

## Eye Health Relief and focus

### Bilberry

(*Vaccinium myrtillus L.*)

- Native to Europe, bilberry is one of the richest natural sources of antioxidant anthocyanins.<sup>1</sup>
- Fruit is used for nearly 1000 years in traditional European medicine for the treatment of varicose veins, diarrhea and mild inflammation.<sup>2,3</sup>



### Studied benefits of Bilberry

*Clinical studies on healthy subjects*

#### Improves eye function

- ✓ Alleviates eye dryness after screen time<sup>4,5,6</sup>
- ✓ Alleviates sensations of eye fatigue, pain and heaviness<sup>4,7</sup>
- ✓ Improves accommodative eye function<sup>4,6,8,9</sup>
- ✓ Improves vision sharpness<sup>9,10</sup>
- ✓ Allows a deeper eye focus and a clearer vision field<sup>6,9,10</sup>
- ✓ Slows down myopia progression in children<sup>11</sup>

#### Highly antioxidant

- ✓ Protects eye cells from light-induced oxidative stress damage<sup>5,6</sup>
- ✓ Its antioxidant components regenerate rhodopsin that transports visual information to the brain<sup>12</sup>

**Blue light from screens is a source of oxidative stress in the eye causing eyestrain and dryness<sup>6,13</sup>**

**59% of people report experiencing symptoms of eyestrain.<sup>14</sup>**

## A daily softgel for eye relief and focus

### Formulation example

- Bilberry fruit extract 100 mg
- DHA rich **algae oil** or **fish oil**
- Other health ingredients on request

- ✓ European bilberry extract
- ✓ All-natural
- ✓ GMO-free



“Contributes to the maintenance of normal vision”

“Contributes to the normal development of the eye of the foetus and breastfed infants”

(EFSA health claims - DHA)

#### Available capsule options

- Gelatin: fish, bovine, organic pork
- Shape: oval, oblong
- Color: naturally clear

# SIRIO

## Bilberry

Eye Health – Relief and focus



### Softgel key benefits

- ✓ Single dose
- ✓ High compliance rate
- ✓ Premium quality ingredients
- ✓ High bioavailability
- ✓ Fill protected from oxidation and degradation
- ✓ Excellent dose uniformity
- ✓ Easy to swallow



Made in Germany

Manufacturing site **pharma GMP, US-FDA, IFS, BRC, EU Organic, MSC, FOS, Feed certified**  
For more information, please visit our website: [sirio-europe.com](http://sirio-europe.com)

Market launch is subject to local regulatory requirements

1. Chu WK, Cheung SCM, Lau RAW, Benzie IFF. Bilberry (*Vaccinium myrtillus* L.). In: Benzie IFF, Wachtel-Galor S, editors. Herbal Medicine: Biomolecular and Clinical Aspects. 2nd ed. Boca Raton (FL): CRC Press/Taylor & Francis; 2011. Chapter 4.
2. European Union herbal monograph on *Vaccinium myrtillus* L., fructus recens EMA/HMPC/375808/2014.
3. Monograph, European Scientific Cooperative on Phytotherapy (ESCOP), Myrtilli fructus, Bilberry fruit, 2014.
4. Liang T. et al., Effect of a bilberry extract (BILBERON®)-containing diet on the improvement of eye fatigue-related symptoms (II) - A randomized, double-blind, placebo-controlled, parallel-group comparison study. Japanese pharmacology and therapeutics, 45(9), 1523-1534, 2017.
5. Riva A. et al., The effect of a natural, standardized bilberry extract (Mirtoselect®) in dry eye: a randomized, double blinded, placebo-controlled trial, European Review for Medical and Pharmacological Sciences, 21(10):2518-2525, 2017.
6. Sekikawa T., The effect of consuming an anthocyanin-containing supplement derived from Bilberry (*Vaccinium myrtillus*) on eye function: A Randomized, Double-Blind, Placebo-Controlled Parallel Study, Functional Foods in Health and Disease; 11(3): 116-146, 2021.
7. Ozawa Y. et al., Bilberry extract supplementation for preventing eye fatigue in video display terminal workers. The journal of nutrition, health & aging volume 19:548–554, 2015.
8. Kosehira M., A 12-Week-Long Intake of Bilberry Extract (*Vaccinium myrtillus* L.) Improved Objective Findings of Ciliary Muscle Contraction of the Eye: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Comparison Trial, Nutrients 12, 600, 2020.
9. Kizawa Y. et al., Effects of anthocyanin, astaxanthin, and lutein on eye functions: a randomized, double-blind, placebo-controlled study, Journal of Clinical Biochemistry and Nutrition 11(3):1-14, 2021.
10. Shim S. H. et al., Ginkgo Biloba Extract and Bilberry Anthocyanins Improve Visual Function in Patients with Normal Tension Glaucoma, Journal of Medicinal Food 15(9): 818-823, 2012.
11. Omar, Ismail Ahmed Nagib. Effect of bilberry extract on slowing high-myopia progression in children: 2-year follow-up study. Clinical ophthalmology, 12: 2575-2579, 2018.
12. Matsumoto H, Nakamura Y, Tachibanaki S, Kawamura S, Hirayama M. Stimulatory effect of cyanidin 3-glycosides on the regeneration of rhodopsin. J Agric Food Chem. 51 (12): 3560-3, 2003.
13. Lee J.B. et al., Blue Light-Induced Oxidative Stress in Human Corneal Epithelial Cells: Protective Effects of Ethanol Extracts of Various Medicinal Plant Mixtures, Investigative Ophthalmology & Visual Science, 55: 4119-27, 2014.
14. LG Digital - eyesafe@: eyesafe.com/lgdisplay.

**SIRIO Europe GmbH & Co. KG**

Am Hünengrab 20 | 16928 Pritzwalk, Germany | [sirio.ayanda.info@siriopharma.eu](mailto:sirio.ayanda.info@siriopharma.eu)