

CREATININE

Creatinine is a waste product made by muscles when they use creatine phosphate. The kidneys filter creatinine from the blood and remove it through urine. High levels of creatinine in the blood can signal kidney problems

Low levels of Creatinine:

- Reduced muscle mass: Low muscle mass due to conditions such as malnutrition, muscle wasting diseases, or prolonged bed rest can lead to decreased creatinine production.
- Liver disease: Liver dysfunction or severe liver damage can affect the body's ability to produce creatinine, leading to lower levels in the blood.
- Pregnancy: During pregnancy, creatinine levels may decrease due to increased blood volume and changes in kidney function.
- Reduced kidney function: In some cases, particularly if accompanied by other abnormal kidney function tests, low creatinine levels can indicate impaired kidney function or kidney disease.

High levels of Creatinine:

- Kidney disease: Conditions such as chronic kidney disease (CKD), acute kidney injury (AKI), or other kidney disorders can lead to decreased kidney function, causing creatinine levels to rise.
- Dehydration: Insufficient fluid intake or excessive fluid loss (e.g., due to vomiting, diarrhea, or excessive sweating) can lead to dehydration, which can concentrate creatinine in the blood, causing levels to increase.
- Blockage in the urinary tract: Obstructions such as kidney stones or tumors can block the flow of urine, leading to a buildup of creatinine in the blood.
- Muscle damage: Severe muscle injury, such as crush injuries, can release large amounts of creatinine into the bloodstream, resulting in elevated levels.

Assessing Creatinine Levels

A creatinine test measures the level of creatinine in the blood or urine, serving as a marker for kidney function. Abnormal levels may indicate kidney dysfunction, muscle disorders, or urinary tract obstructions.