



### Dietary supplementation and glaucoma

#### ***The Science behind the Tip***

Dietary supplements belong to the broad group of complementary and alternative medicine (CAM). A recent survey in Canada has found that 1 in 9 glaucoma patients was using CAM. Most of them were using herbal medicines (34.5%), dietary modifications (22.7%) or dietary supplements (18.8%)<sup>1</sup>. Based on the fact that some glaucoma patients continue to progress at low IOPs, a wide space is left for hypotheses, preclinical experiments, clinical trials and speculations! There is a rationale to consider that dietary supplementation could help in glaucoma. For instance oxidative stress is well established in glaucoma and combat that stress makes sense<sup>2</sup>. Another example is the ability of the omega 3 polyunsaturated fatty acids (PUFAs) to decrease IOP in rats<sup>3</sup>.

Unfortunately there is not robust interventional dietary supplementation study demonstrating the positive effect of such a treatment in glaucoma patients. Conversely there is evidence that some of these compounds may harm, such as an increase intake of magnesium which was found associated with a higher incidence of glaucoma<sup>4</sup>.

Several observational studies have pointed out a reduced risk for glaucoma for higher fruits and vegetables intake<sup>5</sup> or higher omega 3 PUFAs consumption in selected populations<sup>6</sup>. However additional prospective studies are mandatory before glaucoma specialists can recommend any valid dietary supplementation.

#### ***References***

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