

FUNCTIONALAB

BEAUTY NUTRITION

Enduring Skin Plus

Optimal Skin Support for the Normal Aging Process*

DESCRIPTION

A synergistic combination of potent antioxidants designed to support the fortification, repair and revitalization of skin and other tissues during the normal aging process.*

FUNCTIONS

The hallmark of aging skin is the appearance of wrinkles. Clinically speaking, wrinkles are superficial defects visible to the naked eye. For some, wrinkles are a manifestation of wisdom. However, if left uncontrolled and without appropriate care, they may become an aesthetic concern and cause social discomfort. **Enduring Skin Plus** is made of a combination of vitamins, flavonoids, physiologically active antioxidants, and essential elements to support and balance the mechanisms underlying the normal aging process.

As we become more mature, all of the tissues in our body are forced to adapt to new metabolic demands and performances. This is especially true for the skin. Facing the outside on a daily basis, skin is not only affected by the chronological aging, but also faces assaults from external surroundings. Indeed, as we age, reactive oxygen species (ROS) are not only coming from external harmful sources (UV radiation, air pollutants and deleterious chemicals), but are also generated "from inside" by our own metabolic activity. During their normal functions, cells (the smallest functional unit of a tissue or an organ) generate metabolic micro-wastes in the form of ROS. With time, these metabolically-generated ROS will gradually accelerate tissue degeneration so that, as we age, our skin cells are virtually bombarded with harmful ROS from both external and internal sources. Providing a fully balanced cocktail of antioxidants, cofactors and "smart" amino acids, **Enduring Skin Plus** would assist skin cells to better deal with the ROS assaults. Supporting aged-skin cell metabolic activity could also facilitate repair processes. Skin topography mirrors what happens inside our body. This is especially true as we advance through the years. The formulation of **Enduring Skin Plus** would allow the skin to cope with the metabolic changes naturally arising along the process of normal aging.

Body cells and tissues are threatened continuously by damage caused by toxic free radicals and reactive oxygen species (e.g.,

peroxides) which are produced during normal oxygen metabolism, by other chemical reactions, and by toxic agents in the environment. Free radicals, once formed, are capable of disrupting metabolic activity and cell structure. When this occurs, additional free radicals are produced which, in turn, can result in more extensive damage to cells and tissues. The uncontrolled production of free radicals is thought to be a major contributing factor to many degenerative pathologies.

The body's antioxidant defense system is more than the sum of its parts. That's because antioxidants depend on each other for ongoing effectiveness. For example, beta-carotene supports vitamin E, recognized as the body's most valuable fat soluble antioxidant. It prevents oxidation of unsaturated fatty acids by inactivating free radicals, thus stabilizing and protecting cell membranes, e.g. in the lungs, eyes, and arteries. Vitamin E can be regenerated by vitamin C.

Vitamin C is a potent water-soluble antioxidant nutrient, also protecting cells from oxygen free radical damage. It is essential for connective tissue and bone metabolism, capillary health, and immune function. Vitamin C works together with vitamin E. When vitamin E is inactivated by neutralizing free radicals, vitamin C regenerates it back to full activity. In this process, however, vitamin C is oxidized and loses its antioxidant activity. Glutathione reactivates vitamin C, while selenium and B-vitamins are needed to keep glutathione effective.

Glutathione is a naturally occurring tripeptide which is a major component of two anti-free radical enzymes - glutathione peroxidase and glutathione reductase. As such, glutathione offers one mechanism for scavenging toxic free radicals and inhibiting peroxidation thereby slowing down free-radical catalyzed chain reactions. Glutathione can also reactivate (reduce) oxidized vitamin C. Glutathione *per se* is well absorbed in the intestine, and enters the blood and other extracellular compartments where it exerts much of its beneficial antioxidant effects. However, it can not effectively enter the cell.

N-Acetylcysteine is a precursor for the sulfur amino acid cysteine which is used by the cells to synthesize glutathione. In contrast to glutathione, N-acetylcysteine is efficiently transported into the cell where it is readily converted to cysteine for glutathione synthesis. Thus, supplementation with N-acetylcysteine is recognized as a safe, highly effective method of increasing intracellular glutathione stores. Aside

from providing cysteine as a glutathione precursor, N-acetylcysteine also appears to have antioxidant properties as such, and is a valuable sulfur donor for various metabolic needs.

Lutein and zeaxanthin are nutritionally important carotenoids that occur in selected, often brightly colored vegetables, such as corn, spinach and kale.

Like many other carotenoids, lutein is an important antioxidant nutrient that protects healthy cells from oxidative and free radical damage. Recent studies have shown that lutein and zeaxanthin in combination with omega-3 fatty acids may be useful in maintaining normal skin health and appearance. Omega-3 fatty acids, found in fish, walnuts and flax, among other sources, supply essential fatty acids necessary for optimal eye, cardiovascular, skin and neurological health.

Alpha-lipoic acid is unique among biological antioxidants, because it is soluble in both water and lipids. This allows it to neutralize free radicals just about everywhere in the body, inside and outside the cells. Due to its unique sulfur-containing structure, alpha-lipoic acid can scavenge several types of free radicals, such as the highly reactive hydroxyl, and singlet oxygen free radicals. It is also capable of suppressing the generation of free radicals in the first place, since alpha-lipoic acid chelates transition metals, such as iron and copper. Because alpha-lipoic acid is involved in so many different antioxidant functions in virtually all body tissues, it has been called the universal antioxidant.

Pycnogenol® is the name given to their patented antioxidant complex produced solely from pine bark which contains a unique mixture of proanthocyanidins (a bioflavonoid), organic acids, and other active compounds. Pycnogenol® is one of the most powerful natural free radical scavengers yet discovered. As such, it reduces oxidative damage to vital tissues and helps maintain a healthy capillary system. Pycnogenol®'s antioxidant activity is many times more effective than that of vitamin C and vitamin E. Pycnogenol® enhances the effectiveness of vitamins C and E and can be taken together with these vitamins for added benefit.

FORMULA (#20608-30)

1 Pack Contains:

Vitamin C.....	250	mg
(Ascorbyl Palmitate/Calcium Magnesium Ascorbate Complex)		
Bioflavonoids.....	200	mg
(Lemon)		
Hesperidin.....	20	mg
Rutin.....	10	mg
Pycnogenol®.....	50	mg
Vitamin E.....	150	I.U.
(d-alpha Tocopheryl Succinate)		
Beta-Carotene.....	10,000	I.U.
(Vitamin A Activity)		
Vitamin B-1.....	40	mg
(Thiamin HCl)		
Vitamin B-2.....	20	mg
(Riboflavin/Riboflavin-5-Phosphate)		
Vitamin B-3.....	20	mg

(Niacin 10 mg and Niacinamide 10 mg)	
Vitamin B-5.....	40 mg
(Pantothenic Acid/Pantothenine)	
Vitamin B-6.....	20 mg
(Pyridoxine/Pyridoxal-5-Phosphate)	
Inositol.....	50 mg
Choline Citrate.....	100 mg
Zinc.....	15 mg
(Picolinate)	
Selenium.....	50 mcg
(Krebs')	
Glutathione.....	50 mg
N-Acetyl-L-Cysteine.....	200 mg
L-Methionine.....	20 mg
Dimethylglycine HCl.....	25 mg
In a base of specially selected Young Sprouts supplying Superoxide Dismutase, Catalase and Glutathione Peroxidase	
Ultra-Pure Fish Oil Concentrate providing:	
EPA.....	650 mg
DHA.....	350 mg
Total Omega-3 Fatty Acids.....	1,200 mg
Lutein (from FloraGlo Lutein).....	10 mg
Zeaxanthin.....	2 mg
Alpha Lipoic acid.....	333 mg

SUGGESTED USE

Adults take 1 pack daily with meals or as directed.

SIDE EFFECTS

No adverse side effects reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

REFERENCES

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