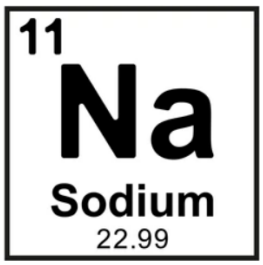
Sodium Overview

Why We Need It?
Sodium is an essential electrolyte that helps regulate fluid balance, nerve signaling, and muscle contractions. It plays a crucial role in maintaining blood pressure, supporting hydration, and ensuring proper cellular function. While necessary for health, excessive sodium intake is linked to high blood pressure and cardiovascular disease.

Functions in the Body
Fluid & Electrolyte Balance: Helps regulate water distribution in and out of cells.
Nerve Transmission: Essential for sending electrical signals between nerves and muscles.
Muscle Function: Supports muscle contraction and prevents cramps.
Blood Pressure Regulation: Helps maintain normal blood pressure levels.
Nutrient Absorption: Assists in the transport of nutrients in the intestines.



Daily Recommended Intake (RDI):
Infants (0-6 months): 120 mg/day
Children (1-8 years): 1,000-1,200 mg/day
Adolescents (9-18 years): 1,500 mg/day
Adults (19-50 years): 1,500 mg/day
Older Adults (51+ years): 1,300-1,500 mg/day
Pregnant & Lactating Women: 1,500 mg/day
Upper Limit (UL): 2,300 mg/day (excess intake is associated with high blood pressure and cardiovascular risks).

Benefits of Supplementation
- Helps maintain proper hydration and electrolyte balance.
- Supports nerve and muscle function, reducing cramps and weakness.
- Prevents dehydration, especially in athletes and those sweating excessively.
- Aids in blood pressure regulation when consumed in balance with potassium.

Most Bioavailable Form
Sodium Chloride (Table Salt): The most common form in diets.
Sodium Bicarbonate: Used in some medications and alkalizing supplements.
Sodium Citrate: Helps balance pH levels in the body.
Himalayan & Sea Salt: Contains trace minerals along with sodium.

Best Food Sources
Natural Sources: Celery, beets, seaweed, dairy products.
Animal-Based Foods: Meat, poultry, eggs, fish.
Processed & Packaged Foods: Bread, cheese, canned soups, fast food (major sources of excessive sodium).
Sports Drinks & Electrolytes: Provide sodium for rehydration after sweating.

Conclusion
Sodium is essential for hydration, nerve function, and muscle contractions. While a moderate intake supports health, excessive sodium from processed foods can increase the risk of high blood pressure and heart disease. A balanced sodium intake, along with potassium, ensures proper electrolyte function.