Vitamin B6 (Pyridoxine) Overview

Why We Need It?
Vitamin B6 is a water-soluble vitamin essential for brain health, metabolism, immune function, and neurotransmitter synthesis. It plays a crucial role in over 100 enzymatic reactions in the body, particularly in amino acid metabolism and neurotransmitter regulation.

Functions in the Body
Protein & Amino Acid Metabolism: Helps break down proteins and supports the synthesis of neurotransmitters.
Neurotransmitter Synthesis: Crucial for serotonin, dopamine, and GABA production, impacting mood, sleep, and cognitive function.
Red Blood Cell Production: Supports hemoglobin formation, reducing the risk of anemia.
Hormonal Balance: Helps regulate homocysteine levels, supporting cardiovascular health.
Immune Function: Plays a role in antibody production and immune cell communication.

Daily Recommended Intake
Adults (19-50 years): 1.3 mg/day
Men (51+ years): 1.7 mg/day
Women (51+ years): 1.5 mg/day
Pregnant Women: 1.9 mg/day
Lactating Women: 2.0 mg/day
Upper Limit (UL): 100 mg/day (excessive intake may cause nerve damage).

Benefits of Supplementation
- Supports brain health and may help prevent cognitive decline.
- Helps reduce PMS symptoms by balancing neurotransmitters.
- Plays a role in cardiovascular health by lowering homocysteine levels.
- Supports immune function, especially in the elderly.
- May help alleviate morning sickness in pregnant women.
- Can aid in mood regulation and reduce symptoms of depression.

Most Bioavailable Form
Pyridoxal-5-Phosphate (P5P) – The active coenzyme form, which is more readily absorbed and utilized by the body compared to Pyridoxine HCl.

Best Food Sources
Animal-based: Chicken, turkey, salmon, tuna, beef liver.
Plant-based: Bananas, potatoes, spinach, avocados, nuts, and whole grains.

Conclusion
Vitamin B6 is vital for brain health, metabolism, and immune function. Ensuring adequate intake through diet or supplementation (especially in the form of Pyridoxal-5-Phosphate) can optimize energy levels, mood balance, and overall well-being.