

**Nutraceuticals. Important innovation from pomegranate extract: reduction of tiredness in those with prolonged fatigue and support for the immune system**

**From Esserre Pharma research in immuno-nutrition IMPROVE® Response**

IMPROVE® Response is a food supplement based on B-complex vitamins Mediterranean pomegranate extract and vitamin C, created to improve the immune system through the rebalancing of micronutrients, helping to increase energy and fight fatigue, thanks to a unique formulation.

**"The pomegranate and its properties land in the vast sphere of immuno-nutrition thanks to in-depth research and development that lasted 2 years, and whose effectiveness was tested by a study in collaboration with the University of Naples Federico II. The results of the work demonstrate a potential activity of this fruit in effectively supporting the immune system".** With these words, the CEO of Esserre Pharma, Amedeo Squillace, announced the launch on the Italian market of **IMPROVE® Response**.

With Immuno-nutrition we mean the properties of some specific nutrients in modulating the activity of the immune system. The area of immuno-nutrition joins the sectors in which Esserre Pharma has been operating since 2013: cardio-metabolic, psychological and intestinal well-being (microbiota), inflammation.

Esserre Pharma - [www.esserrepharma.com](http://www.esserrepharma.com) - was the first to bring this important innovation to the world of nutraceuticals, with a production process that enhances a 100% Italian and sustainable supply chain. And once again thanks to a typically Mediterranean fruit, as happened previously with bergamot, in the wave of the company tradition, strongly linked to natural Mediterranean products.

IMPROVE® Response contains **PunicaPLUS®**, the exclusive **Mediterranean pomegranate** extract that integrates a high number of active molecules with antioxidant properties. In particular, the polyphenolic component has been shown to have antioxidant and immuno-modulatory properties. In turn, the vitamin component of IMPROVE® Response consists of all the B vitamins and vitamin C, whose daily usage promotes the physiological function of the immune system, contributing to the reduction of tiredness and fatigue.

There is no doubt that eating habits are closely related to the health and efficiency of the immune system. However, the frenetic rhythms and the advancing age, as well as the incorrect lifestyles and a state of prolonged fatigue, such as that produced by the Covid19 Pandemic, lead to compromise the immune function, and nutritional deficiencies can predispose the body to be more exposed to infections: the sense of tiredness or exhaustion, characterized by a general lack of energy and physical and mental fatigue, can develop as a result of changes in the immune system, but also due to stressful events, nutritional deficiencies, inflammatory states, infectious diseases. If not correctly faced, these problems can lead to the chronicization of a condition of tiredness and fatigue.

“The question from which we started for the development of this new product was: what the needs of people in the light of this pandemic wave will be, in a *new normal* that lies ahead?” Added Squillace. "The result is precisely the creation of a product that enhances the properties of pomegranate extract, which has shown great potential in supporting the immune system and which, associated with vitamins B and C, is also able to reduce the state of fatigue".

There are also several clinical studies already available on the positive effects of consuming pomegranate, in the form of fruit, juice or extract, in patients with chronic inflammatory disorders. Oxidative stress also plays a role in inflammation-aging, underlining its crucial impact on the complex mechanisms of aging, the recovery of energy during convalescence, especially after an infection, and to support immune function.

### **Bibliography:**

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