Myohub Plus Sachet

Myo-Inositol 2000mg + Pyridoxal 5-Phosphate 2.4mg + Calcium 1000mg + Vitamin D3 (600 IU) Sachet

Introduction

This combination supplement provides essential nutrients that support metabolic, neurological, musculoskeletal, and reproductive health. Each sachet contains:

- Myo-Inositol (2000mg): A vital nutrient involved in insulin signaling, ovarian function, and neurotransmitter balance.
- Pyridoxal 5-Phosphate (2.4mg): The active form of vitamin B6, crucial for enzyme function, neurotransmitter synthesis, and hormone regulation.
- Calcium (1000mg): A key mineral for bone health, muscle function, and nerve transmission.
- Vitamin D3 (600 IU): Enhances calcium absorption, supports immune function, and promotes bone mineralization.

This formulation is particularly beneficial for individuals with polycystic ovary syndrome (PCOS), metabolic disorders, bone health concerns, and overall nutritional deficiencies.

Pharmacological Benefits & Mechanism of Action

Myo-Inositol (2000mg)

- Acts as a secondary messenger in insulin signaling, improving glucose metabolism and reducing insulin resistance.
- Supports ovarian function by regulating folliclestimulating hormone (FSH) and restoring normal ovulatory cycles.
- Aids in neurotransmitter balance, reducing symptoms of anxiety and depression.

 Plays a role in lipid metabolism, potentially lowering triglycerides and improving cardiovascular health.

Pyridoxal 5-Phosphate (2.4mg) (Active Vitamin B6)

- Acts as a coenzyme in over 100 enzymatic reactions, essential for amino acid metabolism and neurotransmitter production (serotonin, dopamine).
- Helps regulate hormonal balance, reducing premenstrual syndrome (PMS) symptoms.
- Supports hemoglobin synthesis and red blood cell production.
- Plays a role in immune function and reducing inflammation.

Calcium (1000mg)

- Strengthens bones and teeth, preventing osteoporosis and fractures.
- Essential for muscle contraction, including the heart
- Supports **nerve function**, aiding in neurotransmission.
- Helps maintain pH balance and enzymatic functions in the body.

Vitamin D3 (600 IU)

- Enhances calcium and phosphorus absorption in the intestines, ensuring optimal bone mineralization.
- Strengthens the immune system, reducing the risk of infections and autoimmune conditions.
- Plays a role in **hormonal balance** and supports cardiovascular health.
- Helps prevent osteomalacia, osteoporosis, and muscle weakness.

Indications & Uses

This combination supplement is beneficial for a wide range of conditions, including:

Metabolic & Hormonal Health

- Polycystic Ovary Syndrome (PCOS): Myoinositol improves ovarian function, insulin sensitivity, and hormonal balance.
- Insulin Resistance & Type 2 Diabetes: Enhances glucose uptake and reduces blood sugar levels.
- Hormonal Imbalances: Vitamin B6 and Myoinositol aid in balancing reproductive hormones.

Bone & Musculoskeletal Health

- Osteoporosis & Osteopenia: Calcium and Vitamin D3 support bone density and prevent fractures.
- Hypocalcemia (Calcium Deficiency): Helps replenish calcium levels in individuals with poor dietary intake.
- Muscle Cramps & Weakness: Calcium and Vitamin D3 assist in muscle contraction and prevent spasms.

Neurological & Mental Health

- Depression & Anxiety: Myo-inositol and Vitamin B6 support neurotransmitter production.
- Neuropathy & Cognitive Function: Vitamin B6 plays a role in nerve health and memory retention.

Pregnancy & Women's Health

- Fertility Support: Myo-inositol enhances ovulation and egg quality in women with PCOS.
- Gestational Diabetes: Helps regulate blood sugar levels during pregnancy.
- Prevention of Pre-eclampsia: Calcium and Vitamin D3 support cardiovascular health in pregnant women.

Dosage & Administration

- **Route:** Oral (Dissolve the sachet contents in water and consume immediately).
- **Recommended Dose:** 1 sachet per day or as directed by a healthcare professional.
- **Timing:** Best taken with meals for optimal absorption of fat-soluble Vitamin D3.

 Consistency: Regular intake is essential for noticeable health benefits.

Drug Interactions

Myo-Inositol Interactions:

- Metformin: Can enhance insulin-sensitizing effects.
- SSRI Antidepressants: May improve response to selective serotonin reuptake inhibitors (SSRIs).

Vitamin B6 (Pyridoxal 5-Phosphate) Interactions:

- Levodopa (Parkinson's Medication): May reduce its effectiveness.
- Hydralazine & Isoniazid: Increased risk of neuropathy without adequate B6 intake.

Calcium Interactions:

- Iron & Zinc Supplements: May interfere with their absorption if taken simultaneously.
- Thyroid Medications (Levothyroxine): Should be spaced 4 hours apart from calcium supplements.

Vitamin D3 Interactions:

- Corticosteroids: Can reduce vitamin D3 levels.
- Orlistat (Weight Loss Drug): May decrease vitamin D absorption.

Precautions & Warnings

- Patients with kidney disease: Should consult a doctor before taking calcium supplements to avoid hypercalcemia.
- Pregnant & breastfeeding women: Can take this supplement under medical supervision.
- Patients on anticoagulants: Vitamin D and calcium may slightly affect blood clotting mechanisms.

Side Effects

Common Side Effects:

- Mild gastrointestinal discomfort (bloating, nausea).
- · Headache or dizziness.
- Increased urination (due to calcium metabolism).

Rare but Serious Side Effects:

- Hypercalcemia: Symptoms include confusion, excessive thirst, and kidney problems.
- **Vitamin B6 Toxicity (High Doses):** Can cause nerve damage (neuropathy).
- Allergic Reactions: Rash, itching, or difficulty breathing (rare).

If severe side effects occur, discontinue use and consult a doctor.

Monitoring & Follow-Up

- Bone Health Monitoring: Regular bone density scans for osteoporosis patients.
- Thyroid Function Tests: If taken alongside thyroid medications.
- Blood Sugar Levels: If used for insulin resistance or diabetes.

Storage & Handling

- Store in a cool, dry place, away from direct sunlight and moisture.
- Keep out of reach of children.
- Do not exceed the recommended dosage.

Conclusion

The Myo-Inositol 2000mg + Pyridoxal 5-Phosphate 2.4mg + Calcium 1000mg + Vitamin D3 (600 IU) sachet is a well-balanced nutritional supplement that supports metabolic, reproductive, musculoskeletal, and neurological health. It is especially beneficial for individuals with PCOS, **osteoporosis, insulin resistance, and hormonal imbalances**. Regular use, under medical guidance, can significantly enhance overall well-being and long-term health.

Manufactured in India for:



(An ISO 9001: 2015 Certified Co.)

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