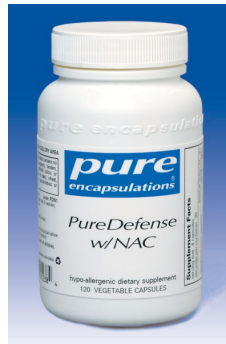




Manufacturers of  
Hypo-allergenic  
Nutritional  
Supplements



# PureDefense w/NAC

**INTRODUCED OCTOBER 2009**

## What Is It?

PureDefense w/NAC contains a combination of EpiCor<sup>®</sup>, n-acetyl-l-cysteine (NAC), vitamins, zinc and herbal extracts designed to promote overall immune defense and provide enhanced support for upper respiratory health. EpiCor<sup>®</sup> is a fermentate of *Saccharomyces cerevisiae* containing various bioactive metabolites produced in a specialized fermentation process. These nutrient metabolites enhance immune cell production, including natural killer (NK) cells, B cells and T cells. Natural killer cells are part of the body's innate, or first-line, immune response. They respond more quickly than the adaptive immune system comprised of B cells and T cells. Once activated, natural killer cell activity peaks in as quickly as several hours, providing rapid support and wide-range immune defense.\*

## Uses For PureDefense w/NAC

**Immune Defense:** In one cellular study, EpiCor<sup>®</sup> promoted natural killer cell activation, as well as that of B cells and T cells. In two randomized, double blind, placebo-controlled trials, EpiCor provided statistically significant support for upper respiratory tract health and overall immune health. A separate open label, in-house trial indicated a strong potential for EpiCor supplementation to enhance secretory IgA levels after 30 days. These various actions demonstrate the ability of EpiCor<sup>®</sup> to address both innate and adaptive immune responses. NAC promotes endogenous glutathione production for antioxidant protection and provides lung defense mechanisms for healthy respiratory function. In a randomized double blind trial involving mostly older individuals, NAC supported comfort, nasal function and respiratory health through the winter months. Vitamin C, vitamin D and zinc provide nutritional immune support, enhancing healthy immune cell proliferation, activation and function. Vitamin D receptors have been found on a number of immune cell types, and it is believed to play an important role in seasonal immune health. Vitamin C and the bioflavonoid quercetin also help boost immune defense by supporting healthy antioxidant enzyme function.\*

## What Is The Source?

Ascorbic Acid is derived from corn dextrose fermentation. Vitamin D is derived from lanolin. Zinc is derived from earthen ore. n-Acetyl-l-cysteine is synthetically produced. EpiCor<sup>®</sup> dried yeast fermentate complex is derived from *Saccharomyces cerevisiae*. Elderberry extract is derived from *Sambucus nigra* fruit. Quercetin is derived from *Sophora Japonica* flower buds. Ascorbyl palmitate is derived from corn dextrose fermentation and palm oil.

EPICOR<sup>®</sup> is a registered trademark of Embria Health Sciences, L.L.C.

## Recommendations

Pure Encapsulations recommends 2 capsules, twice per day, with meals.

## Are There Any Potential Side Effects Or Precautions?

If pregnant or lactating, consult your physician before taking this product. NAC can cause GI upset, abdominal pain, vomiting, constipation or diarrhea. Zinc can cause a metallic taste in some individuals. There have been reports of quercetin causing headache or tingling in extremities. Consult your physician for more information.

## Are There Any Potential Drug Interactions?

Zinc may be contra-indicated with certain antibiotics. Elderberry may be contra-indicated for individuals on immunosuppressant medications. NAC is contra-indicated with nitroglycerin. Preliminary evidence suggests that quercetin may inhibit the metabolism of medications through the cytochrome pathways in the liver. Consult your physician for more information.

(continued)

\*These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

For educational purposes only. Consult your physician for any health problems.

PureDefense w/NAC

four vegetable capsules contain  V 0

vitamin C (ascorbic acid).....	500 mg
vitamin D <sub>3</sub> .....	2,000 i.u.
zinc (citrate).....	15 mg
n-acetyl-l-cysteine (free-form) .....	900 mg
EpiCor® dried yeast fermentate complex .....	500 mg
(from <i>Saccharomyces cerevisiae</i> )	
elderberry extract (fruit).....	400 mg
quercetin .....	50 mg
vitamin C (as ascorbyl palmitate) .....	40 mg
2 capsules, twice per day, with meals.	

***“Natural killer (NK) cells are not only an important first-line defense, they set the stage for the adaptive immune response that follows. Research shows that NK cell activity is highly responsive to nutritional interventions and that supporting NK cell activity leads to better overall outcomes.”***

**– Barry W. Ritz, PhD  
Nutritional Immunologist**

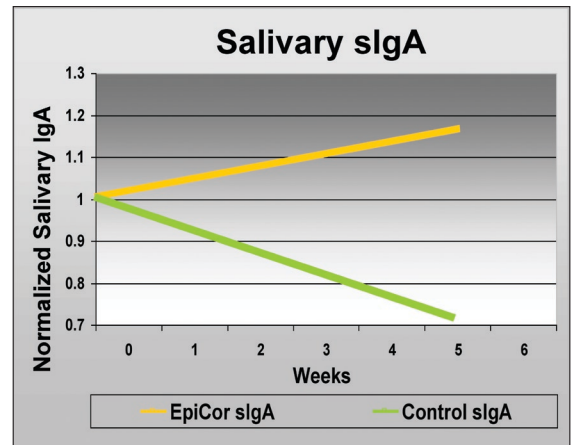


Fig.1. Effect of EpiCor® on salivary IgA.\*

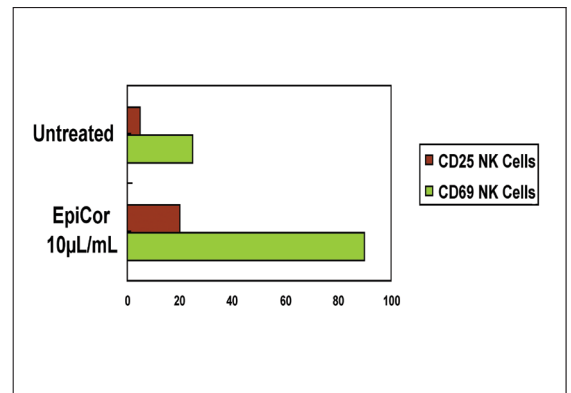


Fig.2. Increase in natural killer cell activity with EpiCor®.\*



— Your Trusted Source —