## **CONTROL OF BACTERIA:**

### How do neutrophils and macrophages engulf bacteria at the site of infection?

-Bacterium has antigens on the surface

- -The bacterium is engulfed by neutrophil or macrophage
- -It is then enclosed in a vacuole.
- -Lysosomes fuse with vacuole releasing enzymes that destroy foreign material.

### What is the role of the lymph nodes in limiting the spread of bacteria?

- -Tissue fluid drains into the lymphatic vessels
- -The fluid called lymph flows along the lymph vessels.

-It passes through the lymph nodes and as lymph passes through the lymph nodes any pathogens present activate lymphocytes and macrophages, which can then destroy the microbes.

- It eventually returns to the blood via the lymphatic and thoracic ducts.

## What is Interferon and what does it do?

-It is a protein that provides non-specific defence against viruses.

-Virus infected cells produce this protein.

-It diffuses to the surrounding cells where it prevents viruses from multiplying. UK How does it limit the formation of new virus particles? -It inhibits viral protein synthesis.

# What are lymphocytes?

-They are white blood cells that help to defend the body against specific diseases.

## What do they do?

-They circulate in the blood and lymph and gather in large numbers at the site of any infection.

## What are the two main types of lymphocyte?

-B cells and T cells

### What do they both do?

-They both respond to antigens called a specific immune response.

### What do B cells do?

-They secrete antibodies in response to antigens.