

# Essays park



**ASSIGN  
BUSTER**

It is one of the most important natural host defense mechanisms since it marshals the attack on the injurious agent and leads to repair of the affected tissue. It is triggered when body tissues are damaged anyhow. Most of the body defense elements are located in the blood and when body defense cells and defense chemicals leave the blood and enter the tissue around the injured or infected site it triggered inflammation. It is caused by release of some chemicals from tissues and migrating cells.

Most strongly implicated are the prostaglandins (PGs), leukotrienes (LTs), histamine, bradykinin, platelet-activating factor (PAF) and interleukin-1 (Vane et al., 1987). Inflammation occurs in response to physical trauma, intense heat and irritating chemicals, as well as to infection by viruses and bacteria, Hypersensitivity reactions and Tissue necrosis. This response is essential for preventing the spread of harmful agents to nearby tissues, disposal of cell debris and pathogens and setting the stage for the repair process.

The inflammatory process begins with chemical “alarms”, a series of inflammatory chemicals that are released in the extracellular fluid. Injured tissue cells, phagocytes, lymphocytes, mast cells and blood proteins are all sources of inflammatory mediators, the most important of which are histamine, kinins, prostaglandins, complement, and lymphokines. Despite the fact that some of these mediators have individual inflammatory roles also, they all promote dilation of the small blood vessels in the near vicinity of the injury. As further blood flows into the area, a local hyperemia (congestion with blood) occurs which accounts for the erythema and the heat of the inflamed area.