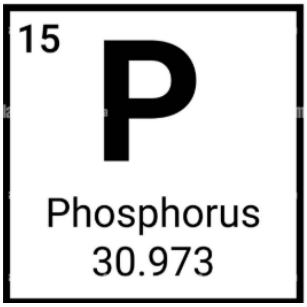
Phosphorus Overview

Why We Need It?
Phosphorus is a vital mineral essential for bone health, energy production, and cellular function. It is the second most abundant mineral in the body, primarily found in bones and teeth, and plays a crucial role in DNA synthesis, metabolism, and pH balance.

Functions in the Body
Bone & Teeth Health: Works with calcium to strengthen bones and prevent osteoporosis.
Energy Production: A key component of ATP (adenosine triphosphate), the body's main energy source.
Cellular Function: Essential for DNA, RNA, and cell membrane formation.
Acid-Base Balance: Helps maintain proper pH levels in the body.
Metabolism Support: Aids in carbohydrate, protein, and fat metabolism.
Muscle & Nerve Function: Supports muscle contraction and nerve signaling.



Daily Recommended Intake (RDI):
Infants (0-6 months): 100 mg/day
Children (1-8 years): 460-500 mg/day
Adolescents (9-18 years): 1,250 mg/day
Adults (19+ years): 700 mg/day
Pregnant & Lactating Women: 700 mg/day
Upper Limit (UL): 4,000 mg/day (excess intake can lead to kidney damage and calcium imbalances)
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Benefits of Supplementation
- Supports strong bones and teeth.
- Boosts energy production and reduces fatigue.
- Aids in muscle recovery and performance.
- Helps maintain a healthy pH balance.
- Supports cognitive function and nerve signaling.

Most Bioavailable Form
Phosphoric Acid: Easily absorbed but often found in processed foods and sodas, which may harm bone health.
Dicalcium Phosphate: A common form in supplements, supports bone and dental health.
Sodium Phosphate: Used medically to balance electrolytes and aid digestion.
Potassium Phosphate: Helps support kidney function and pH balance.

Best Food Sources
Animal-Based Sources: Meat, poultry, fish, eggs, dairy products.
Plant-Based Sources: Nuts, seeds, whole grains, beans, lentils.
Dairy Products: Cheese, yogurt, milk.
Seafood: Salmon, tuna, shellfish.
Processed Foods & Sodas: Contain added phosphates but can contribute to imbalances if consumed excessively.

Conclusion
Phosphorus is essential for bone health, energy production, and cellular function. While most people get enough through their diet, supplementation may benefit those with deficiencies. Maintaining a proper calcium-to-phosphorus ratio is important for optimal bone health and preventing imbalances.