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Paper Abstracts
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Spice treatment for the dry eye: Is saffron supplementation effective on ocular surface health?

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Purpose: To explore the potential of oral saffron supplement in the management of dry eye disease.
Method: In this triple-masked prospective clinical trial total of 35 participants with dry eye received either saffron supplements (treatment, n = 17) or placebo (control, n = 18) for 3 months. Dry eye symptoms and signs were evaluated using the Ocular Surface Disease Index (OSDI), non-invasive break-up time (NIBUT), invasive break-up time (TBUT), tear meniscus height (TMH), Schirmer test II (SH test II), and contrast sensitivity (CS).
Results: After 3 months, Within the saffron group, the Wilcoxon Signed-Rank Test showed significant improvements after 3-month supplementation in OSDI ($p < 0.001$), TBUT ($p < 0.001$), NIBUT ($p < 0.001$), TMH ($p = 0.008$), and SH test II values ($p = 0.008$), while CS did not show a significant change ($p = 0.141$). In the placebo group, no significant changes were observed across outcome measures (all $p > 0.05$) except for SH test II ($p = 0.03$). Between-group comparison of change scores using the Mann–Whitney U test demonstrated significantly greater improvements in the saffron group than the placebo group for OSDI ($p < 0.001$; mean rank 11.26 vs. 24.36), TBUT ($p < 0.001$; 25.68 vs. 10.75), NIBUT ($p < 0.001$; 25.97 vs. 10.47), and TMH ($p = 0.006$; 22.85 vs. 13.42). No significant between-group differences were found for SH test II ($p = 0.123$; 20.71 vs. 15.44) or CS ($p = 0.501$; 18.8 vs. 18.88).
Conclusions: Saffron may provide benefits useful in the management of dry eye disease. Future investigations are necessary to explore whether this effect can be maximised by changing the dosage, or formulation, and in different populations.

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