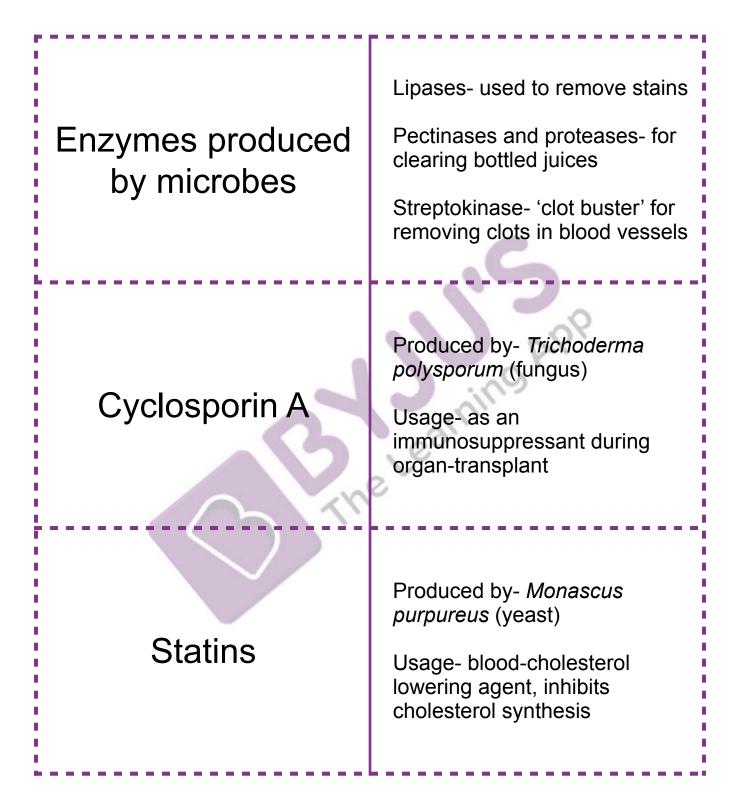


Lactic acid bacteria (LAB)	Gram-positive bacteria
	Convert milk to curd
	Increase vitamin B ₁₂ content
	E.g. <i>Lactobacillus</i>
Penicillin	An antibiotic produced from <i>Penicillium notatum</i> (mould)
	Discovered by Alexander Fleming
	Ernst Chain and Howard Florey identified the full potential as an antibiotic and awarded with Nobel prize in 1945 with Fleming
Organic compounds produced by microbes	Citric acid- <i>Aspergillus niger</i>
	Acetic acid- Acetobacter aceti
	Butyric acid- <i>Clostridium</i> butylicum
	Ethanol- <i>Saccharomyces</i> <i>cerevisiae</i> (yeast)







Secondary treatment	
Biological treatment in STPs	Secondary treatment
	The primary effluent is treated first by aerobic microbes and then the activated sludge is treated by anaerobic bacteria
	Biogas is produced and effluent is released into water bodies
Biogas	A mixture of methane and other gases used as a fuel
	Produced by- Methanogens (anaerobic bacteria)
	Present in rumen of cattle
	Cattle dung is used to produce biogas
Biological control agents	Ladybird beetle to control aphids
	Dragonflies to control mosquitoes
	<i>Bacillus thuringiensis</i> (Bt) to control butterfly caterpillars
	<i>Trichoderma</i> (fungus) to control plant pathogens
	Nucleopolyhedrovirus (Baculoviruses) to control insects



