





# ONCE A DAY VITAMIN C 1000 MG & ZINC WITH ROSEHIPS

### For protection & immune support.

## Nutritional Information

one tablet provides:		*%NRV
Vitamin C	1000 mg	1250
Zinc	10 mg	100
Rose hip extract	50 mg	

\*NRV = Nutrient Reference Values

Take one effervescent tablet daily in a glass of water.





- Supports a healthy immune system.
- Increases resistance to infections and colds.
- Essential for growth, healing and repair of body tissues.
- Provides vitamin C, zinc and rosehips.
- Protects cells from oxidative damage.

#### DESCRIPTION

A combination of vitamin C, zinc and rosehips to support the function of the immune system. Vitamin C is an antioxidant nutrient that contributes to the protection of cells from oxidative stress and to the normal functioning of the immune system. As a water-soluble nutrient, vitamin C supply in the body is used up quicker under stress leading to a lowering of immune function and increased risk of infections. Vitamin C helps towards collagen formation for many body tissues including skin, gums, teeth and cartilage found in joints. It enhances the absorption of iron in the body and is involved in energy metabolism and contributes to the reduction of tiredness and fatigue.

Zinc contributes to the normal function of the immune system and the protection of cells from oxidative stress. The immune cells require a high levels of antioxidants to protect them from oxidation that can occur when destroying pathogens. Zinc also contributes to the maintenance of normal hair, nails and skin, promoting general wound, ulceration and scar healing. Zinc aids with the division of cells and is required in larger levels in rapidly dividing cells. It plays a role in fertility and reproduction and is needed for normal growth. Low levels of zinc may contribute to infertility, hormonal imbalances, poor wound healing, and increased susceptibility to infection.

Rosehips provide bioflavonoids which enhance the absorption of vitamin C and provide additional antioxidant protection.

#### VITAMIN C & THE IMMUNE SYSTEM

**Immune cells:** Vitamin C is required for the proper function of Natural Killer T and B cells. One study showed that vitamin C was able to increase Natural Killer T and B cell function by 10-fold in patients who had the immune cells suppressed by toxins. Vitamin C completely restored immune function<sup>1</sup>.

Vitamin C for antioxidant support: Another mode of action of vitamin C on the immune system is its electron donation and powerful antioxidant status<sup>2</sup>. It is essential for the immune system that our oxidants are kept in check to prevent an excessive amount of reactive oxygen species (ROS) from damaging the immune cells<sup>3</sup>. One study reported that vitamin C enhances glutathione recovery after an oxidative challenge<sup>4</sup>, protecting our body form oxidative damage even further.

Antihistamine: Vitamin C is also a natural antihistamine, so may help to reduce the amount of histamine produced by IgE in people with allergies.

**Other benefits:** Vitamin C has a wide range of additional benefits. It acts as an antioxidant (preventing free radical damage). It contributes to the development, growth and repair of body tissues, bones and teeth. It speeds up the healing of wounds. It helps to maintain the elasticity of the skin. It is needed for the production of anti-stress hormones. It is required for the optimal activity of several enzymes in the body. It activates certain liver detoxifying enzyme systems. It is involved in the synthesis of carnitine and noradrenaline and the metabolism of folic acid, histamine, phenylalanine, tryptophan and tyrosine. It helps protect against atherosclerosis, high blood pressure and the risk of developing cardiovascular disease.

#### ZINC & THE IMMUNE SYSTEM

**T cell activation:** Key T cell signalling molecules (IL-2-induced ERK) are activated in response to intracellular zinc, as well as T cell proliferation<sup>5</sup>. This is a key mechanism in the relationship between zinc and the immune system and resistance against pathogens, particularly viral pathogens.

**Immune resistance:** Zinc deficient individuals experience susceptibility to infections. Zinc deficiency effects the development of acquired immunity as well as the protective skin barrier<sup>7</sup>. An integral skin barrier is essential for the first line of defence against diseases.

**Warts:** Zinc is beneficial for both the immune system's defence against viral pathogens and skin health. Studies indicate that zinc deficiency is associated with persistent, progressive and recurrent warts in the majority of infected patients<sup>6</sup>. Multiple studies demonstrate the efficacy of oral zinc for the treatment of warts. Studies showed no significant adverse effects<sup>8</sup>.

**Healing:** Zinc plays a role in the structure of many enzymes, proteins and membranes within the body. One of the major roles of zinc is the role in DNA transcription and gene expression<sup>9</sup>. For this reason, zinc is required for every cell, cell replication, growth and healing.

#### **ROSEHIPS & THE IMMUNE SYSTEM**

Antioxidant activity: Rosehips are rich in antioxidants which are required for the adequate function of the immune system. The immune system is subject to free radical damage in the process of protecting the body from pathogens. The immune cells require antioxidants to protect themselves and to enhance their function. Rosehips have a high antioxidant concentration. Some research demonstrates the benefits of rosehips in supporting the function of immune cells.

#### **FEATURES**

- 1000 mg vitamin C plus 10 mg zinc per effervescent tablet
- With 50 mg rosehip extract
- Delicious tasting
- Easy to take
- One a day

#### **HEALTH NEEDS**



IMMUNITY

#### **SCIENTIFIC REFERENCES**

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