THE IMPACT OF RELIGIOUS FASTING ON OCULAR HEALTH Cușnir Valeriu¹², Dumbrăvenu Lilia¹², Lupan Valentina¹², Storoja Ana-Maria²

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Introduction. Religious fasting can have various effects on ocular health, both positive and potentially negative, depending on how it is practiced and its duration. It is important to note that understanding and observing religious customs are often subjective and diverse, and their influence on ocular health can vary from person to person.

Objective of the study. The study aims to provide understanding of how temporary dietary restrictions may affect eye health, by supplying data to assist in formulating medical recommendations for individuals practicing religious fasting.

Methods and Materials. To achieve the stated purpose, we conducted a literature review analysis using the NCBI and PubMed databases.

Results. Orthodox fasting may affect intraocular pressure under certain circumstances, although specific studies analyzing this relationship in detail are limited. There may be some changes in metabolism and nutrient levels available to the body; however, intraocular pressure values typically do not differ significantly between fasting and non-fasting periods. Excluding animal-derived proteins from the diet may have varied impacts on ocular health, depending on how this change is managed and individual organism needs. Plant proteins can provide all essential amino acids for complete nutrition, though diversity is necessary to ensure adequate absorption. Consumption of red meat stimulates the growth of N-nitroso compounds, which upon breakdown generate highly toxic radicals that can accumulate in retinal pigment epithelial cells, stimulating vascular endothelial growth factors and contributing to age-related macular degeneration (AMD). Alternative plant sources such as vitamin A, lutein, zeaxanthin, and Omega-3 fatty acids are critical for eye health, aiding in proper eye hydration and reducing inflammation.

Conclusions. Religious fasting can have diverse effects on ocular health, both positive and potentially negative, depending on how it is practiced and its duration. An animal protein-free diet may be suitable for ocular health if properly planned to ensure sufficient essential nutrients from diverse plant sources. It is advisable to monitor nutrient levels through blood tests and, if necessary, to use supplement accordingly.