



*Valens Amino S.O.S.*

# POWERFUL IMMUNITY FORMULA

**Powder sticks**  
For enhanced immune response



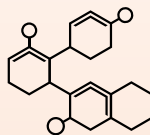


*Powder  
stick  
form*

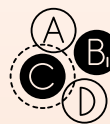
# Valens Amino S.O.S.

*For a stronger immune response, especially at first signs of illness.*

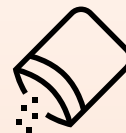
A rich blend of **selected** active ingredients:



**8** aminoacids



**10** vitamins



**4** minerals



World's best **CoQ10**



**Excellent orange taste!**

# Dosage

## *Recommended daily dose*

- **1 stick**
- Suitable for individuals above the age of 14

## *Directions*

- Mix with enough water - cca 200 ml
- Consume immediately
- Consume anytime in the day, best with a meal
- Take at first signs of illness or feeling unwell
- Continue for at least 3 days or as needed

*The box contains 10 daily doses*

Active ingredients	per sachet
L-Glutamine	3000 mg
L-Arginine	2000 mg
L-Lysine	1000 mg
Taurine	1000 mg
Glycine	700 mg
L-Methionine	500 mg
L-Cysteine HCl	100 mg
L-Tryptophan	100 mg
Vitamin A (as beta-carotene)	333 mcg (2 mg)
Vitamin C	300 mg
Vitamin D	25 mcg
Vitamin E	30 mg
Thiamin	1.3 mg
Riboflavin	4.2 mg
Pantothenic acid	6 mg
Vitamin B6	4.5 mg
Folic acid	400 mcg
Vitamin B12	15 mcg
Magnesium	150 mg
Zinc	15 mg150
Copper	1 mg
Selenium	100 mcg
Coenzyme Q10 (Q10Vital®)	50 mg



# Immunity <sup>[1]</sup>

The immune system exists to protect us against infectious agents, such as bacteria, fungi, viruses, parasites. It is a complex network of cells, tissues, and organs that work together to maintain the body's health and well-being.

**Immune system can be divided into two main parts:**

**Innate immune system** is the first line of defense. It includes **physical barriers** (skin and mucous membranes), and **cells** such as macrophages, neutrophils, and natural killer cells.

The innate immune response is rapid but not specific to particular pathogens.

**The adaptive immune system** involves lymphocytes. These cells produce **proteins**, which regulate the immune response (**cytokines**) or neutralize and mark pathogens for destruction by innate immune system (**antibodies** such and **immunoglobulin**).

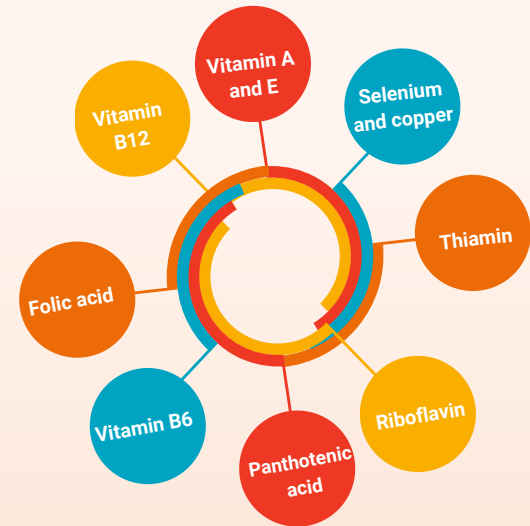
The adaptive immune system results in immunological memory, which allows for a faster, stronger, more targeted response upon subsequent exposure to the same pathogen

# Immunity and micronutrients<sub>2</sub>

Every stage of immune response is reliant on micronutrients, such as **vitamins, minerals, fatty acids, amino acids** etc. Available evidence indicates that supplementation with multiple micronutrients improves immunity and reduces the risk of infection. Micronutrients with the strongest evidence for immune support are **vitamins C and D and zinc**:

- ▶▶▶ **Vitamin C:** supports proliferation of immune cells, anti-microbial effect, protects against ROS (*reactive oxidative species*) ...
- ▶▶▶ **Vitamin D:** regulates antimicrobial proteins, supports gut barrier, protects lungs against infections, regulates immune cells.
- ▶▶▶ **Zinc:** enhances activity of immune cells, especially for *E. coli* and *S. aureus*, protects against ROS

**Historically, the importance of micronutrients in the immune system and on infection was based on vitamin C deficiency and the occurrence of scurvy.**



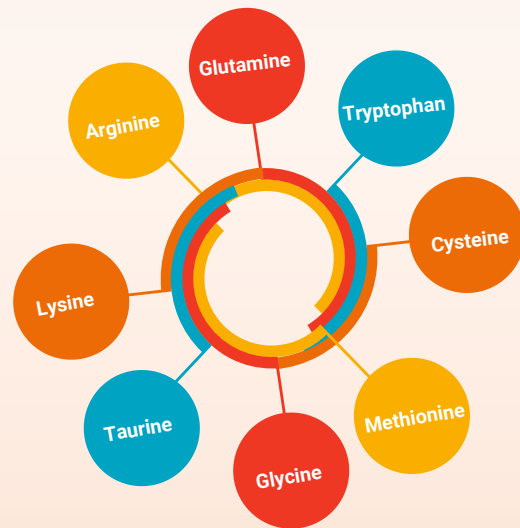
Other nutrients with known effect on immunity

# Amino acids & immunity<sub>3</sub>

Amino acids are the building blocks of **proteins** and are crucial for the development, function and regulation of **immune cells**. The whole immune system is highly dependent on **adequate availability of amino acids**:

- ▶▶▶ Formation and function of immune cells
- ▶▶▶ Production of antibodies
- ▶▶▶ Regulation of severity and location of immune response
- ▶▶▶ Synthesis of other biologically important molecules (glutathione, cytokines).
- ▶▶▶ Wound healing and tissue repair

**A deficiency of dietary protein or amino acids has long been known to impair immune function and increase the susceptibility of humans to infectious disease.**



Selection of these amino acids is based on established mechanisms and supported by clinical research. These AA work towards building a strong immune system, ensuring a faster response.

# Amino acids<sub>3</sub>

## Glutamine

- Primary energy source for immune cells.
- Contributes to formation of immune cells.
- Influences cytokine production.
- Contributes to synthesis of **glutathione**.

## Arginine

- Involved in synthesis of **nitric oxide**, toxic defense molecule against pathogens.
- Helps stimulate immune cells.
- Influences cytokine production.

## Methionine

- Involved in synthesis of **glutathione**.
- Supports synthesis of proteins of the immune system (immunoglobulin).
- Supports proliferation and activity of immune cells.

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## Lysine

- Essential for production of antibodies (as a building block).
- Supports activity of killer cells.
- Supports collagen synthesis (wound healing).
- Inhibits Herpes simplex virus [4].

## Taurine

- Abundant in many tissues.
- Help protect immune cells from ROS.
- Anti-inflammatory function [5].

## Glycine

- Essential for proliferation of immune cells.
- Help protect immune cells from ROS.
- Influences cytokine production.
- Has anti-inflammatory function.

## Cysteine

- Precursor for the synthesis of **glutathione**.
- Supports synthesis of proteins of the immune system (immunoglobulin).
- Supports proliferation and activity of immune cells.

## Tryptophan

- Necessary for the production of **serotonin**, which regulates immune responses and influences mood.

Glutathione is the body's most potent antioxidant. It plays an extremely important role in antioxidant damage during the immune response and in supporting proliferation of immune cells [6].



# Regeneration

Several nutrients aid in regeneration of the body\*:

- »»» Amino acids and proteins maintain muscle mass and repair of the tissues.
- »»» Selected B vitamins, vitamin C and magnesium aid in replenishing energy stores and reduction of tiredness and fatigue.
- »»» Magnesium supports muscle function, energy production and relaxation.
- »»» Folate, vitamin B12, vitamin C contributed to reduction of tiredness and fatigue.

*\*EFSA approved claims.*

## *World's best CoQ10 - Q10Vital®*

Coenzyme Q10 is a natural substance, crucial for cellular energy production - it converts food into energy and acts as a primary regenerating antioxidant [7]. It is therefore an important nutrient, which may also help regenerate faster after illness..

Q10Vital® is water soluble form of CoQ10 with clinically proven 4-times better absorption compared to basic CoQ10 [8].



# Advantages at a glance

- Rich blend of nutrients, working together to boost immune response, reduce inflammation and facilitate faster recovery.
- 8 amino acids, 10 vitamins, 4 minerals.
- Addition of the world's best CoQ10.
- No artificial sweeteners.
- Sweetened with xylitol.
- Pleasant, mild orange taste.
- Efficient formula.
- Market proven.
- Made in IFS and GMP-certified facility in EU.



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# References

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# VALENS<sup>®</sup>

*Science backed nutrition for healthy living*

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