

CRP (C-Reactive Protein)

CRP stands for C-reactive protein, which is a substance produced by the liver in response to inflammation in the body. It is a type of acute-phase protein, meaning its levels increase rapidly in response to inflammation, infection, or tissue damage. CRP plays a role in the body's immune response by binding to damaged cells and bacteria, promoting their clearance by the immune system.

CRP levels in the blood can be measured through laboratory tests, such as the CRP latex test or high-sensitivity CRP (hs-CRP) test. Elevated CRP levels are indicative of inflammation and can be seen in various conditions, including infections, autoimmune diseases, cardiovascular diseases, and certain cancers. CRP levels are often used as a marker of inflammation and can help healthcare providers in diagnosing and monitoring these conditions.

Low level of CRP :

Absence of inflammation: If there is no ongoing inflammatory process or infection in the body, CRP levels remain low.

Resolution of inflammation: CRP levels may decrease once the underlying inflammatory condition has resolved or been successfully treated.

Certain medications: Some medications, such as statins, can lower CRP levels, particularly in individuals with cardiovascular disease.

Chronic conditions: In some chronic inflammatory conditions, such as rheumatoid arthritis, CRP levels may fluctuate but remain relatively low during periods of remission.

High level of CRP :

Infections: Bacterial, viral, or fungal infections can trigger an inflammatory response, leading to elevated CRP levels. This could include conditions such as pneumonia, urinary tract infections, or sepsis.

Inflammatory disorders: Chronic inflammatory conditions like rheumatoid arthritis, inflammatory bowel disease (Crohn's disease or ulcerative colitis), or lupus can result in sustained elevation of CRP levels.

Tissue injury or trauma: Any type of injury or trauma to tissues, including surgery, burns, or physical trauma, can cause an acute inflammatory response and elevate CRP levels.

Autoimmune diseases: Conditions where the immune system mistakenly attacks the body's own tissues, such as systemic lupus erythematosus (SLE), can lead to chronic inflammation and elevated CRP levels.

Cardiovascular diseases: CRP levels are often elevated in individuals with cardiovascular diseases, including coronary artery disease and myocardial infarction (heart attack), as inflammation plays a significant role in the development and progression of these conditions.

Cancer: Certain types of cancer, especially those associated with inflammation, can lead to increased CRP levels.