

The Science Behind The Read Without Glasses Method

Presbyopia, the loss of up-close focus that forces billions of people to wear reading prescriptions around or after 40 years old, is commonly considered an inevitable, unpreventable fact of aging. The condition affects 100% of the population by age 50--the only "treatments" said to be reading glasses, bifocal or multi-focal glasses, multi-focal or monovision contact lenses, or surgery.

The Read Without Glasses Method, a natural, eye training system for home use, more than challenges the conventional thinking. Rather, in a series of structured exercises, *The Read Without Glasses Method* offers a range of remedies--somewhere between delaying the onset of presbyopia to reversing it or stopping it altogether.

The Read Without Glasses Method is based on a longstanding, accepted ophthalmic fact: "the convergence/accommodation mechanism," ⁽¹⁾ which Dr. Ray Gottlieb, a Rochester, N.Y., behavioral optometrist, applied successfully to the particular problem of presbyopia. To prevent blurred and double vision at near-vision, the eyes adjust themselves by automatically increasing accommodation (the eye's ability to focus clearly at near-vision) and convergence (the ability to turn and aim both eyes in tandem at a near object). The fact that converging the eyes increases accommodation has been known for over 100 years. ^{(2) (3) (4)} Additional clinical research also finds that presbyopic eyes can be made to accommodate more through the convergence/accommodation mechanism. ^{(5) (6)}

What was never before examined until Dr. Gottlieb began looking at the issue was whether the accommodation of presbyopic eyes (ones that lack sufficient accommodation due to age) could be stimulated by convergence. Dr. Gottlieb found that it can. Further, Dr. Gottlieb found, along with the increase in accommodation, that the accuracy, strength and flexibility of one's convergence also improved. ⁽⁷⁾

The Read Without Glasses Method uses an especially designed target to stimulate the eyes to converge at a distance of approximately eight inches while accommodating focus at approximately sixteen inches. This extra eight inches of convergence stimulates enough additional accommodation to allow eyes of presbyopes to clearly see small print at sixteen inches. With practice of the method, presbyopia improves. When most people with presbyopia are taught to converge twice as close as the normal reading distance, they report that blurred text becomes much clearer, sometimes crystal clear.

Millions of dollars are spent developing devices, operations and FDA-approved surgical methods to eliminate presbyopia. Ophthalmologists are advertising costly cataract operations to eliminate presbyopia using a special lens implant for presbyopes who do not yet have cataracts, despite such known risks as ocular infection, retinal detachment, macular degeneration and corneal malfunction. The risks are significant ⁽⁸⁾ especially when the chances

for a successful optical outcome are uncertain. ⁽⁹⁾ In some cases, patients must still practice vision exercises for several months after surgery in order to achieve the results they want.

Does exercising with *The Read Without Glasses Method* reduce presbyopia? Yes. Clinical evidence gathered in Dr. Gottlieb's practice indicates that a large percentage of people over 40 continue to have clear near-vision after using the exercises even if they have been diagnosed with presbyopia and even after they've been using weak, medium or strong reading glasses for years.

Does it last? Yes. Can one expect to stop needing bifocals and reading glasses day-to-day and read labels, do computer work, or read for hours without glasses? Again, Dr. Gottlieb's clinical experience is that within a few weeks or months, many people eliminate the need for reading glasses. Clinical experience has also shown that those who continue doing the exercises on a regular basis can continue to avoid needing a reading prescription. Some patients, even after 10 or more years, still do not need glasses or contacts for clear and comfortable near-vision. ⁽¹⁰⁾

FOOTNOTES

(1) "Mutually, convergence can influence accommodation; this coupling is known as the convergence-accommodation/convergence ratio (CA/C). These reciprocal couplings are well integrated in current thinking and modeling of the (con)vergence system." "Listings plane rotation with convergence: Role of disparity, accommodation, and depth perception": Zoi Kapoula, Marijus Bernotas, Thomas Haslwanter, *Experimental Brain Research*, 1999, 126:175-186.

(2) "Elements of Physiology": Mueller, J. Translated from the German by W. Baly. Vol. II, 1842, p. 1147, Taylor and Walton, London.

(3) "Helmholtz's Treatise on Physiological Optics": Helmholtz, H.L.F. von. (Translated from the German Handbook of Physiological Optics, 1856, Ed., Sowthall, J.P.C.) Vol. III, 1925, pp. 37-123. The Optical Society of America, Rochester, N.Y.

(4) "Types of Movement": Alpern, M. *The Eye*, Vol. III, 1962, pp. 91-142.

(5) "Empirical Studies of Accommodation, Convergence, and HMD Use": Howarth, P.A. The extra (con)vergence input to the accommodation system brought about by fusing crossed-disparity images could therefore act beneficially to improve retinal image clarity.

(6) "Presbyopia and Amplitude of Accommodation": Larry Lothringer, MD. ". . . it is not uncommon to observe the patient using their strong convergence accommodation to resolve small print type at near-point levels between 9-15 cm. Once the image is captured, their convergence-accommodation is released to a more comfortable posture of 30-40 cm. This action appears to be contrary to the usual push-up method and has been referred to as the push-down method. Through the combination of the voluntary forces of accommodation and strength of the convergence mechanism, it appears that the patients are re-establishing the synkinesis of the two systems."

(7) "Presbyopia and Convergence or Presbyopia of Convergence": Mawas, L.J.; Diraison, C.; Fox, A.; and Thiollet, L.: "There is significant role for orthoptics [vision exercises] to help the young presbyope to adapt comfortably to the use of his new near correction."

(8) "Refractive lens exchange with the array multi-focal intraocular lens": Packer, Mark, MD. "Cataract surgery is increasingly performed for earlier lens opacities, and clear lens extraction for correction of refractive errors and presbyopia is also gaining popularity." *Journal of Cataract & Refractive Surgery*, Vol. 28, Issue 3, Mar. 2002, pp. 421-424.

(9) The optical side effects of the Array IOL are well known. Fifteen percent of patients have difficulty with halos at night, and 11% have difficulty with glare; [1] Despite these limitations, bilateral Array IOL implantation is a reasonable alternative for presbyopic patients who are motivated to reduce or eliminate dependence on spectacles.

(10) Proposals for controlled studies of *The Read Without Glasses Method* are currently being prepared for university clinics in the U.S. and U.K.