# **Bvit-AL**

## (Vitamin B-Complex with Multivitamin Tablets)

#### Each film coated tablet contains:

- Biotin	5 mg
- Cyanocobalamin	100 mcg
- Folic acid	1500 mcg
- Lactic acid bacillus	15 mg
- Nicotinamide	50 mg
- Pyridoxine	3 mg
- Zinc sulphate	15 mg
- Excipient	q.s

## **Clinical Pharmacology:**

Provide essential vitamins that are necessary for various biochemical processes in the body. They typically include a combination of B-vitamins (such as B1, B2, B3, B5, B6, B7, B9, and B12), as well as other important vitamins like vitamins A, C, D, and E. These vitamins play crucial roles in maintaining energy metabolism, supporting the immune system, and promoting overall health.

## Indications:

## Prevention and Treatment of Vitamin Deficiencies:

- Used in individuals who may not receive adequate vitamins through their diet, particularly the elderly, those with poor nutrition, or those with restrictive diets (e.g., vegans).
- Conditions like malabsorption syndromes (e.g., celiac disease, Crohn's disease), Where the body cannot properly absorb nutrients.

## Support during Periods of Increased Nutritional Demand:

- **Pregnancy and Lactation**: Supports fetal growth, maternal health, and milk production.
- **Growth Periods**: Supports the nutritional needs of children and adolescents during periods of rapid growth.
- **Recovery from Illness or Surgery**: Helps replenish depleted nutrient stores during recovery or after surgery.

#### **Energy and Metabolism Support:**

- Recommended for individuals experiencing fatigue, low energy, or weakness due to poor diet, stress, or other lifestyle factors.
- Supports metabolism of carbohydrates, fats, and proteins for energy production.

## Support in Stress and Fatigue:

- B-vitamins play a crucial role in combating the effects of physical and mental stress by supporting the nervous system.
- May help alleviate symptoms of burnout or chronic fatigue.

## **Contraindications:**

- Hypersensitivity or allergy to any component of the vitamin supplement.
- Patients with **hypervitaminosis A or D** should avoid multivitamins containing high doses of these vitamins.

• Individuals with conditions like **hemochromatosis** (excess iron) should avoid supplements with iron unless specifically recommended by a healthcare provider.

#### **Precautions and Warnings:**

- **Fat-Soluble Vitamin Toxicity**: Excessive intake of fat-soluble vitamins (A, D, E) can lead to toxicity, especially if taken in high doses over extended periods.
- **Kidney Disease**: Patients with renal impairment may need to avoid high doses of vitamins C and D, as they can accumulate and worsen renal function.
- **Iron Supplementation**: Over-supplementation with iron can cause gastrointestinal distress, iron toxicity, or complications in individuals with iron storage disorders.

## **Drug Interactions:**

- **Warfarin**: High doses of vitamin E can interfere with the action of blood-thinning medications like warfarin.
- Antacids and Proton Pump Inhibitors: May reduce the absorption of vitamin B12 from multivitamin formulations.

## Adverse Effects:

• Water-Soluble Vitamins: Generally safe, but in rare cases, excessive intake of certain B- vitamins (e.g., niacin) can lead to flushing, tingling, or gastrointestinal upset.

• Fat-Soluble Vitamins: High doses of vitamins A and D may cause toxicity. Symptoms include nausea, vomiting, dizziness, headache, bone pain, and

hypercalcemia (in the case of vitamin D).

• **Gastrointestinal Distress**: Multivitamins, particularly those with iron, may cause nausea, constipation, or stomach upset.

Overdosage:

## Water-Soluble Vitamins (B-Complex and Vitamin C)

Water-soluble vitamins are generally safer because the body can excrete excess amounts through urine. However, very high doses may cause the following adverse effects:

- Vitamin B1 (Thiamine): Large doses are typically well-tolerated, but hypersensitivity reactions (such as anaphylaxis) may occur with injections, though it's rare with oral supplementation.
- Vitamin B2 (Riboflavin): Excess intake is rare and generally not harmful. It can cause yellow-orange discoloration of urine.
- Vitamin B3 (Niacin): Overdose can lead to:
  - **Flushing** of the skin, warmth, itching, and redness (especially at high doses).
  - Gastrointestinal distress, including nausea, vomiting, and diarrhea.
  - **Hepatotoxicity**: Long-term or very high doses can cause liver damage.
- Vitamin B6 (Pyridoxine): Prolonged intake of high doses can lead to:
  - **Peripheral neuropathy**, resulting in numbress and tingling in the hands and feet.

Route of Administration: Oral. Do not break or crush swallow as whole tablet.Dosage: One or two tablets per day or as directed by a Health Professional.Storage: Store in a cool, dry, dark place. Protect from direct sunlight, heat and moisture.Presentation: It is available as 10x10 tablets strips per box.

