

Micronutrients for the Vitreous Body

Information intended for health care professionals only

Tested Efficacy:^{1, 2, 3, 4, 5, 6}
success rate >60%-80%



1 Capsule daily Contains grapeseed and citrus fruit extracts, vitamin C, zinc and L-lysine

Food supplement designed to support eye health

- 1.) Ankamah E, Green-Gomez M, Roche W, Ng E, Welge-Lüssen U, Kaercher Th, and Nolan JM. Dietary intervention with a targeted micronutrient formulation reduces the visual discomfort associated with vitreous degeneration, Translational Vision Science and Technology (TVST) 2021; in publication
- 2) Welge-Lüssen U, et al. Der Ophthalmologe, Suppl 2 DOG Do03-04, 2019, S30
- 3) Veryasova, A.G. et al. Ophthalmology journal (rus) 2019, 12, 67-72.
- 4) Sobol M, et al. Journal of Alzheimer's Disease 64 (2018), (BON 030, S. 16-17)
- 5) Marchanka L, et al. Ophthal East Europe 2015;25:123-128
- 6) Gerste RD, Kaercher Th. Pharma Report, ZPA 344; April 2013



Waterford double-blind, placebo-controlled, prospective trial

Study design

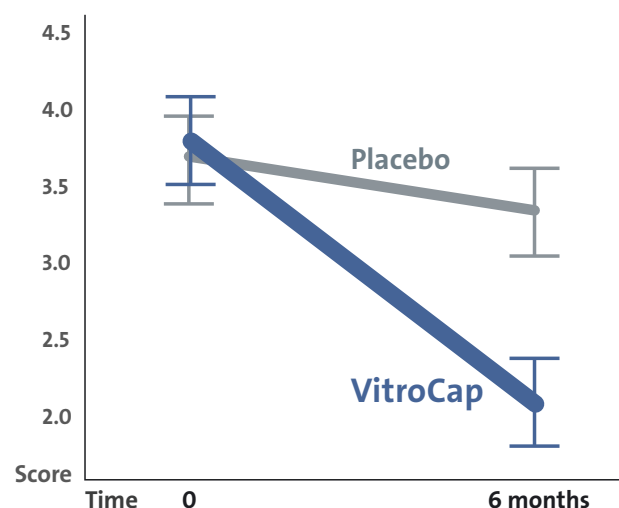
- 61 patients suffering from vitreous floaters (VF)
- Randomized in Active n=31 and Placebo n=30
- ø Age 57.4 years (18-79 y.)
- VF suffering evaluated by using a Floater Disturbance Questionnaire
- Secondary outcome measures: contrast sensitivity, vitreous opacity quantification

Dietary supplementation

6 months 1 capsule/day placebo or VitroCap[®]N

Results

Significant improvement of visual discomfort:



Active group:

- desired therapeutic effect was achieved in 66.6% of patients
- photopic contrast sensitivity + quantitative vitreous opacity areas improved significantly

VitroCap®N is designed to supplement the diet to help support the eye's need for specific micronutrients. Certain structural changes in the vitreous body, e.g. clouding or clumping, affect the transmission of the light and thereby the quality of vision. To maintain function, these structures in the eye require sufficient and specific nutrients.



Nutrition information

per daily dose 1 capsule %NRV*

Zinc	5 mg	50%
Vitamin C	40 mg	50%
Grape seed extract	26.3 mg	**
of which proanthocyanidins	25 mg	**
Citrus fruit extract	100 mg	**
of which bioflavonoids as Hesperidin	60 mg	**
L-lysine	125 mg	**

* NRVs Nutrient Reference Values in average adults

Recommended intake: Take one VitroCap®N capsule daily with water and after food for a minimum of 3 to 6 months. Food supplements are not a substitute for a varied and balanced diet and a healthy lifestyle! Do not exceed the recommended daily amount. Pregnant and breastfeeding women should consult their doctor before use. If you are under medical supervision, taking medication or suffering from a disease, please consult your doctor before taking.

Ingredients: L-lysine hydrochloride, citrus fruit extract (Citrus aurantium L.), capsule shell (coating agent: hypromellose, colouring food: spirulina and apple concentrate, invert sugar), filler: microcrystalline cellulose, L-ascorbic acid (vitamin C); grape seed extract (Vitis vinifera L.), Zinc oxide, anticaking agents: magnesium salts of fatty acids, silicon dioxide.

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We will be happy to advise you!

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Mode of action of dietary support for the vitreous body:

1. Inhibition of the glycation of collagen fibres

- L-Lysine inhibits the glycation by 76%*¹, also acts as a chemical chaperone, a protein required for the proper folding and/or assembly of another protein or protein complex.*¹⁰

- Flavonoids (Hesperidin) significantly inhibit the collagen fibres from forming a meshwork.*²

- Zinc has shown antiglycation properties.*¹¹

2. Modulation of the degrading enzymes of hyaluronic acid and collagen

- Procyanidines from grape seed extract (*Vitis vinifera* L.) modulate the activity of collagenase, hyaluronidase and elastase.*^{3,4}

3. Inhibition of the oxidative damage of the collagen fibres

- Ascorbic acid and procyanidine are powerful antioxidants in an aqueous environment.*^{4,5,6,9}

- Zinc exert its antioxidative effects by protecting sulfhydryl groups from oxidation.*⁷

- Zinc acts as a co-factor for important enzymes involved in the proper functioning of the antioxidant defense system.*⁸