About Medical supplement Lypo-C vitamin C--"primal panacea" or "drink infusion"



Vitamin C's three major actions to enhance immune function

1) To support white blood cells

White blood cells (leukocytes) are an important part of the immune system. Immune cells require vitamin C to carry out their tasks. In fact, the concentration of vitamin C in the white blood cells is 80 times greater than in the red blood cells. It is expected that immune function can be enhanced by intaking a lot of vitamin C.

2) To increase natural killer cells

Natural killer (NK) cells target and kill aberrant cells, such as virally infected and tumorigenic cells. Vitamin C is expected to have potential to generate more NK cells.

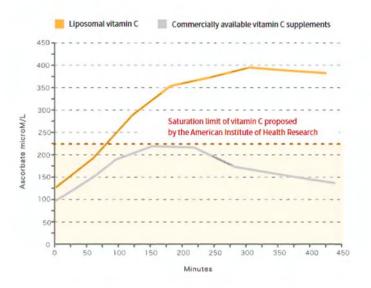
3) To strengthen the collagen of mucous membrane

The first barrier of immune system is mucous membrane that protects upper respiratory tracts (mouth, throat, nose, etc.) from virus infection, which is called "mucosal immunity." Dryness is enemy for mucosal immunity. Virus infection tends to occur when the air is dry.

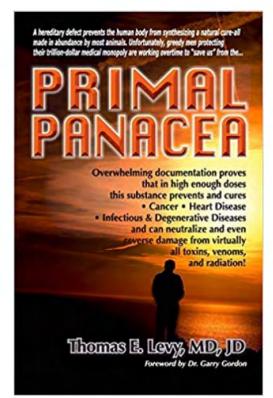
Vitamin C forms collagen not only on the skin but on mucous membrane, that retains moisture and maintain mucosal immunity.

[https://lypo.medsup.jp/news/8501?utm_source=MailMagazine&utm_medium=tryout05]

Why we need high absorption of vitamin C



Vitamin C is hardly absorbed by digestive tract. The more it is taken up, the more it is exhausted. That is, there is a saturation limit for the oral intake of vitamin C. However, this Lypo-C vitamin C goes over the limitation. Studies found that it can maintain the vitamin C concentration in blood for a long time. [https://lypo.medsup.jp/pdf/Evidence.pdf]



The book "Primal Panacea" is filled with notable information beyond our common knowledge.

"Vitamin C can cure viral infection" in the page 33 and "20 ways vitamin C boosts the immune system" in the page 153 are worth reading.

These websites show that vitamin C is expected to have the effect of inhibiting Covid-19.

(words of the villa owner)

http://orthomolecular.org/resources/omns/v16n18.shtml https://www.newsweek.com/new-york-hospitals-vitamin-c-coronavirus-patients-1494407 https://www.clinicaltrials.gov/ct2/show/NCT04323514?cond=COVID-19&draw=3

Vitamin C Can Cure Viral Infections

Vitamin C has been shown to prevent, put into remission, and even cure many viral infections (see Resource H for details). Here's a partial listing:

- AIDS/HIV
- Ebola
- Encephalitis
- Hepatitis
- Herpes
- Pneumonia
- Polio
- Shingles
- Swine Flu

On the other hand, drug companies have yet to develop any drugs that will reliably kill viruses. Instead, vaccination is modern medicine's answer to viral infections. Without delving into the controversies surrounding vaccination, this strategy is not without significant health risks. In addition, many viruses, such as those causing influenza, can evolve into new strains that are unaffected by the antibodies that were developed in response to a previous vaccination. For example, this year's flu vaccination — which was created from last year's virus — may have little or no effect against the flu virus currently making the rounds.

Given the fact that modern medicine has no effective therapy for all viral and many bacterial infectious diseases, why aren't doctors turning to high-dose vitamin C to save the lives of their patients? For decades, men in places of influence have tried to keep the knowledge of high-dose vitamin C locked away. When that has not worked, they have tried to discredit it. Here's where it all started...

[the excerpt of page 153 to 156]

20 ways vitamin C boosts the immune system

In both Chapter Six and Resource A the power of vitamin C resulting from its incredible ability to donate electrons as an antioxidant is discussed. In fact, it is this very attribute of vitamin C that accounts for most of its potent antimicrobial and toxin-neutralizing qualities.

However, no other antioxidant can perform the many additional physiological and biological roles that vitamin C fills. To dismiss vitamin C as "nothing more" than an antioxidant greatly understates and misrepresents the range of vitamin C's positive effects on the body. Vitamin C is a strong stimulator and supporter of good immune function. Some of the ways that vitamin C promotes and boosts the immune system include the following:

- Vitamin C enhances production of interferons.¹⁻⁶ Interferons are an important part of the body's immune system. The body produces them when the presence of pathogens — viruses, bacteria, or parasites — is detected. They facilitate the ability of cells to trigger protective cellular defenses against the detected attack.
- 2) Vitamin C enhances the function of phagocytes.⁷⁻²⁴ Phagocytes are a type of white blood cell that envelop pathogens and infection-related particles. Once the invaders are captured in this manner, they are enzymatically digested.

- 3) Vitamin C selectively concentrates in white blood cells.²⁵⁻²⁹ Some of the primary cells in the immune system concentrate vitamin C as much as 80 times higher than the level in plasma. This assures extra delivery of vitamin C to the sites of infection by the migration of these vitamin C-rich white blood cells.
- 4) Vitamin C enhances the cell-mediated immune response.³⁰ There are 2 major ways that the body can respond to a pathogen: antibody-mediated immunity and cell-mediated immunity. Cellmediated response refers to the activation of macrophages, natural killer cells, and antigen-specific T-lymphocytes that attack anything perceived as a foreign infectious agent.
- 5) Vitamin C enhances cytokine production by white blood cells.³¹ Cytokines are communication proteins released by certain white blood cells that transmit information to other cells, promoting the immune response.
- 6) Vitamin C inhibits various forms of T-lymphocyte death.³² T-lymphocytes are a type of white blood cell. They are an integral part of the cell-mediated immune defense system. Vitamin C helps to keep these important cells alive and viable.
- 7) Vitamin C enhances nitric oxide production by phagocytes.^{33,34} Phagocytes, as discussed in #2 above, are white blood cells that engulf invading microorganisms. Nitric oxide is produced in large amounts in these cells. It is one of the agents that will kill captured pathogens.
- Vitamin C enhances T-lymphocyte proliferation.³⁵⁻³⁷ As mentioned in

#6 above, these cells are essential to cell-mediated immune responses, and vitamin C helps them to multiply in number.

- 9) Vitamin C enhances B-lymphocyte proliferation.³⁸ These white blood cells make antibodies as part of the antibodymediated immune response. Antibodies are formed in reaction to the initial introduction of an invading pathogen or antigen. If and when the body detects a reintroduction of the same pathogen the body counters with a specific antibody attack.
- 10) Vitamin C inhibits neuraminidase production.³⁹ Some pathogenic viruses and bacteria create neuraminidase, an enzyme that keeps them from being trapped in mucus, one of the body's natural lines of defense. By inhibiting neuraminidase, vitamin C helps the body optimize this defensive mechanism.
- 11) Vitamin C enhances antibody production and complements their activity.⁴⁰⁻⁵⁰ Good antibody function is important to combat both infections and toxins. The complement system is a complex group of proteins that interact to kill targeted cells and mediate other functions of the immune system.
- 12) Vitamin C enhances natural killer cell activity.⁵¹ Natural killer cells are small lymphocytes that can directly attack cells, such as tumor cells, and kill them.
- 13) Vitamin C enhances prostaglandin formation.⁵²⁻⁵⁴ Prostaglandins are hormone-like compounds that control a variety of physiologic processes, including the regulation of T-lymphocyte function.

- 14) Vitamin C enhances cyclic GMP levels in lymphocytes.^{55,56} Cyclic GMP plays a central role in the regulation of different physiologic responses, including the modulation of immune responses. Cyclic GMP is important for normal cell proliferation (reproduction) and differentiation (specialization for specific purposes). Cyclic GMP also controls the action of many hormones, and it appears to mediate the relaxation of smooth muscle.
- 15) Vitamin C enhances localized generation of and/or interaction with hydrogen peroxide.⁵⁷⁻⁶⁰ Vitamin C and hydrogen peroxide can kill microorganisms and can dissolve the protective capsules of some bacteria, such as pneumococci.⁶¹
- 16) Vitamin C detoxifies histamine.^{62,63} This antihistamine effect of vitamin C is important in the support of local immune factors.
- 17) Vitamin C neutralizes oxidative stress.⁶⁴ Infections produce free radicals locally that further promote the infective process.
- 18) Vitamin C improves and enhances the immune response achieved with vaccination. ⁶⁵⁻⁶⁷
- 19) Vitamin C enhances the mucolytic effect.⁶⁸ This property helps liquefy thick secretions, increasing immune access to infection.
- 20) Vitamin C may make bacterial membranes more permeable to some antibiotics.⁶⁹

