

BACTERIOLOGY

Parvashi

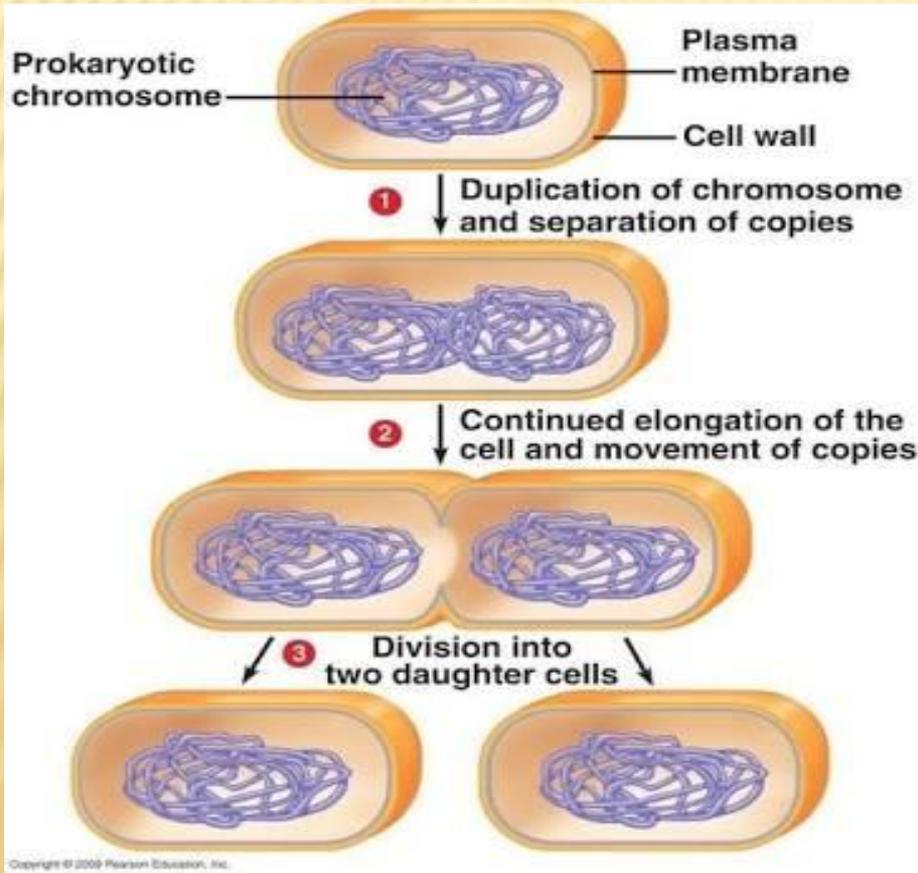
ASST. PROF. IN COSMETOLOGY

BACTERIA

Germs and microbes are very small one cell plant micro organisms. They are found everywhere in great numbers. They grow well in water on the skin or hair in decaying matters and in the various waste materials by men and other animals . Although bacteria are very small that they are invisible to the naked eyes but they are complete living things. They carry all the functions necessary for life . They require food for survival and growth. Some bacteria have here like projections called ***“FLAGELLA”*** or ***“CILIA”*** which permit them to move in liquid.

BACTERIA GROW & REPRODUCE

❖ Bacteria is found in two forms...



1. Active Bacteria

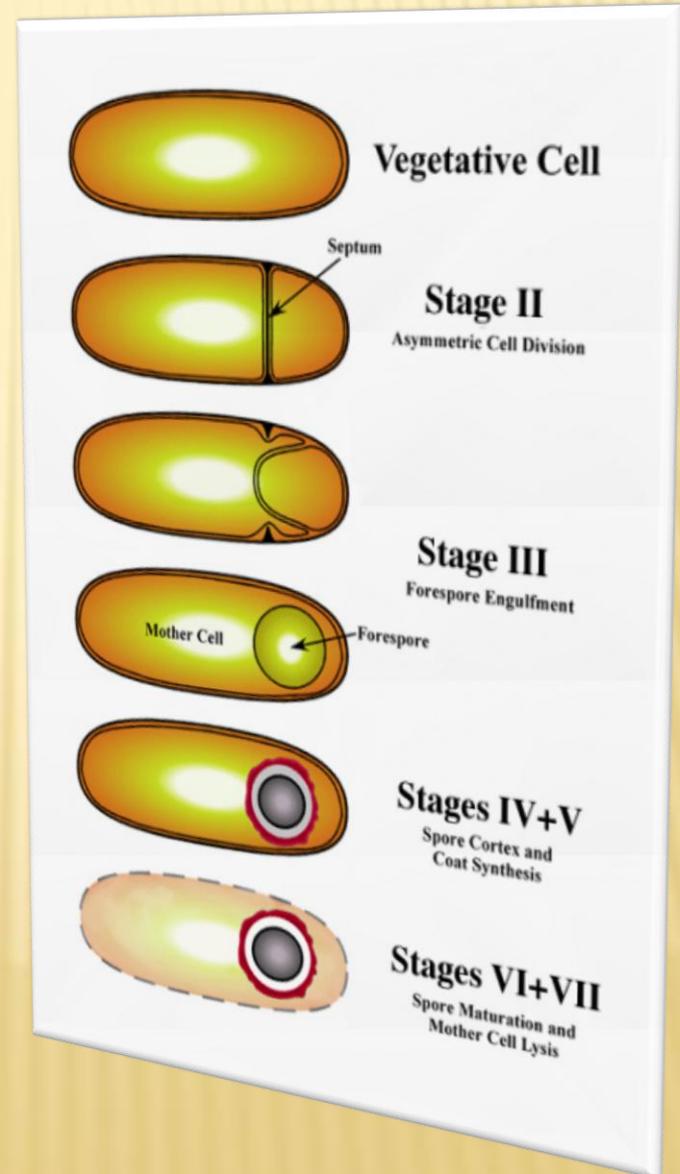
Bacteria grow and reproduce are called **ACTIVE BACTERIA** and that stage is called ACTIVE STAGE .They grow in warm , dark , dirty and moist environment .

Most of the bacteria reach to their full growth in about 2 to 30 min. When they have reached there full growth they are ready to reproduce.

2. Inactive Bacteria

Most Bacteria cannot grow and reproduce . If there is too much light or heat or lack of food or moisture . Under those conditions some bacteria are divided but other simply are inactive . Bacteria those are in active stage they form spores those have hard shell like outer covering these spores are resistant adverse conditions .

The spores helps the bacteria to survive for a long time without food in an environment that is not suitable for growth . The spores can float in that air and cannot stick to form rashes etc.



❖ **CLASSIFICATION OF BACTERIA...**

Bacteria are of two types..

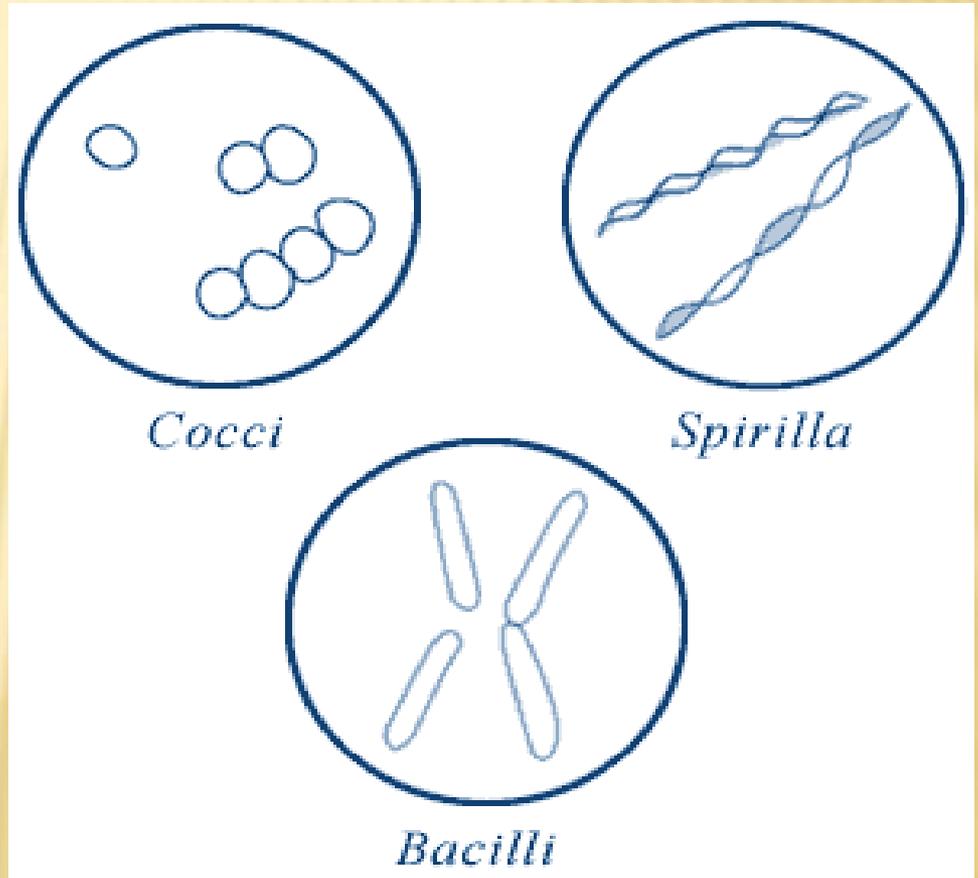
- 1) Pathogenic bacteria
- 2) NON-PATHOGENIC BACTERIA

PATHOGENIC BACTERIA

There are thousands kinds of bacteria but only about hundred of these bacteria are said to be pathogenic or disease producing bacteria .

Classes-

1. Cocci
2. Bacilli
3. Sprilla



Non-Pathogenic Bacteria

They are harmless and some are even useful in nature they help in decomposing dead vegetation and animals and fertilize the soil .

In the digestive system they help to breakdown the food that we eat . Some of them are used to produce medicines by the drugs in industry .



INFECTION

All the times our bodies are inhabited by large numbers of bacteria the pathogenic bacteria is of that kind which causes disease . Infection and disease occur when pathogenic bacteria in way the body overcome the body defenses and begin to multiply they produce TOXINS that are the poisons that cause diseases .

Infections is of two times ...

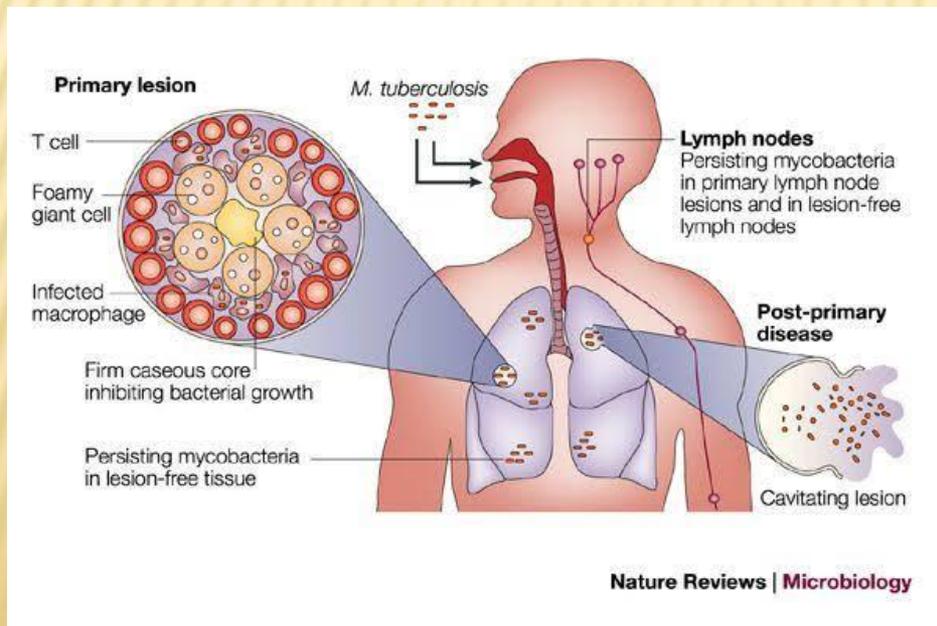
1.Local infection

2.General infection

DISEASE

Bacteria may invade the body through cuts scratches in the skin or through any of the body openings bacteria are also contained in food we eat the water we drink and the air we breathe .

the bite of an insect or an animal can also introduce harmful bacteria into the body when the entered bacteria starts grow and reproduced fast and the disease may



Disease of two types |-

1. Contagious disease

2. Communicable disease

***PUS**

It is the yellowish fluid that oozes from the wound . It is a sign of infection and it contains blood cells , dead and living things..

***BODILY DEFENCES**

The body has a network of defenses that guard against the inclusion of bacteria . Other defense mechanisms control bacteria that are already within the body .

***VIRUS**

Virus are infectious pathogenic particles that are also so small that they cannot be seen through an ordinary microscope .

***AIDS**

It caused by HIV which is incurable precautions should be taken to avoid its spread as it destroy the immune system .

***FUNGI**

Fungi are plant organism that live on dead , decaying or living matter . Some types of fungi consist of one micro scoping cell , other are composed of many cell certain fungi cause serious infection such as ringworm .

***IMMUNITY**



It is the ability a person has to fight off resist disease and infection . There are two types of immunity -

1. NATURAL IMMUNITY
2. ACQUIRED IMMUNITY

THANK YOU
