



Professional Education Series 2020/2005

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20/20 VisClear™ An Eye-Essential Dietary Supplement

20/20 Visclear™ has been formulated to work with the body, enhancing its ability to maintain the eye health and avoid degenerative disorders, including cataracts and macular degenerative. **20/20 Visclear™** contains *twenty* (20) natural ingredients that have been researched thoroughly and selected for their role in improving the structure and function of the eye, in particular the macula, retina and lens.

Each ingredient is pharmaceutical quality, which insures maximum bioavailability. **20/20 Visclear™** is encapsulated in vegetable starch based capsules for quick dissolution and maximum potency.

General Consideration

- Thirteen million Americans suffer from age related macular degeneration, the number one cause of blindness in men and women over the age of 50. Age related macular degeneration results in 300,000 cases of irreversible blindness every year.
- Approximately four million Americans have vision impairing cataracts and at least 40,000 are completely blind due to cataracts.
- Approximately 2 million Americans suffer from glaucoma, the result of their failure to get regular eye checkups. One in four with this debilitating condition will become blind.
- According to estimates of the American Optometric Association, from data compiled by the National Center for Health Statistics, 90% of the U.S. population over four years of age have some degree of visual dysfunction. Approximately 50% of these individuals wear corrective eye glasses or contact lenses.
- *“The dietary intake of specific vitamins and carotenoids can lead to their accumulation in the retina and prevent against retinal degeneration”* says author Steven G. Pralt, MD, FACS, a senior staff Ophthalmologist at Scripps Memorial Hospital in La Jolla, Ca.
- Research has shown that specific antioxidants may prevent the development dry Age Related Macular Degeneration (ARMD). Antioxidants can also help decrease the risk of developing wet ARMD.
- Cataracts can result when an inadequacy of antioxidants allow free radicals to damage sulphhydryl proteins in the lens. Studies have shown that antioxidant supplements can protect the lens against forming cataracts.

- Certain ingredients have also been shown to be beneficial in assisting body's natural recovery and healing processes after eye surgery.

Key Ingredients in 20/20 Visclear™

Vitamin A (25,000 IU)

One of four retinal photo-pigments, Vitamin A and is essential for photo-transduction. It normalizes and protects the eye's epithelial cells, including the retinal pigment epithelium.

Beta Carotene (5,000 IU)

From Dunaliella & Spirulina (vegetable algae)

Physiologically and medically, natural beta carotene functions as a potent radical quenching antioxidant. Gram for gram, dunaliella contains approximately 100 times more beta carotene than carrots. The betacarotene used in **20/20 Visclear™** contains 9-CIS Beta Carotene, a highly fat soluble, non-crystallized carotenoid.

Due to sunlight, this powerful antioxidant quencher of singlet oxygen free radicals is especially prone to be found in the eye structure. Beta carotene is important for health of the epithelial portion of the lens.

Floraglo™ Lutein (6 mg)

Patent # 5, 382, 714 & 5, 648, 564

Lutein is the predominant carotenoid found in green leafy vegetables such as broccoli, brussel sprouts, spinach, corn and pumpkins. Scientist have documented more evidence of its biological antioxidant activity in blood serum than they have for other carotenoids. Lutein is deposited in the macular region of the eye. Deterioration of this pigment has been correlated with the onset of Age Related Macular Degeneration (ARMD), the leading cause of irreversible blindness among adults over 50.

20/20 Visclear™ contains a purified form of lutein extracted from marigolds (which gives them their color), and purified by an exclusive patented process (U.S. Patent # 5, 382, 714). Because of this process, our lutein has been trademarked **Floraglo™**. It offers a level of lutein equivalent to or higher than that found in fresh vegetables and fruits. The 6 mg. level is equivalent to eating approximately 14 ounces of pumpkin.

Lyc-o-mato Lycopene (6 mg.)

Lycopene is one of the 600 known carotenoids found in plants. Five carotenoids are commonly found in human plasma from

ingesting plant foods. They are alpha carotene, beta carotene, lutein, beta-cryptoxanthin and lycopene.

The major source of lycopene is found in tomatoes and tomato based products. Other food sources are watermelon, guava, papaya, apricots, pink grapefruit and blood oranges. 85% of the dietary intake of lycopene, however, comes from tomatoes and tomato products.

According to a 1996 study, the intake of lycopene in American averages approximately 3.1 mg. to 3.7 mg. a day. Other populations have even lower intakes, with an average intake estimated to be 1.3 mg/day in Germany, 1.1 mg/day in Great Britain and 0.7 mg/day in Finland. Intake is generally higher in males than females and decreases with age. The highest intake was for American children 12 to 19 due to their higher intake of ketchup, pizza and pasta with tomato sauces. However, these sources are filled with sugar, highly processed white flour, cholesterol fat and loads of calories, hardly the best sources.

Lycopene has been demonstrated to be the most potent of all the carotenoids in quenching singlet oxygen, a highly reactive and short lived molecule capable of causing extensive cell damage. Plasma levels of lycopene are influenced by dietary intake, age, gender, hormonal status, body mass & composition, blood lipid levels, smoking, alcohol and cholesterol-lowering drugs.

Lycopene is concentrated in the liver, prostate, adrenal glands and testes. Over 80% is concentrated in the adrenal glands and testes. A higher concentration of lycopene in the organs suggests a relationship to biological function. Several studies have shown that the consumption of tomato products may reduce the risk of certain types of cancers, particularly prostate cancer. As the consumption of tomato products increases, the relative risk of cancer decreases.

The **Ly-o-mato™** brand of lycopene used in **Ultra Clear 20™**, is patented and is derived from non-genetically altered tomatoes (G.M.O. free). This standardized lycopene contains a group of important tomato phytochemicals such as toco phenols, phyto steroids and carotenoids (phytofluene, phytoene and zeta-carotene).

Spirulina (10 mg.)

Hawaiian blue-green algae

In addition to its very high carotenoid/phytonutrient activity, spirulina provides a full range of B vitamins (B₁, B₂, B₃, B₆, B₁₂) and folic and pantothenic acid. Its highly digestible protein makes it a good source amino acids and structural proteins.

Grape Seed Extract (5 mg.)

Standardized 95% OPC

Grape seed extract is a rich source of one of the most beneficial groups of plant flavonoids - the proanthocyanidens. These flavonoids exert many health promoting effects. Collectively, mixtures of proanthocyaniden dimers, trimers, tetramers and larger molecules are referred to as procyanidolic oligomers or PCO for short.

PCO extract has demonstrated a wide range of pharmacological activity. These effects include an ability to increase

intracellular vitamin C levels, decrease capillary permeability and fragility, scavenge oxidants and free radicals and inhibit destruction of collagen. Clinical studies have shown positive results in the treatment of disorders of the retina, including diabetic retinopathy and macular degeneration.

Bilberry Extract (25mg.)

Standardized 25% anthocyanosides

10:1 concentrate (equivalent to 250 mg.)

- Helps reduce near-sightedness
- Reinforces the portion of the retina responsible for adaptation from dark to light and vice versa
- Improves night vision
- Helps reverse diabetic retinopathy
- Has a strong affinity for pigmented epithelium of the retina (optical or functional portion of retina) where it reinforces collagen structures and prevents free-radical damage
- Contains high levels of anthocyanosides widely used for clinical applications, including treatment of poor day vision, glaucoma and macular degeneration.

Ginkgo Biloba (5 mg.)

Standardized

- Helps to prevent ischemia and free-radical damage to the retina and macula
- Has been shown to be helpful in the treatment of macula degeneration. Ginkgo heterosides exert powerful antioxidant and free-radical scavenging activity with significant specificity for the eye
- Reduces vascular insufficiency associated with ageing and atherosclerosis. Increases cerebral blood-flow, and helps oxygenation of brain cells
- Inhibits platelet aggregation

Eyebright (Euphrasia officinalis) (5 mg.)

This popular herb has been used for over 2000 years in the treatment of eye diseases and to restore poor vision. Known to reduce soreness and inflammation of the eyes.

Helps arrest abnormal discharge, counteract infection and strengthen eye tissues.

Folklore says it brings sparkle to the eyes

Bioperine™ (5 mg.)

Standardized 95% Piperine

US Patent #5, 536,506, 5,744.161

Bioperine™ is referred to as nature's thermotransport enhancer and bioavailability enhancer. Clinical studies show that Bioperine interacts directly with the intestinal epithelial cells, increasing their ability to absorb food and nutrients.

Beta carotene absorption varies among humans, with some individuals consistently absorbing it well, while others do not. Recently a bio-availability study showed that using 5 mg. of **Bioperine™** with 15 mg. of beta carotene once a day increased the blood levels of beta carotene almost twofold. These results indicate that **Bioperine™** possesses the potential to increase the bio-availability of other nutrients as well.

Selenium (L-Selenomethione) (70 mg.)

The human lens' glutathione peroxidase is selenium-dependent. Studies show that the selenium content in the human lens with cataracts is only 15% of normal. Selenium also protects the cell, the mitochondria, the microsomes and the lysosome membranes from lipid peroxidation damage. Selenium is closely related to vitamin E in many of its antioxidant functions. It is very important in the treatment of ARMD.

OptiZinc™ (10 mg.)

Zinc is an important antioxidant vital for normal lens function and integrity. Therefore, it is an important nutrient in the treatment of macular degeneration. Zinc is distributed in all tissue, with substantial concentrations in the eyes, particularly the retina, iris and choroid. It helps maintain normal vitamin A levels and is important for insulin activity, immune function, wound healing and synthesis of protein and DNA.

The optimum ratio of Zinc to Copper is 10:1.

Copper Gluconate (1 mg.)

The beneficial effects of copper relate to its role as the metallo portion in several enzymes. The two enzymes with the greatest clinical relevance are lysyl-oxidase (required in the normal cross-linking of collagen and elastin) and super oxide dismutase (SOD) which breaks down the super oxide free radical. A copper deficiency is associated with poor collagen integrity. This poor integrity manifests itself in the rupture of blood vessels, brain disturbances, increased lipid peroxidation, elevated LDL cholesterol and reduced HDL cholesterol levels and impaired immune function. As stated previously, the proper ratio of copper to zinc is 1:10.

Taurine (75 mg.)

This amino acid is important in retinol functioning. It appears to protect photoreceptors and regulate signal transduction. Retinol pathologies, including diminished ERGs and morphologic changes have been observed when taurine is deficient.

L-Glutathione (5 mg.)

A powerful antioxidant compound found in very high concentrations in the lens of the eye where it maintains reduced sulphur bond protein. It protects the lens against damage by toxins and has been found to be diminished in virtually all forms of cataracts. It also plays a major role as an antioxidant in the prevention of ARMD.

N-Acetyl Cystine (50 mg.)

The key component of the body's antioxidant defence system. It is a powerful free radical scavenger and has the ability to chelate heavy metals. It is known to increase the tissue levels of glutathione and protect the liver against dysfunction and hepatotoxicity.

L-Glycine (25mg.)

Glutathione is produced by the contribution of three amino acids: *glutamic acid, cysteine and glycine*. Glycine is one of the few amino acids that helps spare glucose for energy by improving glycogen storage. It is important for brain metabolism, where it has a calming effect. Glycine is needed for the synthesis of the hemoglobin molecule, collagen and glutathione. When blood fat or uric acid levels are too high, it helps clear or utilize these substances. Glycine has also been shown to be helpful in reducing gastric acidity.

Alpha Lipoic Acid (10 mg.)

A powerful antioxidant that is both fat and water soluble. It regenerates or mimics other less powerful antioxidants like vitamin C and vitamin E and raises glutathione levels.