

Vitamin C: The Essential Antioxidant for Health, Immunity and Wellbeing

Vitamin C is one of the most widely recognised and researched vitamins in the world. Known for its role in supporting the immune system, Vitamin C is an essential nutrient that contributes to many important functions throughout the body, including collagen production, wound healing, antioxidant protection, and energy metabolism.

Because the human body cannot produce or store large amounts of Vitamin C, it must be obtained regularly through diet or supplementation. While most people associate Vitamin C with oranges and cold remedies, its importance extends far beyond immune health alone.

What Is Vitamin C?

Vitamin C, also known as Ascorbic Acid, is a water-soluble vitamin that plays a vital role in maintaining normal body function.

Unlike many animals, humans cannot produce Vitamin C naturally and therefore rely entirely on dietary intake or supplementation.

Vitamin C is involved in numerous biological processes, including:

- Supporting the immune system
- Collagen formation
- Protection of cells from oxidative stress
- Iron absorption
- Wound healing
- Energy metabolism
- Blood vessel health
- Skin health
- Bone and cartilage maintenance

Because Vitamin C is water-soluble, excess amounts are generally excreted by the body rather than stored for long periods.

Why Is Vitamin C Important?

Vitamin C contributes to several important functions that help support overall health and wellbeing.

Immune System Support

One of the most well-known roles of Vitamin C is its contribution to normal immune system function.

Vitamin C supports the activity of various immune cells and contributes to the body's natural defence mechanisms.

Maintaining adequate Vitamin C levels helps support:

- Normal immune responses
- Cellular health
- Recovery processes
- General wellbeing

Although Vitamin C is often associated with colds and seasonal illnesses, it is important to understand that it is not a cure or treatment for infections. Rather, it contributes to the normal functioning of the immune system.

Powerful Antioxidant Protection

Vitamin C acts as a powerful antioxidant.

Antioxidants help protect cells from oxidative stress caused by unstable molecules known as free radicals.

Free radicals are generated through:

- Normal metabolism
- Stress
- Pollution
- Smoking
- UV exposure
- Illness
- Environmental toxins

Over time, excessive oxidative stress may contribute to cellular damage and the ageing process.

Vitamin C helps neutralise free radicals and supports the body's natural protective systems.

Collagen Production

Vitamin C is essential for the production of collagen, one of the body's most abundant structural proteins.

Collagen is found throughout the body and helps maintain:

- Skin structure
- Blood vessels
- Bones
- Cartilage
- Tendons
- Ligaments
- Gums

Without adequate Vitamin C, collagen production can be impaired.

This is one reason Vitamin C is frequently included in wellness and skin-support programmes.

Skin Health

Because of its role in collagen production and antioxidant protection, Vitamin C contributes to maintaining healthy skin.

Healthy Vitamin C levels support:

- Skin integrity
- Normal wound healing
- Protection from oxidative stress
- Overall skin health

Vitamin C is therefore often included as part of broader aesthetic and wellbeing programmes.

Wound Healing and Tissue Repair

Vitamin C contributes to the normal formation of connective tissue and plays an important role in tissue repair.

It supports the body's natural healing processes following:

- Minor injuries
 - Surgery
 - Exercise
 - Everyday tissue maintenance
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Iron Absorption

Vitamin C enhances the absorption of non-haem iron from plant-based foods.

This makes Vitamin C particularly important for:

- Vegetarians
- Vegans
- Individuals at risk of iron deficiency

Adequate Vitamin C intake can help support healthy iron levels when combined with an appropriate diet.

Energy Metabolism

Vitamin C contributes to normal energy-yielding metabolism and may help support individuals experiencing tiredness and fatigue.

It also contributes to reducing tiredness and fatigue as part of its recognised nutritional functions.

Who May Be at Risk of Low Vitamin C Levels?

While severe deficiency is uncommon in developed countries, some individuals may have lower-than-optimal Vitamin C intake.

Risk factors may include:

Poor Dietary Intake

Individuals who consume limited fruits and vegetables may be more likely to have lower Vitamin C levels.

Smoking

Smoking increases oxidative stress and may increase the body's Vitamin C requirements.

Smokers often require higher dietary intake compared to non-smokers.

High Levels of Stress

Chronic physical and emotional stress may increase demand for antioxidant nutrients within the body.

Certain Medical Conditions

Some health conditions may affect nutrient intake, absorption, or requirements.

Older Adults

Older individuals may be at greater risk of inadequate dietary intake due to changes in appetite or dietary habits.

Signs and Symptoms of Vitamin C Deficiency

Severe Vitamin C deficiency can result in a condition known as scurvy, although this is rare in modern populations.

Possible symptoms of low Vitamin C levels may include:

- Fatigue
- Weakness
- Poor wound healing
- Easy bruising
- Bleeding gums
- Joint discomfort
- Dry skin
- Increased susceptibility to illness

Many of these symptoms are non-specific and can have multiple causes, making professional assessment important.

Vitamin C Therapy

Vitamin C can be administered through:

- Diet
- Oral supplementation
- Intravenous therapy (where clinically appropriate)

Some individuals choose Vitamin C therapy as part of a wider wellness programme aimed at supporting overall nutritional status and wellbeing.

At ARM Vitality Clinic, all treatments are delivered following appropriate assessment and consultation.

by appropriately trained healthcare professionals following assessment of suitability.

Not all patients will be suitable candidates for Vitamin C therapy, which is why consultation and screening are essential.
