

## FACT SHEET - IMUNI Immune Defence

### What is Immune Defence?

IMUNI Immune Defence is a unique formulation which contains Vitamin C, Vitamin D and Zinc that is designed to have your bases covered when it comes to supporting healthy immune system function. It boasts clinically meaningful doses of Zinc and Vitamin D to maintain Vitamin D and Zinc levels in the body, combined with Quercetin and Vitamin C - providing antioxidants and helps to reduce free radical damage to your body cells.

### Ingredients:

Quercetin 250mg, Vitamin D3 Vitashine™ (Colecalciferol) 5mg equiv. to 12.5 microgram/500iu, Zinc Gluconate 153.14mg equiv zinc 20mg, Ascorbic Acid (Vitamin C) 250mg

Vitashine™ is the world's only Vegan Society & Vegetarian Society registered 100% plant-source Vitamin D3 ingredient. All ingredients are vegetarian and vegan friendly. This product does not contain animal products, dairy, lactose, gluten, nuts or genetically modified ingredients (GMO-free).

### Precautions/contraindications:

Consult your doctor before use if:

- You are pregnant or preparing for pregnancy
- You are breastfeeding
- You use regular medications that may interact with this supplement (see below)
- You have a medical condition (e.g. kidney disease, cancer)

### Recommended dose:

Adults: take 1 capsule twice a day with food, or as directed by your healthcare professional.

If the above regimen is followed, your daily intake will be as follows:

- Quercetin 500mg
- Vitamin C 500mg
- Vitamin D3 1000IU/25mcg (equivalent to maximum recommended daily dose in Australia)
- Elemental Zinc 40mg (note: maximum recommended dose/Tolerable Upper Limit (UL) is 40mg in Australia and the USA.

## Warnings and adverse effects:

Adults only. Contains zinc which may be dangerous if taken in large amounts or for a long period. Vitamin and mineral supplements should not replace a balanced diet. Consider consulting your doctor before use; especially if pregnant or lactating, taking other medications, or if you have a medical condition. Always read the label and follow the directions for use. If symptoms persist, talk to your health professional.

Allergic reactions and anaphylaxis are possible with any medication or supplement. Seek urgent medical attention if you experience symptoms of skin rash, wheezing, shortness of breath or difficulty breathing.

### Quercetin:

- Side effects: Mild symptoms such as stomach ache, headache and tingling sensations have been reported in people taking more than 1000mg per day
- Pregnancy and breastfeeding: Quercetin is a naturally occurring antioxidant found in many foods, and is generally safe to ingest when obtained from dietary food sources. However, the safety of quercetin supplements has not been well studied for pregnant or breastfeeding women.

### Zinc:

- Zinc may be dangerous when used in large amounts or for a long period. A daily dose of 50mg elemental zinc should not be exceeded in adults unless advised by a qualified healthcare professional.
- Nausea and vomiting may occur (more likely at higher doses).
- Abdominal cramps and diarrhoea are possible.
- Excessive zinc may reduce iron and copper absorption.

### Vitamin D:

- Toxicity from excessive oral intake of vitamin D is unlikely if taken at the recommended daily dose, or under close medical supervision.
- The Royal Australian College of General Practitioners (RACGP) recommends a target blood level of vitamin D of 100 nmol/L (on blood testing). To avoid adverse effects, it is important not to exceed 150 nmol/L on serum blood tests. If you are concerned regarding the possibility of overdose, you should see your doctor about getting a blood test to assess your levels.

### Vitamin C:

- Vitamin C has low toxicity and serious adverse effects have not been reported even with high intakes.
- High doses can cause nausea, diarrhoea and abdominal cramps due to the osmotic effect of excessive vitamin C in the gastrointestinal tract

## For Health Professionals

### Interactions with medications:

#### Quercetin:

- Consult your doctor or pharmacist if you are taking regular medications to determine if it is safe to use this product.
- Inhibits cytochrome P450 enzymes: CYP3A4 and CYP1A2. Check with your pharmacist if this will affect the metabolism of other medications you might be taking.
- May interact with some medications such as warfarin, antibiotics, anticonvulsants, prednisone, digoxin, blood pressure medications and some drugs used in the treatment of cancer.

#### Zinc:

- Antibiotics (eg fluoroquinolones/ciprofloxacin, tetracyclines) may interact with zinc in the gastrointestinal tract and may reduce both the absorption of zinc and the antibiotic. To avoid this, take the antibiotic at least 2 hours before or 4-6 hours after using Immune Defence.
- May interact with a medication called penicillamine (a treatment for Rheumatoid Arthritis).
- Prolonged use of thiazide diuretics (e.g. hydrochlorothiazide) may deplete zinc levels resulting in zinc deficiency.

#### Vitamin D:

- Statin medications (e.g. atorvastatin) is a type of cholesterol lowering medication that can reduce vitamin D levels.
- Similarly, high intakes of vitamin D can reduce the potency of statin medications. However, any marked effect is unlikely at the dose contained in this product.

#### Vitamin C:

- Vitamin C supplements should not be used in cancer patients undergoing chemotherapy or radiotherapy unless advised otherwise by a specialist.

## References:

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