

SODIUM

In the body, sodium is a crucial electrolyte and mineral essential for various physiological processes. It plays a vital role in maintaining fluid balance, transmitting nerve impulses, and supporting muscle function, including the contraction of the heart muscle. Sodium is primarily found in extracellular fluids, such as blood plasma and interstitial fluid.

Sodium intake is primarily through dietary sources, with common sources including table salt (sodium chloride) and processed foods. The body tightly regulates sodium levels to ensure proper function, with mechanisms such as kidney excretion and hormonal control. However, excessive sodium intake can lead to health issues such as high blood pressure, cardiovascular disease, and fluid retention. Therefore, maintaining an appropriate balance of sodium intake is essential for overall health and well-being.

High level of Sodium:

- High levels of sodium in the body, known as hypernatremia, can result from excessive sodium intake, dehydration, certain medical conditions, or medications. Symptoms include thirst, confusion, weakness, and in severe cases, coma. It can lead to health complications like high blood pressure, heart disease, and kidney damage.
- Treatment involves addressing the underlying cause and may include reducing sodium intake, increasing fluid intake, and adjusting medications.

Low levels of Sodium:

- Low levels of sodium in the body, called hyponatremia, can occur due to factors such as excessive sweating, vomiting, diarrhoea, certain medications, or medical conditions like kidney disease or hormonal imbalances. Symptoms may include nausea, headache, confusion, muscle weakness, and in severe cases, seizures or coma. Hyponatremia can lead to health complications such as brain swelling and impaired nerve and muscle function.
- Treatment typically involves addressing the underlying cause and may include fluid restriction, intravenous fluids, or medication adjustments.