

Viewpoint

Nutritional Supplements Recommended For Managing & Preventing Dry Eye Disease

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Dry eye disease (DED) is a multifactorial disease of the ocular surface system that probably affects the population over the age of 50. Polyunsaturated fatty acid (PUFA) supplements involving omega-3 components have been proposed as a therapy for dry eye. It can be derived from certain plant- and marine-based foods. Additionally, vitamin A, B12 & D are also found to be evident in the management of DED. We need to analyze the possible role of different micronutrients and nutraceutical products for the treatment of ocular surface diseases. We reviewed literature to explore clinical indications for accuracy, strength and weakness of micronutrients and nutraceutical products for managing & preventing dry eye disease. We also figured out the effects of omega-3 fatty acids, vitamin A, B12 and D. According to various studies published between 2019 and 2020, it has been stated that omega-3 fats, vitamin A, B12 and D are found to have beneficial effects on dry eye symptoms. Omega-3 fats work by diminishing inflammation while vitamin A, B12 and D assist in reducing inflammation, burning sensation and help in the formation of tears. Vitamin A, B12 and D are known to improve symptoms of DED. Results were variable across studies. Yet based on the systematic reviews done it shows that long-chain omega-3 PUFA supplementation confers benefit for tear production, quantified via the Schirmer test and tear osmolarity among individuals suffering from DED. These findings needs to be known to all the medical fraternity for their treatment modalities in helping the people suffering from Dry eye disease

Keywords: Dry eye disease, omega-3 fatty acids, PUFA, vitamin A, B12, D, nutraceutical.

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