

**The natural shield  
for your wellbeing.**



**IMMUN ACTION LINE**

Greater protection against external aggressions.  
A new energy to strengthen the immune system.

Quality, Efficacy, Guarantee.

Think Green. Live Green. Be Green.



# The immune system and its delicate balance

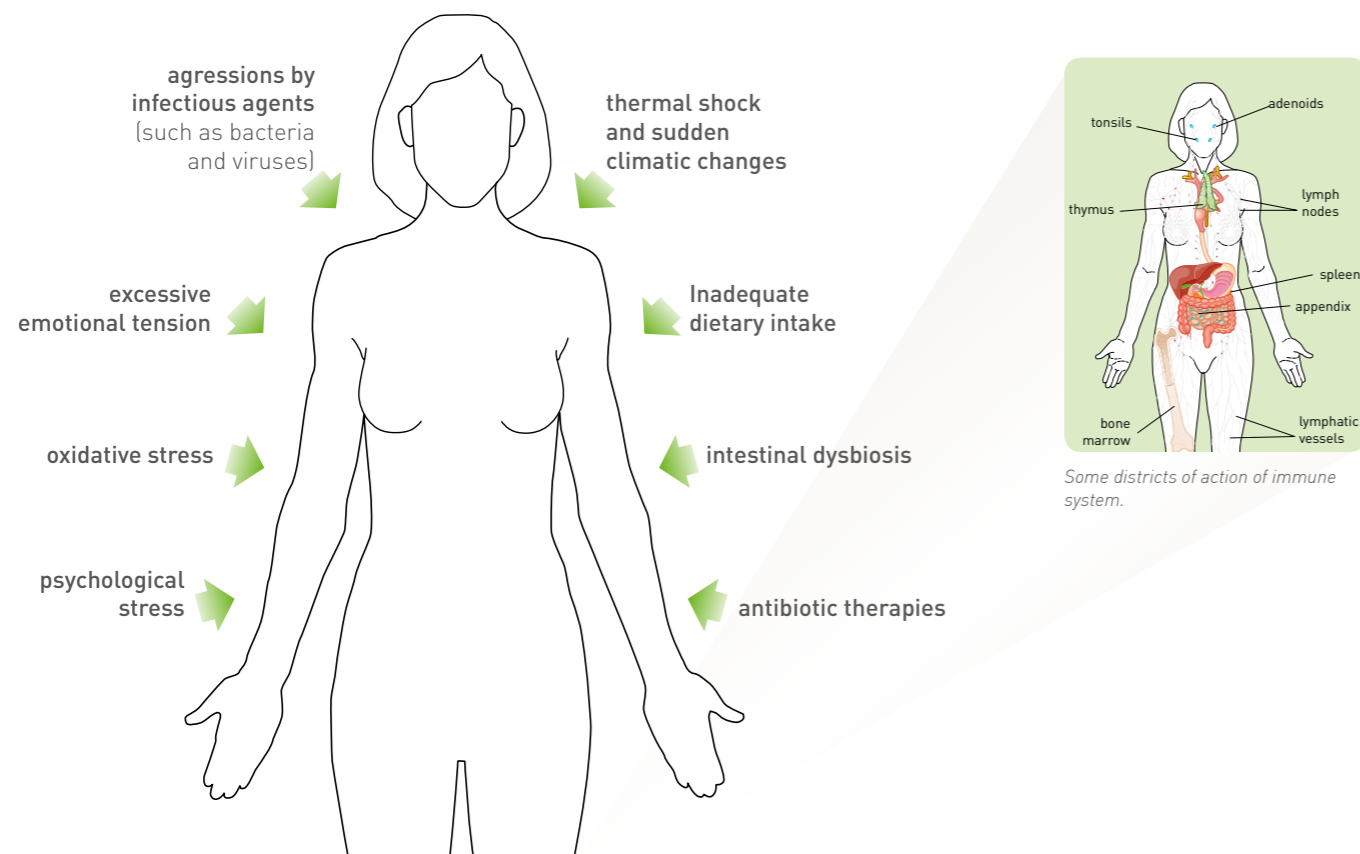
The **immune system** is one of the most important functional networks of the human body and it has evolved to protect it from pathogen agents such as bacteria, viruses and fungi, and generally from endogenous or external stressors.

The immune system is represented by a set of organs (such as the spleen, bone marrow, lymph nodes, thymus, and tonsils), tissues and cells, which are found throughout the body. These elements are inter-connected by numerous lymphatic vessels. More than thousand proteins belong to the immune system, which act as signal transmitters and small biological molecules that act as mediators of inflammation.

**A key role in immunity, however, is played by the leukocytes (white blood cells)**, that is the nucleated cells, highly specialized, from the blood and lymphatic organs (for example the granulocytes, the monocytes that mature in macrophages, the lymphocytes T and B).

The specific action of the **antibodies** is strategical: when a microorganism is recognized as an outsider (in immunology "non self"), lymphocytes activate a sophisticated and fine cascade of biochemical events that result in the calling of cells and biological mediators, in order to remove it.

## FACTORS THAT WEAKEN THE IMMUNE SYSTEM



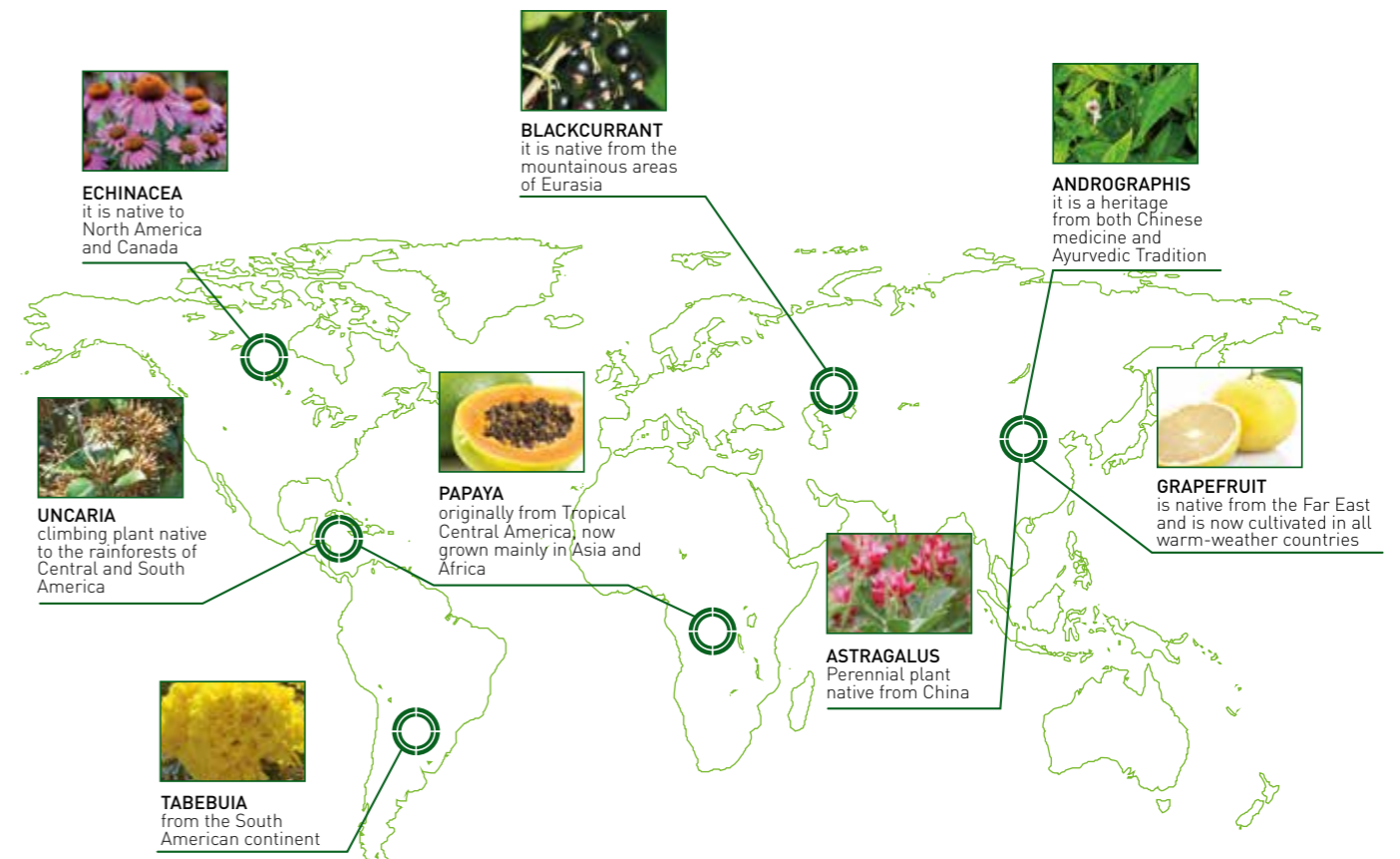
# Dr. Carlo Bollini, founder, soul and heart of Erba Vita, has investigated botanical species from different continents

**Dr. Carlo Bollini, in its investigation, identified, selected and mixed the best botanical species of immune induction**, with antibacterial and antiviral properties that originate from **different ethno-botanical traditions of the various continents**.



Also collaborating with several academic partners and in particular with the University of Siena, the company Erba Vita, originally from San Marino, has studied and investigated, in years later, the interaction of medicinal plants with biological structures such as cells, tissues and organs; such research has had the major role in explaining the biological effects of phyto-complex, identifying precise mechanisms of action.

The company has invested significant resources in the in-depth study of innovative formulas, valuing the 10-year work of **Dr. Carlo Bollini, who deftly mixed phyto-complexes of plants from different continents, each with an ancient traditional cultural horizon and whose biological activities are filtering scientific investigation for more than a decade.**



# Protect the immune system throughout the year with the Immun Action line from Erba Vita

In all periods of the year, our natural defences may need effective help to fulfill their biological activity, especially during the winter season.

## The multiple biological actions and immune-modulating properties of the Immun Action Line

The products from the Line act at various levels providing beneficial properties on the immune system:

- increasing phagocytosis in macrophages and neutrophil granulocytes;
- enhancing bacteriostatic, bactericidal, antiviral and general anti-inflammatory activities;
- stimulating and modulating the immune system in all its cellular components.

The products, therefore, are suitable to:

- promote the **body's resistance to pathogens**, especially against disease and inflammation of the respiratory tract;
- promote a **rapid functional recovery** and a quick restart after flu syndrome;
- contribute significantly even in the case of frequent recurrences.

## Erba Vita has selected immune-stimulants and antioxidants medicinal plants

The formulas contain medicinal plants that have a recognized antioxidant action such as Tabebuia, fermented papaya and grapefruit.

**The role of antioxidants in a formula with immune-stimulatory activity is important** because the radical's oxygen (ROS) and other radical species have a key role in modulating the response of monocyte lymphoma. Under physiological conditions, the ROS determine several useful mitochondrial activities, but in case of increase in their concentration (in all cases, therefore, of "oxidative stress") they trigger inflammatory reactions.

**The simultaneous presence of medicinal plants with antioxidant value and immune induction value, activates more efficiently the immune alert**, modulating in an organized and balanced way the different molecular signals (helping, cooperating and optimizing the physiological condition of the immune system).

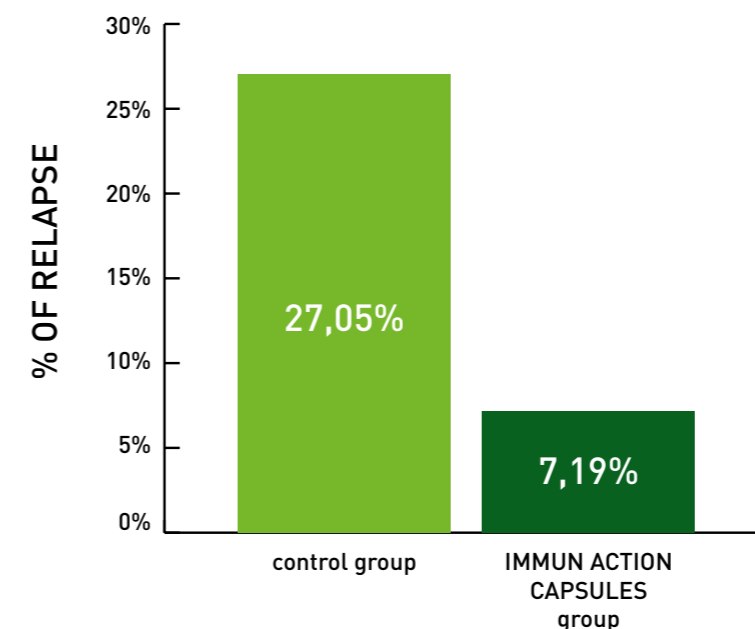
# Surprising results obtained from Immun Action capsules

UNIVERSITY OF TURIN - SECTION OF ONCOLOGY SURGERY - Dir. Prof. A. Mussa

## "Evaluation of the effectiveness of Immun Action in reducing the recurrence of anal warts after surgery"

The clinical study of 2006 showed that in a significant number of **261 patients with recurrent anogenital warts** (hospitalized and undergoing surgical eradication) **supplementation Immun Action capsules** (3 capsules/day for 1 month) made it possible to obtain a **drastic reduction of post-surgery recurrence**, compared with the control group.

The efficacy and safety framework of the product was confirmed by the complete absence of side effects.



Recurrences after 6 months of the surgery treatment in patients who have tried IMMUN ACTION CAPSULES were equal to 7.19%

The study indicated above was published in the prestigious international journal **Colorectal Disease**, and is currently available in the important database PUBMED

**Colorectal Disease.** © The Association of Coloproctology of Great Britain and Ireland.  
Edited By: R.J. Nicholls.  
**Impact Factor:** 2.081. ISI Journal Citation Reports © Ranking: 2012: 43/74  
(Gastroenterology & Hepatology). Online ISSN: 1463-1318.  
**Colorectal Dis.** 2010 Aug;12(8):799-803. doi: 10.1111/j.1463-1318.2009.01960.x.  
Epub 2009 Jun 22.  
**Immunostimulation to reduce recurrence after surgery for anal condyloma acuminata: a prospective randomized controlled trial.**  
Mistrangelo M, Cornaglia S, Pizzio M, Rimonda R, Gavello G, Dal Conte I, Mussa A.  
**Oncological Surgical Department, University of Turin, 10126 Turin, Italy.**  
PMID: 19548899 [PubMed - indexed for MEDLINE]



Complete line that adapts to different target consumers, for the age group and the way of use.

## Current objectives and new ideas for action research on immun action capsules: further experimental protocols performed at the University of Siena

To understand the biological mechanisms underlying the immune stimulus, the company has conducted new scientific observations in collaboration with the **Research Department of Cell and Molecular Biology, University of Siena**, aiming to investigate the mechanisms of biological action on human cell lines.

**Immun Action Capsules** induces an immune defence's alert in a balanced way, avoiding the appearance of pathological elements, caused by actual imbalanced inflammatory responses.

During laboratory tests there were collected Cytokine multiparameter doses, chemokines and growth factors on lymphocytes and monocytes taken from healthy volunteers; it has also been evaluated the activation of key transcription and transduction factors.



*Immun Action Capsules dosed in 5mcg/ml significantly modulates the monocyte and lymphocyte activity.*

## IMMUN ACTION CAPSULE

Food supplement

- Activates the natural defence mechanisms of the body, particularly against diseases and inflammation of the respiratory tract.
- Decreases the duration of the typical winter discomforts and promotes post-flu recovery.
- Protects against viral relapse.
- Protects against oxidative damage and neutralizes free radicals excesses.

TRADITIONAL FORMULA

100% NATURAL PRODUCT

CLINICALLY TESTED

**Ingredients:** powder and dry extract of Echinacea Angustifolia concentrated to 0.1% of echinacoside; dry extract of Tabebuia concentrated to 3% Naphthoquinones; powder and dry extract of Uncaria concentrated to 3% of alkaloids; dry extract of Andrographis standardized to 10% Andrographolide; Grapefruit dry extract standardized to 50% in bioflavonoids; Fermented Papaya.

**How to use:** intake far between meals  
 • 2 capsules daily with water as a preventive aid;  
 • 3 capsules daily with water during the coldest periods or during the acute phase.

**Content:** 60 vegetal capsules



## IMMUN ACTION JUNIOR FLUID

Food supplement

The powerful shield specifically for children is very helpful:

- to action the immune induction;
- as a protection that lasts all winter.

SWEETENED WITH STEVIA

WITH TYNDALLIZED MILK FERMENTS

NO COLORANTS, NO ALCOHOL, WITH NATURAL AROMA

**Ingredients:** dry extract of Echinacea Angustifolia standardized to 4% Echinacea, Rosehips standardized to 70% Vitamin C, Blackcurrant; Glycerite extract of Astragalus, blackberry and Elder juices; Zinc, tyndallized probiotics, Vitamin D, trace minerals of Manganese and Copper.

**How to use:** it is recommended to take the pure product or diluted in water, juice or any other liquid as follows  
 • children 3-6 years: 2.5 to 5 ml per day;  
 • children 6-9 years: 5 to 10 ml per day;  
 • children over 9 years: 10 to 15 ml per day.

**Content:** 200 ml



UNIVERSITÀ DI SIENA 1240

# Main medicinal plants and nutritional factors useful to assist the immune system

<b>Echinacea</b> <i>(Echinacea angustifolia DC.)</i> root	<ul style="list-style-type: none"> <li>• Improves and strengthens the immune system, especially during the symptoms caused by rhino-oropharynx cold.</li> <li>• Acts as an anti-flu.</li> <li>• Anti-viral action.</li> </ul>
<b>Uncaria</b> <i>(Uncaria tomentosa (Willd. ex Schult.) DC.)</i> cortex	Immune-modulating properties, antiviral and immune-stimulating (useful to counteract the action of DNA-polymerase and reverse transcriptase, enzymes involved in the replication of the virus).
<b>Tabebuia</b> <i>(Tabebuia avellanedae Lorentz ex Griseb.)</i> cortex	<ul style="list-style-type: none"> <li>• Strengthens the immune system.</li> <li>• Antibacterial action against Gram + (responsible of causing respiratory tract diseases ) and Gram-.</li> </ul>
<b>Andrographis</b> <i>(Andrographis paniculata (Burm.f.) Nees)</i> aerial part	Improves flu symptoms such as runny nose, headache, asthenia, with the advantage of reducing the course of the disease thanks to the inhibition of inflammatory mediators responsible for flu symptoms. It also has important properties of specific immune induction.
<b>Grapefruit</b> <i>(Citrus paradisi Macfad.)</i> seeds	It has strong antioxidant and protective action at the mucosal level thanks to its high concentration on polyphenols, particularly naringin.
<b>Papaya</b> <i>(Carica papaya L.)</i> fermented fruit	<ul style="list-style-type: none"> <li>• Modulates the immune system.</li> <li>• Increases immune defences to regulates the production of nitric oxide (NO) contained in macrophages (macrophages use NO to destroy pathogenic microorganisms).</li> <li>• Antioxidant protection against free radicals (responsible for the damage to the cell membrane) and scavenger effect on oxygen's radical reactions.</li> </ul>
<b>Astragalus</b> <i>(Astragalus membranaceus (Fisch.) Bunge)</i> raiz	Always well-known in traditional Chinese medicine, the Astragalus has been successfully tested for: <ul style="list-style-type: none"> <li>• immune induction (prevention of cold discomfort);</li> <li>• antioxidant action - free radical scavenging - (flavonoids and saponins);</li> <li>• antiviral and antibacterial properties;</li> <li>• adaptogenic action.</li> </ul>
<b>Black Currant</b> <i>(Ribes nigrum L.)</i> leaves	It is used to counteract all forms of general and localized inflammation from infectious or immune origin.
<b>Dog Rose</b> <i>(Rosa canina L.)</i> fruit	It is the most concentrated vitamin C "natural source" containing up to 50 - 100 times higher quantities compared to traditional citruses (oranges and lemons), and therefore it can help strengthen the body's natural defences.
<b>Zinc</b>	<ul style="list-style-type: none"> <li>• Mineral also known for its protective properties on the immune system.</li> <li>• Component in more than 2,000 metabolic enzymes including carbonic anhydrase, necessary for tissue breathing.</li> </ul>
<b>Vitamin D</b>	Already known for its biological role related to the absorption of calcium in the bones, also plays an important role in the immune system function (acts as an activator of T lymphocytes).
<b>Manganese-Copper Trace element</b>	According to the opinion of the Oligotherapy, a classic combination that can "strengthen" the immune system and acts on the recurrent disorders.
<b>Tyndallized probiotics</b> <i>(Lactobacillus acidophilus, L.casei, L.plantarum, Streptococcus thermophilus)</i>	They are made by undergoing a controlled heat treatment on common probiotic microorganisms; the heat treatment "suppresses" them without modifying their positives properties and biological activities (to stimulate the immune response by activating macrophages; to produce chemical mediators involved in immune homeostasis; to favour the growth of indigenous beneficial micro- flora).

The information contained herein must not be divulged or communicated to the public. This information is strictly reserved to professional operators qualified in medicine, the food sector and pharmacy (pursuant to Sect. 6 (2) of Legislative Decree No. 111/1992). Any use other than specified above or any unauthorized use lies outside our responsibility.

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