

## TRINERGIC-L

**For the use of a Registered Medical Practitioner or Hospital or a Laboratory only.**

Abbreviated Prescribing information for TRINERGIC-L(Ginseng, Lycopene, Benfotiamine, Vitamin B6, B12, Zinc, Wheat Germ Oil, Chromium and Selenium Capsules)

[Please refer the complete prescribing information available at [www.torrentpharma.com](http://www.torrentpharma.com)]

### PHARMACOLOGICAL PROPERTIES:

#### **Mechanism of action:** Vitamin B<sub>6</sub> (Pyridoxine)

Pyridoxine, once absorbed, is rapidly converted to the co-enzymes pyridoxal phosphate and pyridoxamine phosphate, which play an essential role in protein metabolism. Convulsions and hypochromic anaemia have occurred in infants deficient in pyridoxine.

#### Vitamin B<sub>12</sub> (Cyanocobalamin)

Vitamin B<sub>12</sub> is present in the body mainly as methylcobalamin and as adenosylcobalamin and hydroxocobalamin. These act as co-enzymes in the Trans methylation of homocysteine to methionine; in the isomerisation of methylmalonyl co-enzyme to succinyl co-enzyme and with folate in several metabolic pathways respectively. Deficiency of Vitamin B<sub>12</sub> interferes with haemopoiesis and produces megaloblastic anaemia.

#### Zinc (Zinc Sulfate)

Zinc is a constituent of many enzymes and is, therefore, essential to the body. It is present with insulin in the pancreas. It plays a role in DNA synthesis and cell division. Reported effects of deficiency include delayed puberty and hypogonadal dwarfism.

#### Selenium

Selenium is an essential trace element, deficiency of which has been reported in man. It is thought to be involved in the functioning of membranes and the synthesis of amino acids. Deficiency of selenium in the diet of experimental animals produces fatty liver followed by necrosis.

#### Chromium (Chromium Amino Acid Chelate 10%)

Chromium is an essential trace element involved in carbohydrate metabolism.

#### Ginseng Dry Extract

Ginseng extract raises the general level of cellular activity, which is expressed by a pronounced increase in the physical and mental capacity.

In animal experiments, it caused a reduction of lactic acid concentration in muscles during exercise. An increase in the dopamine and noradrenaline content and a reduction in the serotonin content in the brain stem could be observed.

#### Lycopene

The main activity profile of lycopene includes ant atherosclerotic, antioxidant, anti-inflammatory, antihypertensive, antiplatelet, anti-apoptotic, and protective endothelial effects, the ability to improve the metabolic profile, and reduce arterial stiffness.

### Benfotiamine

Benfotiamine acts by modulating the advanced glycation end products (AGEs). It can also act through non-AGE dependent pathways.

Advanced glycation end products are modified proteins or lipids that become non-enzymatically glycosylated on exposure to sugars such as aldose. AGEs may generate reactive oxygen species, attach to specific receptors, and form cross-linking structures.

AGEs are present in the diabetic vasculature and involved in the progression of atherosclerosis. Benfotiamine inhibits the synthesis of AGEs and thus decrease the metabolic stress. Benfotiamine thus helps in vascular complications associated with diabetes.

### Wheat Germ Oil

This study indicated that minor components in wheat-derived oils such as wheat germ oil formed the richest source of total tocopherols, lutein and smaller amount of other carotenoids among the vegetable oils and also contains oryzanol like compounds along with high amount of polyunsaturated fatty acids (PUFA). The presence of ideal amount of oryzanol like compounds (steryl ferulates), total tocopherols and lutein in WGO might be of sufficient quantity to prevent diseases like, cardiovascular disease, diabetes and cancer. Therefore, the oils from wheat bran and wheat germ may be used as a source of minor components in our daily food menu to promote good health.

**DOSAGE AND ADMINISTRATION:** As directed by physician.

**CONTRAINDICATION:** Hypersensitivity to any of the ingredients.

**WARNINGS & PRECAUTIONS:** If symptoms persist or worsen, seek medical advice. Do not exceed the stated dose.

**DRUG INTERACTION:** Many drugs may alter the metabolism or bioavailability, including isoniazid, penicillamine and oral contraceptives, which may increase the requirements for vitamins. Pyridoxine may reduce the effect of levodopa, a drug used in the treatment of Parkinsons Disease unless a dopa decarboxylase inhibitor is also given.

In case of concomitant intake of ginseng preparations and anticoagulants, the effect of oral blood thinning medication (e.g. warfarin) may potentially be reduced. Patients on blood thinning medications should seek medical advice before starting this product.

**ADVERSE REACTIONS:** Long-term administration of large doses of pyridoxine is associated with the development of severe peripheral neuritis.

### **Marketed BY:**

Torrent Pharmaceuticals Ltd.

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(Additional information is available on request)