MULTI-SYSTEM IMMUNE DEFENCE

Fights against deadly & contagious infections

Immunocompromised conditions

Viral **Infections** Recurrent Infections

Sluggish Lymph **functions**

Respiratory discomforts

like Dyspnea. chest congestion. dry cough, sore throat

Disturbed gut microbiota Oxidative stress

Dosage: In infective condition: 2 tsf. TDS for 21 days (Therapeutic dose) In immunocompromised patients:

In recurrent infective condition:

2 tsf. BD for 3 months

2 tsf. BD for 2 months









AIMIL PHARMACEUTICALS (INDIA) LTD.

Regd. Off. : 2994/4, Street No. 17, Ranjit Nagar, New Delhi-110008, Ph : +91-66410000

Dear Doctor,

MULTI-SYSTEM IMMUNE DEFENCE

A NEED OF HOUR

in fight against deadly & contagious infections

AIMIL

Introduces

Extra Strength

Phyto formula in

Mild to Moderate

disease conditions

AMYNITY Plus Liquid Sugar Free

With **51** powerful herbal extracts and 8 essential oils

Strengthens Respiratory System

Improves Digestion & Metabolism

> **Acts as Powerful Anti-oxidant**



Immune Health Restorative

Acts as Powerful Adaptogen

Rejuvenates Body Tissues





Dear Doctor,

In midst of this pandemic, medical science faces a big challenge of finding a treatment regime which can mitigate the risk of contracting infections and significantly reduce mortality, and with vaccines taking their usual time to develop, it's our immunity which can prevent and fight deadly microbes. Our immune system, innate and adaptive immunity is our body's defense against infections and other harmful invaders. People with a weak immune system have a higher risk of experiencing frequent infections and severe symptoms. They may be more prone to pneumonia and other infections.

The immune system is an interface across which many climate changing sensitive exposures will affect health outcomes. Some part of immunity is present from birth, while other results from environmental factors, lifestyle, food habits and encounters with different microbes. Hence, the immunity system serves as a robust defense mechanism in preventing and fighting the pathogens. Taking this fact into consideration, Aimil Pharmaceuticals has come up with the one stop solution for all immunocompromised patients from the deep research of Ayurveda based 51 botanical extracts and 8 essential concentrates named as Amynity plus liquid sugar free, a multi-system immune defense for immunocompromised patients, helping restore and maintain strong immunity.

Amynity Plus has been introduced to provide multi system immune defense, which acts like a herald for the six vital systems of immunity i.e. respiratory system, gut-immune system, the complementary immune system involving liver, lymphatic system, cell mediated, humoral immune system in the blood and anti-oxidant strengthening immune defense for the body cells and tissues.



MULTI-SYSTEM IMMUNE DEFENCE

- Amynity Plus is a guardian of these six systems and starts acting on the very first site of pathogen entry – respiratory system herbs in Amynity Plus enhance the length of the cilia and the ciliary movement to expel out the foreign microbes. It also activates the alveolar macrophages to restrict the entry of microbes in the circulatory system.
- Amynity Plus being in a form of liquid, rapidly gets absorbed in the gut and activates the second check post of the immune system – the gut immune response. It activates the gut associated lymphatic tissue (GALT) which is responsible for 70% of the immune response
- On the third check post, liver, the herbal extracts in Amynity Plus act directly on Kupffer cells to initiate a strong macrophage driven phagocytic response
- Amynity Plus improves function of the lymphatic system, which is the fourth immune check post, where it facilitates lymph drainage and reduces the inflammation in the lymph nodes along with initiating the functions of lymphocytes. It also restores the cellularity and weight of the spleen, thus helping in producing stronger immune response.
- In the blood, Amynity Plus modulates both cell mediated and humoral mediated immunity where it maintains the normal count of WBC to neutralize the pathogens and also improves the activity of T-Cells & B-cells to produce antibodies against specific antigens and eradicate them.

With all these multi-system immune defense action, Amynity Plus liquid sugar free is a potential drug of choice in case of infections and specially for infections in immunocompromised patients. We therefore, request for your kind patronage for Amynity Plus so that all your patients with moderate and severe infections can get the exclusive benefit of multi-system immune defense and can have a faster recovery in viral infections as well with 51 herbs and 8 essential oils of Amynity Plus liquid sugar free.

Regards

Aimil Pharmaceuticals (India) Ltd.









MULTI - SYSTEM IMMUNE DEFENCE

Revives & Rejuvenates Respiratory system

- Acts as bronchodilator
- Activates alveolar macrophages
- Exerts mast cells stabilization
- Promotes oxygen carrying capacity

Modulates gut-immune health

- Activates healthy gut microbiota
- Increases lymphocyte number in peyer's patches
- Regulates Immune homeostasis
- Maintains favourable gastric pH

Activates Kupffer cells, boosts metabolism

- Exerts macrophage activating property
- Removes circulating pathogens
- Activates complement immune system
- Improves Kupffer cells functioning



- Restores neutrophils functions
- Improves phagocytosis
- Optimizes weight & cellularity of spleen
- Increases serum immunoglobulins



- Improves flow of infection fighting immune cells
- Improves function of lymphocytes
 & reduces glandular swelling

Strengthens anti-oxidant defence, immunity, exerts anti-viral action

- Supplements essential nutrients to fight depressed immunocompetence
- Strengthens immunity, reduces viral replication
- Prevents free radical induced cellular damage



Revives & Rejuvenates Respiratory system

Acts as a Bronchodilator-**Eases breathing**

Bronchodilatory activity is due to vasicine, a primary alkaloid of Vasa (Adhatoda vasica), which increases ciliary movement and the essential content has been reported to possess expectorant action. Vasicine shows inhibitory affect against 5-HT & Histamine and acts as a bronchodilatory agent.

Journal of Ethnopharmacology. 2000 Sep 1;72(1-2):1-20. https://doi.org/10.1016/S0378-8741(00)00225-7

The airway

epithelium is

a physical barrier that defends the lungs

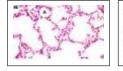
from invading pathogens

through mucus secretion

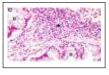
and efficient ciliary

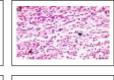
Increases Alveolar macrophages activity-Reduces Inflammation

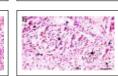
Thymoquinone (TQ) from Kalonji (Nigella sativa), increases phagocytic activities, leads to reduction in peri bronchial, perivascular and interstitial inflammatory edema. Reduction in inflammatory exudates in the lumens of airways and alveoli, lowers the level of IL1 and TNFα. It could be concluded that TQ restores lung architecture & reduces inflammatory mediators in lung injury. Zagazig Veterinary Journal. 2017 Sep 1;45(3):228-37. DOI: 10.21608/ZVJZ.2017.7948



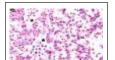


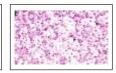






(a) Showing normal lung tissue morphology, (b) diffuse hemorrhagic area (asterisk) is seen in the necrotic lung tissue, (c) rat lung showing PICI (asterisk), (d) rat lung showing ASI (asterisks), (e) rat lung showing AED (asterisk), (f) rat lung showing AEX (asterisks), (g) showing necrotic lung tissue (asterisks) and multivacuolated alveolar histiocytes forming clusters in alveolar spaces (arrowhead) and (h) showing GRA (asterisks) in necrotic lung tissue (among arrowhead). (A) Alveoli and (B) bronchiole





IMPROVES

VENTILATION IN

AIR WAYS

Kantkari (Solanam xanthocarpum)

produced a progressive improvement

in the ventilatory function of asthmatic

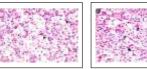
individuals. The improvement in peak

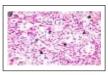
respiratory flow rate (PRFR) & the

reduction in breathlessness and cough

indicates bronchodilator effect.

The Journal of the Association of Physicians of India. 1971 Oct;19(10):741. doi: 10.1002/ptr.1555.





PREVENTS LUNG DAMAGE **EFFECTIVELY**

Banafsha (Viola odorata) was tested for anti-inflammatory properties as compared with hydrocortisone.

V.odorata as an extract could possibly be used as an alternative and safer medicinal agent than corticosteroids in the treatment of inflammatory conditions of the lung.

rnal of herbs, spices & medicinal plants. 2003 l 17:10(2):95-103. https://doi.org/10.1300/J044v10n02

ENHANCES INTERFERON PRODUCTION

Yashtimadhu (Glycyrrhiza glabra) Glycyrrhizin modulates essential parameters like interferons, interleukins, interferon-gamma,

IgE which are critical for innate and adaptive immunity against viral and bacterial infections.

nternational immunopharmacology. 2006 Sep 1;6(9):1468-77. https://doi.org/10.1016/j.intimp.2006.04.020

The restoration of optimum functioning of respiratory system affected with viral infection, needs to:

- Combat the impairment in the ciliary activity of epithelial lining
 - Expel out thick mucus
- Manage local inflammation & Immune response
 - Prevent the narrowing of bronchial lumen & airway obstruction

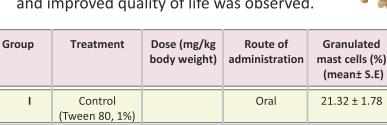
Stabilizes mast cells, prevents **Bronchospasm**

Flavanoids of **Pippali** (*Piper longam*) inhibit basophil histamine release & neutrophil beta glucuronidase release, act as antiallergic due to its ability to prevent the release of allergic **mediators** from mast cells and show preventive action in histamine induced bronchospasm by blocking IgE regulated calcium channels.

Indian J Allergy Asthma Immunol. 2006;20(2):112-6

Increases the capacity of the blood to transport oxygen

After the eight week supplementation of Ashwagandha (Withania somnifera), an increase in VO2 max, enhanced cardiorespiratory endurance and improved quality of life was observed.



10

100

200

Journal of Ayurveda and integrative medicine. 2012 Oct;3(4):209. doi: 10.4103/0975-9476.104444

Oral

ACTS AS **NATURAL**

Dilates

Constricted

Bronchioles

Exerts

anti-allergic

action, relieves

& prevents

bronchospasm

Lavang (Syzygium aromaticum) can significantly reduce virus yield. Major constituent of Lavang is the phenolic compound eugenol. Eugenol provides wide range of pharmacological properties, including antimicrobial, antioxidant, anti-inflammatory activity.

ANTIVIRAL

Antiviral research. 1996 Oct 1;32(2):63-70. DOI: 10.1016/0166-3542(95)00978-7

ACTS AS ANTI-INFLAMMATORY

Prednisolone

Extract

Extract

Tulsi (Ocimum sanctum) contains palmitic, stearic, oleic, linoleic and linolenic acid, which inhibit enhancement of the vascular/ capillary permeability and leucocyte migration following inflammatory stimulus in the lungs.

Biological activities of Ocimum sanctum L. fixed oil-An overview, DOI: 10.3390/medicines5020034

RELIEVES LARYNGITIS & PHARYNGITIS

Degranulated

mast cells (%)

(mean± S.E)

80.90 ± 4.65

38.22 ± 2.70

33.62 ± 2.11

72.25 ± 3.91 28.14 ± 1.34

62.44 ± 3.92

67.24 ± 3.56

Gojiha (Onosma bracteatum) is having significantly inhibitory activity against respiratory pathogens S. pneumoniae, P. aeruginosa, and S. aureus, as it contains alkannin, shikonin, flavonoids, ferulic and vanillic acids.

ournal of Medicinal Herbs & Ethnomedicine, 2015 Nov 27:108-12 DOI: 10.5455/jmhe.2015-08-017

Relieves chest congestion and eases breathing

Modulates Mucosal Immune System

AMYNITY Plus Liquid Sugar Free

Intestine not only absorbs nutrients but is also an immune organ in body

It is well
established
that Protein deficiency
suppresses
the immune response
& increases
susceptibility to
infections

The intestine & the GUT ASSOCIATED LYMPHOID TISSUE (GALT)

are the essential components of the whole body immune system protecting body from foreign antigens and pathogens.

Amino acids are essential to optimize immune functions of the intestine & resident immune cells.

GLUTAMINE

from *Moringa oleifera*(Sigru)

- Increases intestinal IgA level
- Increases Immunoregulatory cytokine production
- Increases lymphocyte number in Peyer's patches, lamina propria, and in intraepithelium lymphocytes

Heliyon. 2018 Oct 1;4(10):e00877. doi: 10.1016/j.heliyon.2018.e00877



ARGININE

from Linum usitatissimum (Flax seeds)

- Supports microvasculature of intestinal mucosa
- Facilitates neutrophils and macrophage killing through iNOS mediated NO production & glutamate in intestinal epithelium cells and immune cells.

Trends in food science & technology. 2014 Jul 1;38(1):5-20. https://doi.org/10.1016/j.tifs.2014.03.011



METHIONINE and CYSTEINE

from Nigella sativa (Kalounji)

- Reduce intestinal oxidative stress
- Protect against
 Dextran Sulfate Sodium (DSS)induced intestinal damage by lowering inflammation
- Precursor for Glutathione (GSH), taurine and cysteine.

Food Chemistry. 1992 Jan 1;45(4):239-42. https://doi.org/10.1016/0308-8146(92)90153-S

GLUTAMATE

from Trigonella foenum-graecum (Methi)

- Facilitates T-cell proliferation
 & T helper type 1 (Th1)
 & pro-inflammatory
 cytokine production
- Acts as immunotransmitter between dendritic cells & T-cells
- Oxidative substrate for immune cells and intestinal-epithelial cells (IECs)

Journal of the Saudi Society of Agricultural Sciences. 2018 Apr 1;17(2):97-106. https://doi.org/10.1016/j.jssas.2016.01.007









Boosting the phagocytic ability of macrophages and improving cell mediated immunity, innate immunity and humoral immunity coupled with increased antibody production, Amynity Plus could be an effective way in preventing & managing various infective disease conditions.

Alkaloids in N.arbor-tristis (Harsingar)

Increases positive bone marrow cells

Stimulates haemopoietic system

Stimulates antibody synthesis

Sterols in Harad (Terminalia chebula) increases T-cell proliferation, stimulates Th-1 cell type immunity which enhances responsiveness of macrophages and B-lymphocytes subsets involved in antibody synthesis, thereby suggesting stimulation of humoral immunity, cell mediated immunity and innate immunity.

Food and Agricultural Immunology. 2016 Jan 2;27(1):1-22. https://doi.org/10.1080/09540105.2015.1055554

Modulates Delayed Type Hypersensitivity (DTH)

Extracts of Vasa (Adhatoda vasica) are rich in glycosides, phytosterols and

alkaloids and are found to suppress delayed type hypersensitivity reactions induced by SRBC*. Decrease in delayed type hypersensitivity reactions revealed

the inhibitory effect of various extracts of A.vasica on T lymphocytes and accessory cells types required for expression of the reaction which resulted in 62.02%

Increases bone marrow & spleen cellularity - restores WBC count

Spleen is one of the major lymphoid organ due to predominance of T & B lymphocytes. Harad (Terminalia chebula) in Amynity plus showed restoration of weight & cellularity of spleen. It also stimulated the haemopoietic system & increased the total WBC count and bone marrow cellularity to nonspecific immune response.

Food and Agricultural Immunology. 2016 Jan 2;27(1):1-22. https://doi.org/10.1080/09540105.2015.1055554

Significantly increases serum immunoglobulins

Estimation of immunoglobulins level is a direct measure of humoral immunity. Extracts of *Dalchini (C.zeylanicum)* produced a significant increase in serum immunoglobulins level when compared to control. C.zeylanicum also increased the anti-body titre in the indirect hemagglutination test and has resulted in the increase in both cellmediated and humoral immunity.

Pharmaceutical biology. 2009 Dec 1;47(12):1168-73. https://doi.org/10.3109/13880200903019234

Increases neutrophil adhesion

Vasa (Adhatoda vasica) was administerd and percentages of neutrophils adhesion were observed on 8th day of treatment. The percentage increase in neutrophil adhesion showed a dose dependent activity (p<0.001). This increase in adhesion of neutrophils to nylon fibres correlates to the process of migration of cells in blood vessels.

S.no.	Treatment	Neutrophil Adhesion (%)	Inhibition (%)
1	Control (Normal Saline)	67.28 ± 3.2	-
2	Test Extract - I	3.55 ± 2.62	94.72***
3	Test Extract - II	10.56 + 8.14	84.30**
4	Test Extract - III	24.68 + 16.12	63.31*

Results are expressed as mean + SEM from five observations as compared to control group by student "t" test. N=5, *p<0.01, **p<0.002, ***p<0.001

African Journal of Pharmacy and Pharmacology. 2011 Mar 31;5(3):306-10. https://doi.org/10.5897/AJPP10.126

Positively restores granulocyte functioning

> **Activates** neutrophils

Increases neutrophil adhesion

Fights invading pathogens



Activates

T-lymphocytes

Secretes IL2, IgG3,

IFNG (Interferon Gamma)

Increases

DTH response

Activates B-Lymphocytes

Enhances anti-body production

Increases macrophages, Thelper cells & Lytic enzymes

Increases Phagocytosis

Encourages bacterial & viral killing



Helps eradicate antigens

Activates Macrophages

reduction in paw volume (footpad thickness) *SRBC-sheep red blood cell.

African Journal of Pharmacy and Pharmacology. 2011 Mar 31;5(3):306-10. https://doi.org/10.5897/AJPP10.126

Black cumin (Nigella sativa) contains evaporated oil, fatty acids, rich inz sterols especially beta-sitosterol, thymoquinone, dithymoquinone and saponins that can activate macrophages through Toll-like receptors (TLRs), especially TLR-4. Thymoguinone proved to increases the activity of TLR-4 which resulted in the more specific identification of antigen by the macrophages and increased the phagocytic activity.

S.no.	Group	IL-12 levels (microlitre/ml) (mean + sd)	The ratio of TLR-4 expression (X10²) (mean + sd)
1	BCSO 0.25 ml/KgBW	58.33 ± 7.95°	1.22 ± 0.71°
2	BCSO 2.5 ml/KgBW	66.33 ± 2.11 °	1.22 ± 0.71°
3	BCSO 5 ml/KgBW	51.17 ± 2.25 °	1.28 ± 0.25 °
4	Thymoquinone	52.83 ± 10.49 °	1.33 ± 0.21 °
5	Solvent	18.75 ± 1.25	1.00 ± 0.00

Note: *significantly different (p<0.05) from normal group;

BCSO: Black Cumin seed oil

Biomedical Research. 2017;28(12):5241-6.

Positively restores antibody production and phagocytosis

Significantly increases

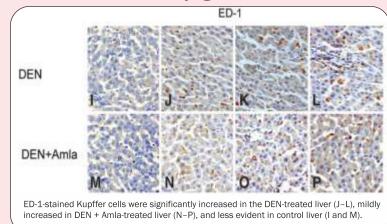
RBC count

Modulation of Kupffer cell activity

The aqueous extract of **Giloe** (Tinospora cordifolia) is reported to prevent infections, improve Kupffer cell function and polymorphonuclear cell (PMN)-mediated phagocytosis. This indicates that Tinospora therapy has prevented deterioration of Kupffer cell activity. This appears to be due to its macrophage activating property, which has opposed any suppressant influences on Kupffer

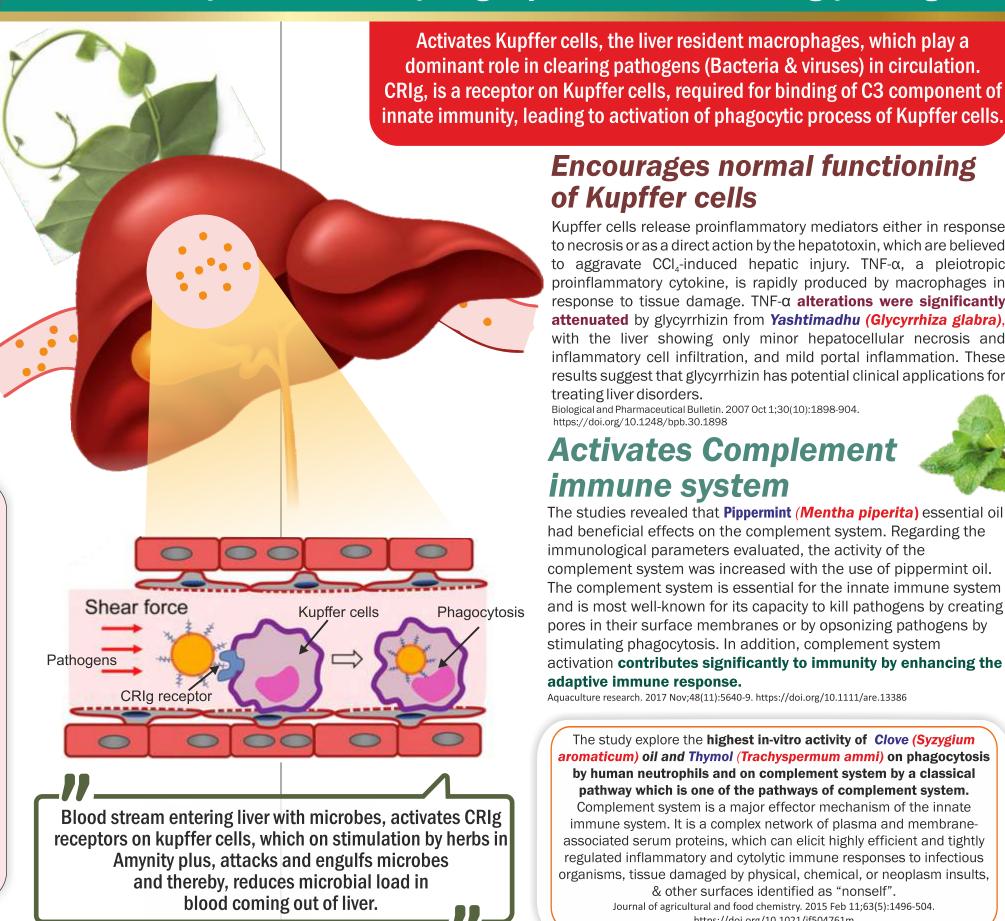
Journal of postgraduate medicine. 1994 Apr 1;40(2):65. PMID: 8737554

Amla (Emblica officinalis) is rich in vitamin C, gallic acid, flavonoids, and tannins, which protect against hepatotoxicityinduced liver injury. N-Nitrosodiethylamine increased ROS production in liver and bile, hepatic Kupffer cells and increased leukocyte infiltration. Kupffer cells damage was less evident in the control and Amla treated livers but was significantly enhanced in N-Nitrosodiethylamine treated liver in a time-dependent manner. Decreased infiltration of neutrophils and decreased damage to Kupffer cells in the amla treated group, suggests that Amla is an effective anti-inflammatory agent.



Journal of medicinal food. 2011 Jul 1;14(7-8):746-55. https://doi.org/10.1089/imf.2010.1459

Activates kupffer cells for phagocytosis of circulating pathogens



Encourages normal functioning of Kupffer cells

Kupffer cells release proinflammatory mediators either in response to necrosis or as a direct action by the hepatotoxin, which are believed to aggravate CCl₄-induced hepatic injury. TNF-α, a pleiotropic proinflammatory cytokine, is rapidly produced by macrophages in response to tissue damage. TNF-α alterations were significantly attenuated by glycyrrhizin from Yashtimadhu (Glycyrrhiza glabra), with the liver showing only minor hepatocellular necrosis and inflammatory cell infiltration, and mild portal inflammation. These results suggest that glycyrrhizin has potential clinical applications for treating liver disorders.

Biological and Pharmaceutical Bulletin. 2007 Oct 1;30(10):1898-904.

Activates Complement immune system

The studies revealed that Pippermint (Mentha piperita) essential oil had beneficial effects on the complement system. Regarding the immunological parameters evaluated, the activity of the complement system was increased with the use of pippermint oil. The complement system is essential for the innate immune system and is most well-known for its capacity to kill pathogens by creating pores in their surface membranes or by opsonizing pathogens by stimulating phagocytosis. In addition, complement system activation contributes significantly to immunity by enhancing the adaptive immune response.

Aquaculture research. 2017 Nov;48(11):5640-9. https://doi.org/10.1111/are.13386

The study explore the **highest in-vitro activity of Clove (Syzygium** aromaticum) oil and Thymol (Trachyspermum ammi) on phagocytosis by human neutrophils and on complement system by a classical pathway which is one of the pathways of complement system. Complement system is a major effector mechanism of the innate

immune system. It is a complex network of plasma and membraneassociated serum proteins, which can elicit highly efficient and tightly regulated inflammatory and cytolytic immune responses to infectious organisms, tissue damaged by physical, chemical, or neoplasm insults, & other surfaces identified as "nonself".

> Journal of agricultural and food chemistry. 2015 Feb 11;63(5):1496-504 https://doi.org/10.1021/jf504761m

Improves innate immunity, removes microbes from circulation

Boosts detoxifying & cleansing process of Lymphatic system

Lymphatic system helps eliminate waste, toxins from cells & controls flow of infection fighting immune cells throughout the body. It is essential to keep it healthy for effective detoxification, immunity and overall health.

Cleanses Lymphatic System

Fenugreek (Trigonella foenum graecum) offers the lymph system several cleansing & healing benefits. The cleansing action of fenugreek helps purify blood, cleans lymphatic system & detoxify the body Journal of Toxicology. 2016 Jan 18;2016. doi: 10.1155/2016/1250387

Improves Lymphocytes function

Neem (Azadirachta indica) enhances the functions of lymphatic system and its ability to flush out toxins, decreases congestion & reduces swelling. It has been reported to stimulate body's lymphatic system, boosts body macrophage system & increase production of WBC Nigerian Journal of Experimental and Clinical Biosciences. 2014 Jan 1;2(1):54. DOI: 10.4103/2348-0149.135731

Inhibits lymph node inflammation

Haldi (Curcuma longa) is a detoxifying & purifying herb & is great for cleansing the lymph system of any built-up waste. It inhibits elevation of inflammation of Lymph nodes, reduction of T and B cell proliferation and natural killer cell activity induced by the infection.

Effects of Curcuma longa L. 20% ethanol extracts on organ weights of C57BL/6 mice with or without LP-BM5 murine leukemia viruses infection

Groups	Positive	LP-BM5 MuLV infection			
	Control	Infection Control	CL50	CL200	CL500
WEIGHT GAIN (g) ¹	10.34±1.79	9.96 ± 2.27	10.61±2.46	12.18 ± 2.85	11.50 ± 2.89)
(0015501/)	0.66.0.42	0.04.0.22	0.76.0.20	0.60.0.04	0.57.0.24
SPLEEN (g)	0.66±0.13	0.84±0.22	0.76±0.20	0.69±0.04	0.57±0.21

¹Weight gain (g/12 week)=final body weight (g)-initial body weight (g). Positive control, LP-BM5 MuLV infection with dietary supplement; infection control. LP-BM5 MuLV infection group; CL50, LP-BM5 MuLV infection with dietary supplement of *Curcuma longa* L. 20% ethanol extracts 50 mg/kg; CL200, LP-BM5 MuLV infection with dietary supplement of *Curcuma longa* L. 20% ethanol extracts 200 mg/kg; CL500, LP-BM5 MuLV infection with dietary supplement of *Curcuma longa* L. 20% ethanol extracts 500 mg/kg. All data are presented as mean±standard deviation (n=8). Differences in the same row were considered statistically significant at P<0.05.

Journal of the Korean Society of Food Science and Nutrition. 2014;43(9):1317-24, http://dx.doi.org/10.3746/jkfn.2014.43.9.1317 Ayu. 2014 Jul;35(3):303. doi: 10.4103/0974-8520.153750

Reduces toxic load in body

Manjistha (**Rubia cordifolia**) reduces the toxic load carried by the body & boosts the process of detoxifying the lymphatic system & purifies the blood.

Journal Of Pharmacy (p)-ISSN: 2319-4219 Volume 8, Issue 4 Version. II (April 2018), PP. 30-34

Lessens congestion in lymphatic system

Pipal (Ficus religiosa), a rich source of flavonoids, alkaloids, improves body efficiency, lymphatic system and immunity. It can lessen congestion and swelling in lymphatic system

Ficus religiosa: A wholesome medicinal tree.7 (2018)

Decongests Lymphatic system, drains out waste, toxins, microbes and gives powerful boost for the immune system for optimal health and longevity

Journal Of Pharmacy (p)-ISSN: 2319-4219 Volume 8, Issue 4 Version. II (April 2018), PP. 30-34

Supports proper lymph drainage

Harad (Terminalia chebula), Bahera (Terminalia bellirica) & Amla (Emblica officinalis) are detoxifying & purifying herbs & are great for cleansing the lymph system of any built-up waste. They inhibit elevation of inflammation of Lymph nodes, reduction of T and B cell proliferation & natural killer cell activity induced by the infection.

Ayu. 2014 Jul;35(3):303. doi: 10.4103/0974-8520.153750

Provides Immune detox defence

Boosts anti-oxidant

defence, strengthens immune function, exerts anti-viral action

Amynity Plus is rich in natural anti-oxidants like flavonoids, flavones, polyphenols & vitamins that can prevent damage to the cells caused by the free radicals or unstable molecules that the body produces. It also stabilises cell structure by reducing cell stress and apoptosis.



Improves anti-oxidant enzyme level, activates cellular immunity

Sigru (Moringa oleifera) contains rich quantity of phytonutrients having potential anti-viral

activity. It inhibits viral replication by targeting chemokine receptor type 4 (CXCR-4), activates cellular immunity and hinders viral growth. It increases CAT expression and showed inhibitory activity against Epstein-Barr virus (EBV). It also **targets proteins/enzyme responsible for viral replication** cycle thereby acts as immuno booster. South African Journal of Botany. 2019 Aug 19. doi.org/10.1016/j.sajb.2019.07.049

Boosts Anti-oxidants, improves immunity, decreases viral replication

Tulsi (Ocimum sanctum) increases the level of SOD, CAT, GSH-Px to scavenge the ROS generated in the body and hence helps in decreasing the viral replication inside the host system. Tulsi due to its rich eugenol content shows **broad spectrum anti-viral activity against DNA & RNA viruses** thereby augmenting the elimination of viruses from the body

Journal of Bioequivalence and Bioavailability. 2017;9(3):387-492. DOI: 10.4172/jbb.1000330

Showing herbs of Amynity Plus rich in natural anti-oxidants (SOD, CAT & GSH)

ANTIOVIDANTO	SOD	САТ	GSH
ANTIOXIDANTS	(Superoxide dismutase)	(Catalase)	(Glutathione)
HERBS	Vitis vinifera (Draksh)	Achyranthes aspera (Appamarg)	Laptadenia reticulata (Jivanti)
ПЕКВЗ	Cuminum cyninum (Jira)	Elettaria cardamomum (Elaichi)	Trachyspermum ammi (Ajwain)

Immunopharmacology and immunotoxicology. 2012 Dec 1;34(6):1010-9. doi: 10.3109/08923973.2012.689767.

J. Agric. Engg. Food Tech. 2015;2(2):131-5, Pharmaceutical biology. 2008 Jan 1;46(12):824-8. https://doi.org/10.1080/13880200802366645,

Arab J Nucl Sci Appl. 2013 Jan 1;46(1):232-9, Journal of agricultural and food chemistry. 2002 Oct 9;50(21):5909-14, https://doi.org/10.1021/jf0257042

Eliminates
free radicals,
improves
immune functions,
reduces
viral

infections

Prevents free radical induced cellular damage

Withaferin A from *Ashwagandha (Withania somnifera)* enhances cell survivability against cytotoxin induced apoptosis by **inhibiting** H_2O_2 induced upregulation of SOD2, SOD3 & Prdx-1, ameliorates cardiomyocyte capase-3 activity via AkT dependent manner which suggests that Withafarin A activated Akt are major signalling enzymes involved in cellular protection against oxidative stress.

Life sciences. 2018 Oct 15;211:91-101. https://doi.org/10.1016/j.lfs.2018.09.020

Reduces the stress level of cells

Giloe (Tinospora cordifolia) is a rich source of alkaloids, diterpenoid lactones, aliphatics and glycosides which inhibit the activity of matrix metalloproteinases (MMPs) & translocation of transcription factors, nuclear factor-kappa-B (NF-KB) to nucleus and could reduce the plasma recalcification time & enhanced the release of lipoprotein lipase enzymes thereby reducing the stress level of cells.

Ancient science of life. 2012 Apr;31(4):151. doi: 10.4103/0257-7941.107344

Supplementation of Vit.C, A, B₆ & Folates to FIGHT DEPRESSED IMMUNOCOMPETENCE

Vit.C, A, B₆ & Folates derived from **Amla (Embelica officinalis)**, **Black pepper (Piper nigrum)** fulfil the nutritional reserves needed to ensure a good supply of energy sources, macronutrients & micronutrients **required for the development, maintenance and expression of immune response.** Vitamin A maintains the proper functioning of T & B lymphocytes for generating antibody response to various antigens and folates play a crucial role in cell mediated immunity.

PLoS One. 2016 Aug 17;11(8):e0161464. doi: 10.1371/journal.pone.0161464

ANTIOXIDA A

Nourishes body tissues, reduces cellular stress and damage

NORMAL MOLEC

Enriched with SUPER STRENGTH

8 Actives Essential oils in **POWERFUL CONCENTRATION**

Each drop acts as "AMRUT" for infected patients

Camphor Oil- Modulates GIT microbiota

Camphor (Cinnamomum camphora) oil effectively acts as a modulator of health status (by increasing glucose and HDL), GIT microbiota and humoral immunological responses. The greatest AIV anti-Body titers & values of NDV antibody titers increases with an increase in camphor consumption. It is a phagocytic feed & effectively acts as a modulator of Health status, GIT microbiota & immunological response. Camphor positively decreased coliform population in GIT & increased in lactic acid bacteria.

Animal: an International Journal of Animal Bioscience. 2017 Dec 1;11(12):2139. doi:10.1017/S1751731117001148



Dalchini oil- Increases phagocytic activity

Dalchini (Cinnamomum zeylanicum) oil stimulates innate and adaptive immunity by increasing the number of macrophages and phagocytic activity and provides immunity against infectious pathogens. The active phytochemical constituents of cinnamon are cinnamonaldehyde and eugenol. Other beneficial effects of Dalchini oil are antioxidant and anti-inflammatory effects.

The Anti-viral and Immunomodulatory Activity of Cinnamon zeylanicum Against" NDV" Newcastle Disease Virus in Chickens. Group. 2017;1:0-3

Thymol Oil-Decreases inflammatory response



Thymol (*Trachyspermum ammi*) oil alleviates the intestinal lesions, improves the intestinal histomorphology, decreases the inflammatory response and enhances the specific immune response. Thymol has been reported to inhibit pro-inflammatory cytokines, decrease inflammatory cell recruitment, and alleviate oxidative damage. Thymol also decreases Tumor necrotic factor (TNF)- α gene expression and increases the interleukin (IL)-4 gene expression in the spleen.

Journal of animal science and biotechnology. 2016 Dec 1;7(1):19. DOI: 10.1186/s40104-016-0079-7

Lavang (Clove) oil-Improves immnue response

Clove (Syzygium aromaticum) essential oil increases the total white blood cell (WBC) count and results in improvement in humoral and cell-mediated immune response mechanisms. Major constituent of clove oil is the phenolic compound eugenol. Eugenol has pharmacological properties, including anti-microbial, antioxidant and anti-inflammatory activity.

Journal of Pharmacy and Pharmacology. 2009 Jul;61(7):961-7. https://doi.org/10.1211/jpp.61.07.0017

Menthol Oil-Increases anti-oxidant capacity

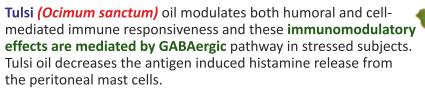
Menthol (Mentha Sps.) oil promotes immune strength by stimulating non-specific immune components, plasma globulins and increases lysozyme activity to increase immune power. Menthol also significantly increases plasma super oxide dismutase, catalase, total antioxidant capacity, RBC, total protein, globulin, lysozyme.

Aquaculture. 2020 Mar 19:735260. https://doi.org/10.1016/j.aquaculture.2020.735260



Rejuv enates & Stim ulates Body Tissues

Tulsi oil- Decreases histamine release



Journal of Ethnopharmacology. 2002 Apr 1;80(1):15-20. https://doi.org/10.1016/S0378-8741(01)00373-7



Lemon Grass oil-Improves immunological functions

Lemon grass (Cymbopogon citratus) oil findings proved that it improves protection against infection by improving immunological functions and improving gut microbiota. Citral is its main component and has been known for its immunomodulatory, anti-inflammatory, anti-septic and anti-microbial properties.

Aquaculture Nutrition. 2018 Jun;24(3):1006-14. https://doi.org/10.1111/anu.12637

Citronella oil - Protects against infections

Citronella (Cymbopogan nardus) oil shows Antioxidant activity by DPPH test. It also exerts anti-inflammatory property. **It is also essential for combating pathogens.** Citronella oil shows activity against a strain of fungus known as Aspergillus niger. This common fungus is thought to cause lung and sinus infections in people with weakened immune systems.

Revista Ciência Agronômica. 2012 Jun;43(2):399-408. http://dx.doi.org/10.1590/S1806-66902012000200025

Acts effectively as modulator of overall health status

Regulates Immune Homeostasis - Boosts Innate & Acquired Immunity

Provides fast defence to body by **Activating Innate Immunity**

Increases length of cilia

(Zingiber officinalis)

External Defence

Internal Defence

Reduces gastric pH

(Curcuma longa)

Improves phagocytosis activity of

Macrophages & Neutrophils (Tinospora cordifolia & Withania somnifera)

Improves capacity of Natural killer cells

(Ocimum sanctum)

Increases Interferon Production

(Ocimum sanctum)

Stabilizes Mast cells

(Piper longum)

Boosts body defence against viruses, bacteria & antigens

Amynity plus
works in all dimensions
of immune system,
boosting cell mediated &
humoral immunity responses.

Activates
Phagocytosis,
natural killer cells
along with improving
T & B-lymphcyte functions.

Boosting Body Defence is an important step to treat & prevent various diseased conditions



Activating
Acquired Immunity

Strengthens T-lymphocyes activity
Improves helper, suppressor & cytotoxic T-cells activity

(Ocimum sanctum)

Improves B-lymphocytes activity Increases memory B-cells

(Terminalia chebula)

Increases serum Immunoglobulin level (IgG & IgM)

(Cinnamomum zeylanicum)

Fights and kills virus and bacteria

Efficiently neutralizes pathogens and hastens recovery

Q. Will Amynity Plus work in allergic respiratory disease conditions?

Ans. Yes, it will work as anti-allergic, bronchodialator by stabilizing mast cells and relieve congestion by improving the ciliary movement by Vasa (Adhatoda vasica) & Pippali (Piper longum).



Q. Can it be taken by all patients having low immunity?

Ans. The immune system protects the body from infections. A person with a weak immune system may be more prone to frequent infections. Respiratory, digestive, systemic, circulatory, cellular lymphatic level and lymph nodes make up the body's immune system. Bacteria and viruses, including the virus that causes the deadly infections, can have a devastating effect on a person with a compromised immune system. So, Amynity plus liquid sugar free is a need of hour to boost immunity of all age group to fight against deadly bacteria and virus. (For specific cases, kindly refer to the safety profile.)

Frequently asked questions (FAQs)

Q. How many days Amynity Plus will take to restore the immune system?

Ans. A. In infective condition - Amynity Plus has to be given for at least 21 days in dosage of 2 teaspoons thrice a day as therapeutic dose. Then as prophylactic dose Amynity Plus has to be prescribed for 21 days in dosage of 2 teaspoons twice a day and after the course the patient should be shifted to Aimil Ayush Kwath to be taken regularly.

B. In immunocompromised patients -Dosage - 2 teaspoons twice a day for 3 months C. In recurrent infective conditions -Dosage -2 teaspoons twice a day for 2 months

Q. Can Amynity Plus be taken with milk or water?

Ans. It is advisable to take Amynity Plus with lukewarm water. It is contraindicated with milk due to the presence of essential oils. However, there has to be a 2 hours gap if the patient has consumed milk.

Q. How many days Amynity Plus will take to restore WBC count?

Ans. Amynity Plus improves the function of WBC to fight the pathogens and normally restores them within 21 days.

Q. Why 51 herbs and 8 essential oils are incorporated in Amynity Plus?

Ans. Amynity Plus is formulated to provide multi-system immune defense and acts on various immunity associated organs and systems such as, Vasa (Adhatoda vasica) & Pippali (Piper nigrum) to support the respiratory system, Flax seeds (Linum usitatissimum) and Sigru (Moringa oleifera) strengthen the gut-immune axis, Pipal (Ficus religiosa) and Manjistha (Rubia cordifolia) cleanse and decongest the lymphatic system, Black cumin(Nigella sativa) and (Harad) Terminalia chebula modulate the humoral & cell mediated immunity and provide the cellular level anti-oxidant protection. These all make the part of 51 herbs and 8 essential oils which are incorporated to obtain the given range of systemic action and to deliver the desired therapeutic efficacy.

Q. Can it be Co-prescribed with other medicines?

Ans. Immunity is the capacity of an individual to fight infections, diseases, or unwanted biological invasion. People with diabetes, hypertension or any other disease are more susceptible to developing infections, as high blood sugar levels and blood pressure can weaken the patient's immune system defenses. In addition, some diabetes-related health issues, such as nerve damage, reduced blood flow to the extremities and nephrotoxicity increase the body's vulnerability to infection. It can be safely taken hypertensives, OHGs, antibiotics, pain killers etc. So, Amynity plus can be prescribed with other essential drugs to hasten the recovery and boost multi-system immune defense against disease related infections.

	free contains : A. Aqueous extracts derived fr	om:
Tulsi	Ocimum sanctum, Pl.	500 mg
Ashwagandha	Withania somnifera, Rt.	500 mg
Guduchi (Giloe)	Tinospora cordifolia, St.	500 mg
Yashtimadhu	Glycyrrhiza glabra, Rt. & Sto.	300 mg
√asa	Adhatoda vasica, Lf.	300 mg
Sunthi	Zingiber officinale, Rz. Dr.	300 mg
Kantkari	Solanum surattense, Pl.	300 mg
Harad Badi	Terminalia chebula, Fr. P.	300 mg
Amla	Emblica officinalis, Fr. P.	300 mg
	Achyranthes aspera, Pl.	200 mg
Kadipatta	Murraya koenigii, Lf.	200 mg
Sigru	Moringa oleifera, Lf.	200 mg
3harangi	Clerodendrum serratum, Rt.	100 mg
_asora	Cordia dichotama, Fr.	100 mg
Jivanti	Leptadenia reticulata, Rt.	100 mg
Bidari Kand	Pueraria tuberosa, Tr.	100 mg
Bahera	Terminalia bellirica, Fr. P.	100 mg
Kakanasika	Martynia annua, Fr.	100 mg
Motha	Cyperus rotundus, Rz.	100 mg
Gojiha	Onosma bracteatum, Lf.	100 mg
Punernava	Boerhaavia diffusa, Rt.	100 mg
Revand Chini	Rheum emodi, Rt.	100 mg
3hutrnah	Cymbopogon citratus, Pl.	100 mg
Harsingar	Nyctanthes arbor-tristis, Lf.	50 mg
Manjistha	Rubia cordifolia, St.	50 mg
Oraksh	Vitis vinifera, Fr.	50 mg
Pushkarmool	Inula racemosa, Rt.	50 mg
Haridra	Curcuma longa, Rz.	40 mg
_al Munnaka	Vitis vinifera, Fr.	30 mg
	Azadirachta indica, Lf.	30 mg
Pipal	Ficus religiosa, Lf.	20 mg
Chirayata	Swertia chirata, Pl.	20 mg
Harimirch	Capsicum annuum, Fr.	2 mg
B. Hot Infusions derived from		000
Dalchini	Cinnamomum zeylanicum, St. Bk.	200 mg
Kalonji	Nigella sativa, Sd.	200 mg
Banafsha	Viola odorata, Pl.	100 mg
Pippali	Piper longum, Fr.	100 mg
Methi	Trigonella foenum-graecum, Sd.	100 mg
Jira	Cuminum cyminum, Fr.	80 mg
Badi ilayachi	Amomum subulatum, Fr.	50 mg
Talish Patr	Abies webbiana, Lf.	50 mg
Nagkesar	Mesua ferrea, Stmn.	50 mg
Ajwain	Trachyspermum ammi, Fr.	50 mg
avang	Syzygium aromaticum, Fl. Bd.	40 mg
Tejpatra Colonia	Cinnamomum tamala, Lf.	30 mg
Kulanjan	Alpinia galanga, Rz.	30 mg
Alsi	Linum usitatissimum, Sd.	30 mg
Kalimirch	Piper nigrum, Fr.	25 mg
Fumbru	Zanthoxylum alatum, Fr.	20 mg
Choti ilayachi	Elettaria cardamomum, Fr.	20 mg
Saunf Shootel Chini	Foeniculum vulgare, Fr.	20 mg
Sheetal Chini	Piper cubeba, Fr.	20 mg
C. Powder:	(Ammanium ablavida nuvified Drad)	10 ma
Naushadar Sudh	(Ammonium chloride purified, Prcd.)	10 mg
Liquid sugar free base		Q.S.
Excipients	/ Oila : Kanaar Caty (Comphar) (Cirnamanum	Q.S.
Toruned with Concentrates	/ Oils : Kapoor Satv (Camphor) (Cinnamomum	carripriora

Q. What is the safety profile of Amynity Plus?



Adults



Infants



Children









Lactation

Diabetes

Safe to

Not indicated

in low doses & under medical

Use with caution Use with caution in low doses & under medical supervision

Not indicated

Safe to

Use with caution in low doses & under medica supervision

Q. How Amynity Plus is different from Aimil Ayush Kwath?

AMYNITY PLUS LIQUID SUGAR FREE

- It is a complete therapeutic formulation which works on multiple immunity associated organs.
- It contains 51 potent herbs and 8 essential oils which exert its multi system immune defense
- Suitable for moderate and severe conditions
- Enriched with herbal extracts and essential oils

AIMIL AYUSH KWATH

- It is a preventive formulation which works primarily on the respiratory system
- It contains 4 herbs and boosts the primary immune system
- · Suitable for mild conditions
- · Powder form of herbs

