

Appendices:

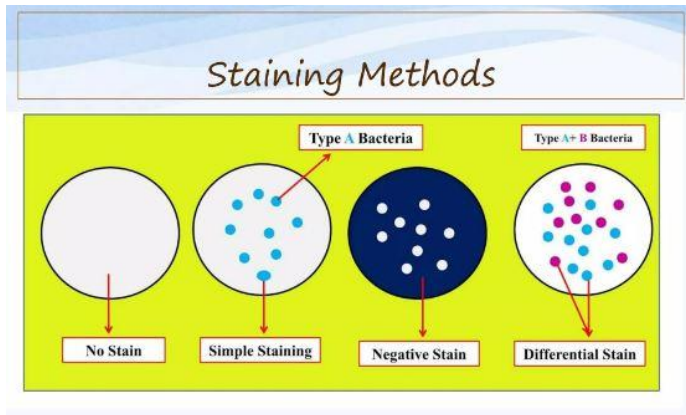


Figure (1): Staining methods.

Smear Preparation

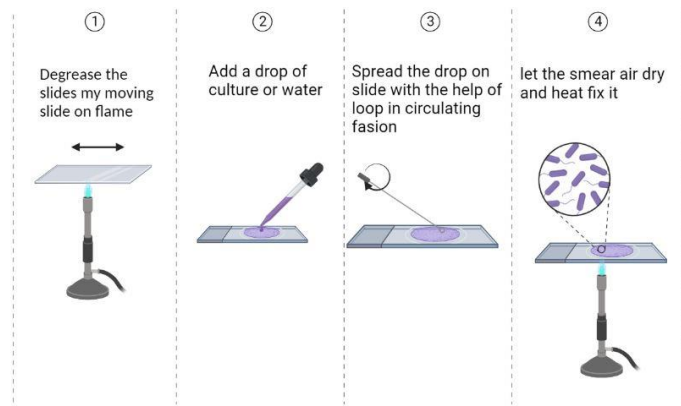


Figure (2): smear preparation.

Smear preparation

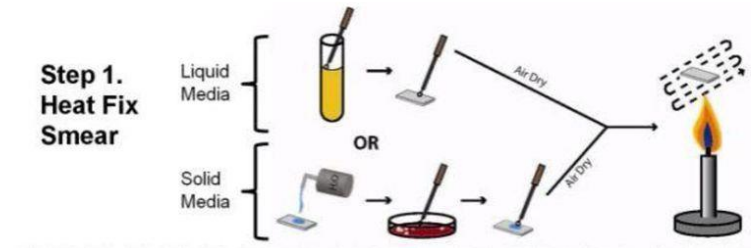


Figure (3): smear preparation from broth or agar medium.

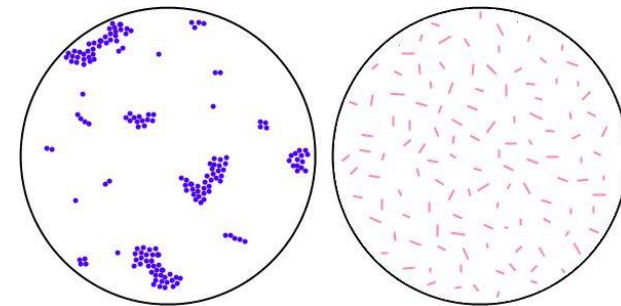


Figure (4): simple stain

Left: cocci – Right: bacilli

**common bacterial arrangement**












Shape		Arrangement	
Spherical		diplococcus (pairs)	
	coccus (pl., cocci)	streptococcus (chains)	
		staphylococcus (random or grapelike clusters)	
		micrococcus (square groups of four cells)	
Rod-shaped		streptobacillus (chains)	
	bacillus (pl., bacilli)		
Spiral		sarcina (cubical packets of eight cells)	
	spirillum (pl., spirilla)		
Incomplete spiral			
	vibrio (pl., vibrios)		
Irregular or variable shape			
	pleomorphic		

Figure (5): Bacterial shape & arrangement.

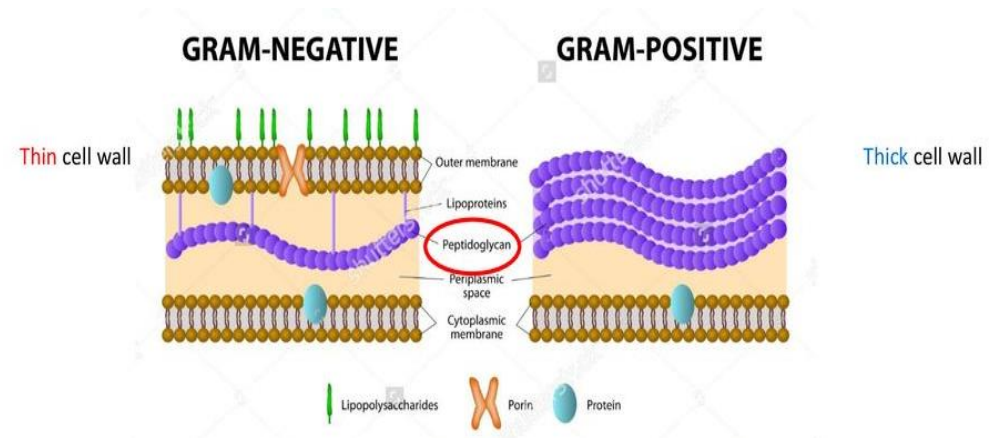


Figure (6): cell wall structure of g-ve and g+ve bacteria.

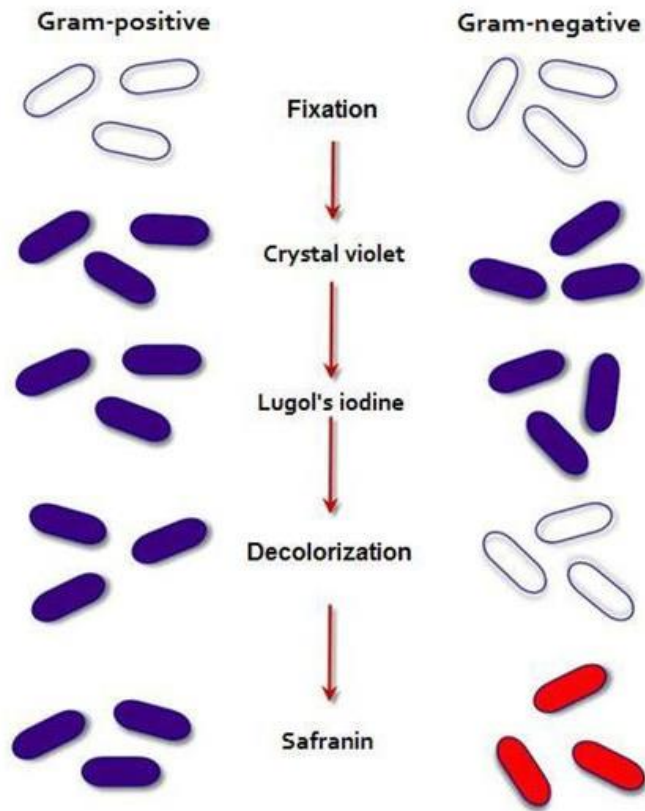


Figure (7): Gram stain procedure.

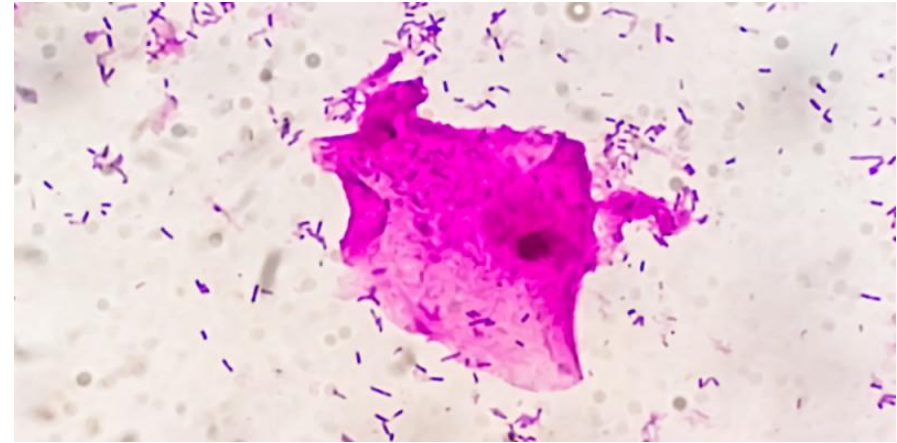


Figure (8): Gram negative bacteria under light microscope.

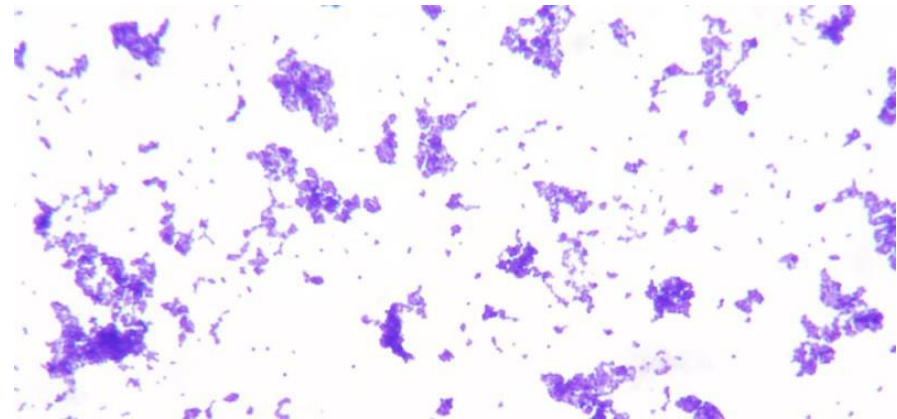


Figure (8): Gram positive bacteria under light microscope.

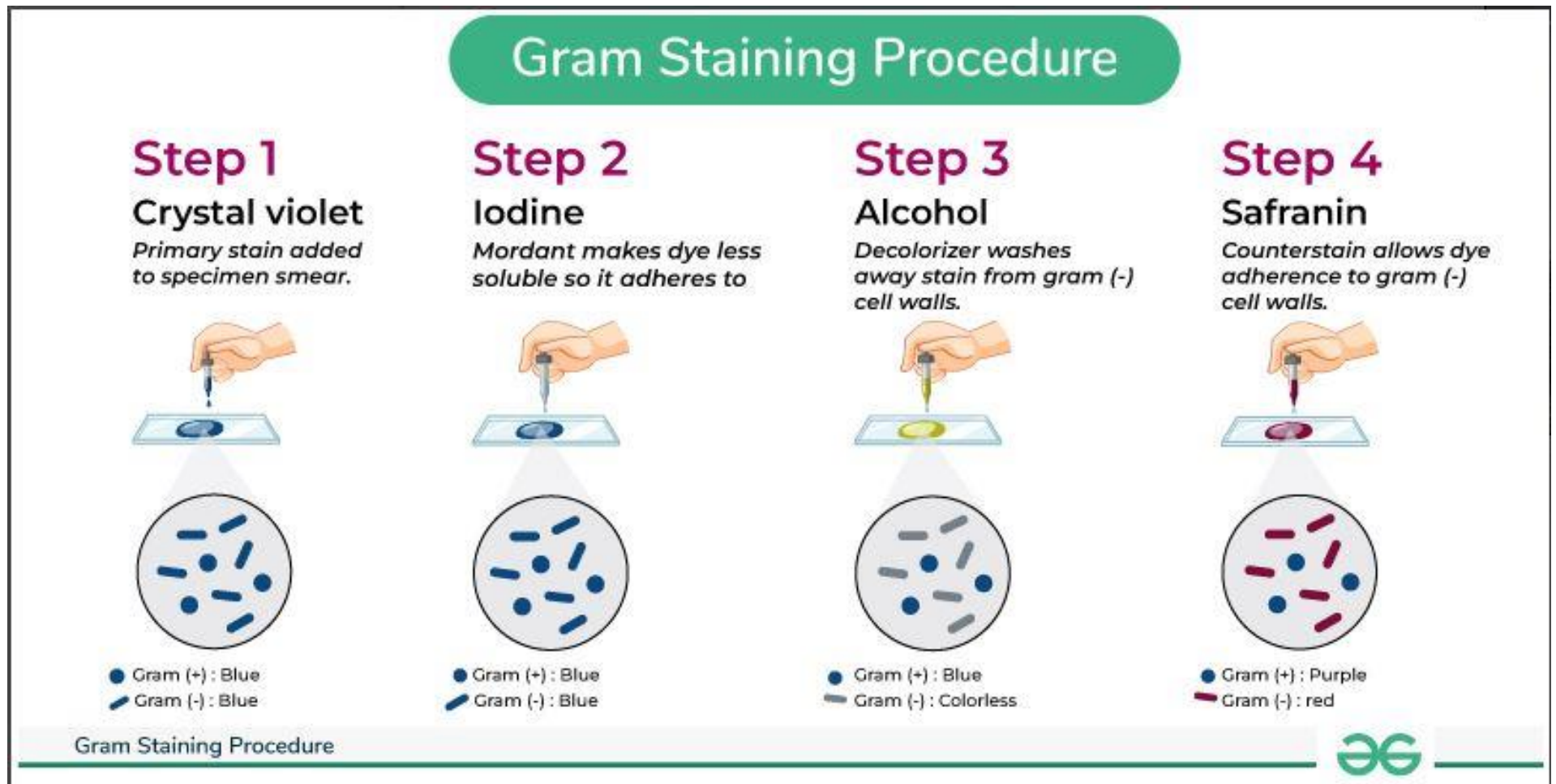


Figure (9): Gram stain procedure steps.



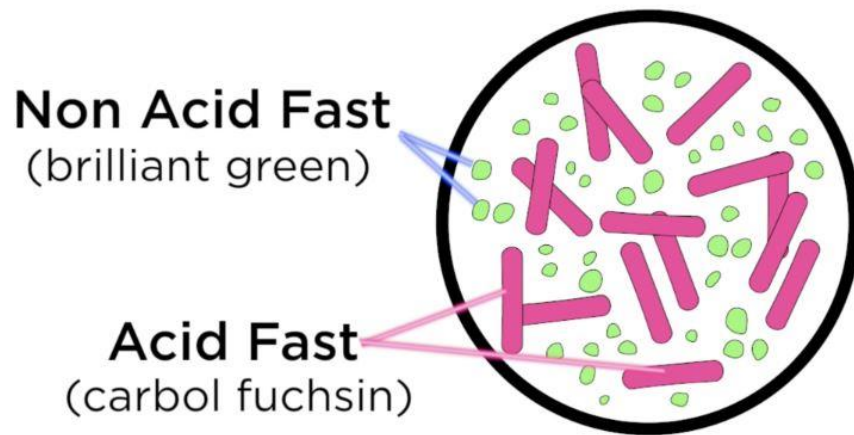
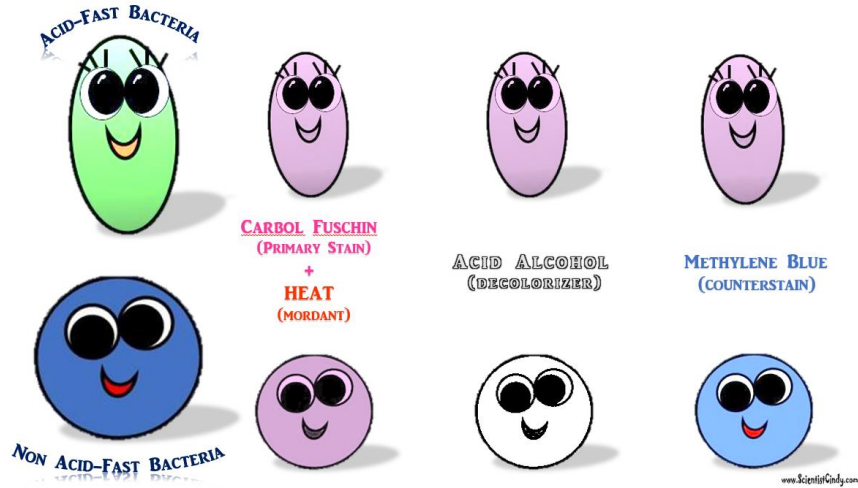


Figure (10): Acid – Fast Bacteria.

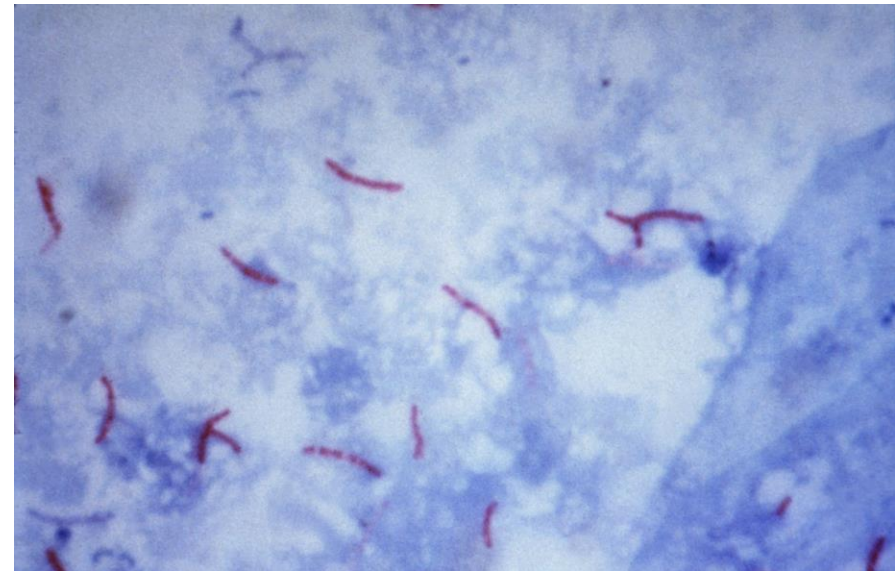


Figure (11): Acid – Fast stain for *Mycobacterium tuberculosis* under light microscope.