

Pro-Core

South Africa - July 2018



What is Pro-Core?

Herbalife Pro-Core is a delicious beverage formulated with a unique blend of key ingredients. This product is high in:

Vitamins C & D,

Minerals Zinc & Selenium,

EpiCor® (a yeast based ingredient) and

Elderberry Juice









Key Information & Ingredients

Pro-Core consists of the key active ingredient EpiCor®. EpiCor® is a yeast-based booster used in addition to beneficial vitamins and minerals currently not found in any other Herbalife product.

Pro-Core is available in powder form and can be added as part of your daily nutrition routine. It can be taken as a stand alone drink or added to your favourite beverage.

Key nutritional profile for Pro-Core

- ✓ 500mg of EpiCor®
- √ 80mg of Vitamin C
- √ 10mcg of Vitamin D
- √ 10mg of Zinc
- √ 55mcg of Selenium
- √ 92mg of Elderberry Juice

Take one 3.7 g stick pack once a day with 150 ml of warm or cold water. Available in 10 stick packs per box.





What are the benefits?

The health benefits associated with the vitamins and minerals in this product have been well established and targets all people seeking to support a healthy immune system, in conjunction with a healthy and active lifestyle.

How the ingredients help:

EpiCor®

- ✓ Helps to protect the immune system¹
- ✓ Restores the balance of the intestinal immunity²
- Provides high antioxidant properties³

Vitamin C

- ✓ Contributes to the normal function of the immune system⁴
- ✓ Protection of cells from oxidative stress⁴

Vitamin D

✓ Contributes to the normal function the immune system⁴

Zinc

- Contributes to the normal function of the immune system⁴
- ✓ Protection of cells from oxidative stress⁴

Selenium

✓ Contributes to the normal function of the Immune System⁴



What is Immunity?

The Immune System

- The immune system is a very complex compound of cells, tissues, and organs which are interconnected to protect our body against disease-causing microorganisms.
- Microbes, such as viruses, harmful bacteria, fungi, and parasites can be easily hosted in the human body and it is the immune system's role to intervene to avoid this.
- Humans are exposed to pollution, pathogens, environmental toxins and stress as part of everyday life, all of which contribute to the generation of free radicals such as reactive oxygen species (ROS). Free radicals mediate with components of the inflammatory response and have been shown to be responsible for many pathological conditions with multifactorial background.
- These in turn are responsible for elevated oxidative stress linked to, among others, lipids peroxidation, and vascular damage. Antioxidants act as neutralizers of free radicals preventing excessive oxidative damage.



What is Immunity?

Protecting the Immune System

Protecting the immune system requires a healthy diet and lifestyle. In addition, there are a number of vitamins and minerals which potentially have a better participation on immune responses such as:5

- Vitamins C and D
- ✓ Minerals Selenium and Zinc

EpiCor® is a dried yeast-based ingredient which provides high antioxidant properties.

This yeast product provides antioxidants which acts as a layer to protect cells from oxidative damage.³ As a result, EpiCor® may have beneficial immune modulating effects, particularly in relation to seasonal allergies and flu-cold symptoms.⁷



What is EpiCor®?

EpiCor® is the main active ingredient in Herbalife Pro-Core. This ingredient is a dried yeast-based ingredient obtained by anaerobic fermentation which provides high antioxidant properties.³ It is designed to control immune responses without excessive suppression or unnecessary stimulation of overall immune activity.³

EpiCor® can potentially:

- Play a role as an immune controller
- Act on the gut micro flora
- Restore the balance of the intestinal immunity.²

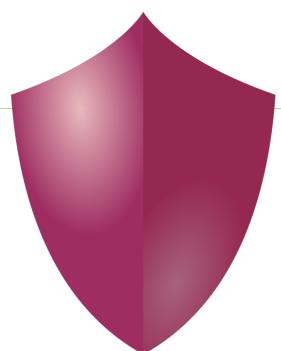
EpiCor® is a registered trademark of Embria Health Sciences, L.L.C.



How does Vitamin C help?

Vitamin C contributes to the normal function of the immune system⁴

Under conditions of immune depression, resistance to infections may be reduced, and certain diseases such as common cold may occur more frequently.



How Vitamin C helps:

Most of the human studies presented have investigated the relationship between vitamin C supplementation and the prevention of common cold. Essentially, Vitamin C is needed for the normal function of the immune system.



Why 80 mg of Vitamin C?

Current review of Scientific evidence for Vitamin C and cold symptoms suggests:

- High doses of Vitamin C (500 1000 mg) showed no consistent effect on either duration or severity of common cold symptoms. The higher the better is an old myth.
- Only in athletes exposed to short periods of extreme physical stress (including marathon runners and skiers) 200 mg Vitamin C halved the common cold risk.
- A <u>daily</u> diet that supplies 100-200 mg Vitamin C is adequate to cover all general requirements for a healthy body. For example, this can be obtained from: Pro-Core, Formula 1, Lift-Off, fruit and vegetables).

80 mg Vitamin C is equivalent to 100% of the European Nutrient Reference Values

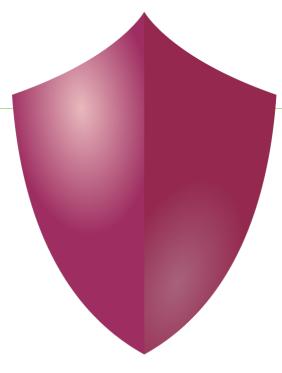




How does Vitamin D help?

Vitamin D supports normal function of the immune system⁴

Vitamin D3 has long been known to aid in calcium absorption, but new research shows that D3 also plays a role in cardiovascular function.



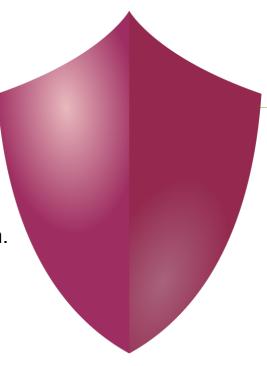
How does Zinc help?

Contributes to the normal function of the immune system⁴

Normal function of the immune system is beneficial to human health.

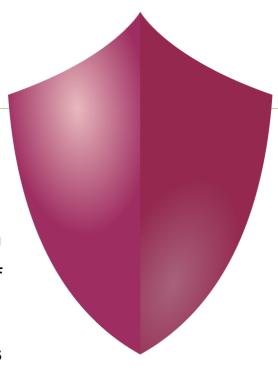
Severe zinc deficiency depresses immune function and the production of immune components.

Overall, zinc deficiency causes individuals to be more susceptible to infections, while zinc supplementation benefits immune responses to bacterial and viral infections.



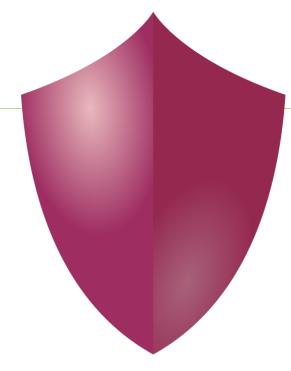
How does Selenium help?

Selenium appears to play a role in cell-mediated immunity. Human supplementation with selenium was able to stimulate the growth of activated T cells of the immune system. T cells are responsible for defending our body from viruses, harmful bacteria, fungi, parasites and pathogens.



Key Claims

- EpiCor® helps to protect the immune system
 (G. S. Jensen et al., 2011; M. Moyad et al., 2009; M. Moyad et al., 2010).
- EpiCor® provides antioxidant properties
 (G. S. Jensen, Carter, Reeves, Robinson, & Benson, 2014; M. Moyad et al., 2008;
 Thompson, Sim, Hallam, & Kohut, 2009).
- EpiCor® supports mucosal defence and provides prebiotic properties (G. S. Jensen et al., 2014).
- EpiCor® modulates acute and potentially chronic immunologic control mechanisms (Evans, Reeves, & Robinson, 2012).
- Vitamin C contributes to the normal function of the immune system⁴
- Vitamin C contributes to the protection of cells from oxidative stress⁴
- Vitamin D contributes to the normal function of the immune system⁴
- Zinc contributes to the normal function of the immune system⁴
- Zinc contributes to the protection of cells from oxidative stress⁴
- Selenium contributes to the normal function of the immune system⁴





Pro-Core – Approved Pricing

		25% Discount	35% Discount	42% Discount	50% Discount
(1)	Servings	10	10	10	10
(2)	Volume Points	9.50	9.50	9.50	9.50
(3)	Retail Price	151.81	151.81	151.81	151.81
(4)	Ratio, Retail Price to V.P.	15.98	15.98	15.98	15.98
(5)	Earn Base	142.32	142.32	142.32	142.32
(6)	Ratio, Earn Base to Retail Price	93.7%	93.7%	93.7%	93.7%
(7)	Ratio, Earn Base to V.P.	14.98	14.98	14.98	14.98
(8)	Discount (x% x E.B.)	35.58	49.81	59.77	71.16
(9)	Freight and MF + Tax	25.19	23.05	21.56	19.85
(10)	Member Price (Ship + Tax)	141.41	125.05	113.59	100.50
(11)	Member Price to VP	14.89	13.16	11.96	10.58
(12)	Suggested Customer Price	182.33	182.33	182.33	182.33
(13)	5% Royalty (5% x E.B.)	7.12	7.12	7.12	7.12
(14)	Retail Profit	40.92	57.28	68.74	81.83



References

- 1. Jensen, G. S. et al., (2011). *J Med Food, 14*(9), 1002-1010
- 2. Possemiers, S., Pinheiro, I., Verhelst, A., Van den Abbeele, P., Maignien, L., Laukens, D., Marzorati, M. (2013). A Dried Yeast Fermentate Selectively Modulates both the Luminal and Mucosal Gut Microbiota and Protects against Inflammation, As Studied in an Integrated in Vitro Approach. *Journal of Agricultural and Food Chemistry, 61*, 9380-9392
- 3. Jensen, G. S., Carter, S. G., Reeves, S. G., Robinson, L. E., & Benson, K. F. (2014). Anti-Inflammatory Properties of a Dried Fermentate In Vitro and In Vivo. *J Med Food*. doi: 10.1089/jmf.2013.0158; Moyad, M., Robinson, L., Zawada, E., Kittelsrud, J., Chen, D. G., reeves, S., & Weaver, S. (2008). Effects of a Modified Yeast Supplement on Cold/Flu Symptoms. *Nursing, 28*, 50-55; Thompson, N., Sim, Y., Hallam, J. E., & Kohut, M. (2009) Effects of yeast based dietary supplement on inflammatory response to strenuous exercise, *Autumm Immunology Conference*. *Chicago*.
- 4. EFSA Journals 2015;13(11):4298, 2009; 7(9):1226, 2010;8(10):1815, 2015;13(7):4182, 2010; 8(2):1468, 2009; 7(9):1229, 2009; 7(9):1220.
- 5. Ross, A. C., Caballero, B., Cousins, R. J., Tucker, K. L., & Ziegler, T. R. (2014) *Modern Nutrition in Health and Disease* (11th ed.) Baltimore, MD: Lippincott Williams & Wilkins.
- 6. Mangge, H., Becker, K., Fuchs, D., & Gostner, J. M. (2014) Antioxidants, inflammation and cardiovascular disease, World J Cardiol, 6(6), 462-477. doi: 10.4330/wjc.v6.i6.462
- 7. Robinson, L., & Moyad, M. (2009) Randomized, double-blind, placebo-controlled, parallel group study to evaluate the effect of 500 mg once a day Epicor on allergy symptoms. FASEB EB. New Orleans, U.S.
- 8. Evans, M., Reeves, S., & Robinson, L. (2012). A Dried Yeast Fermentate Prevents and Reduces Inflammation in Two Separate Experimental Immune Models. Evidence-Based Complementary and Alternative Medicine.

