

# THE EFFECT OF THE MEDITERRANEAN DIET ON DISEASE ACTIVITY, FUNCTION AND FATIGUE IN PATIENTS WITH RHEUMATOID ARTHRITIS

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## Background and Aims

In order to maintain remission or low disease activity and prevent disease progression in rheumatoid arthritis (RA), a multimodal approach is preferred one, including pharmacological and non - pharmacological treatment. The aim of our study was to evaluate effect of the Mediterranean diet on RA activity.

## Methods

A total of 26 patients (19 female and 7 male) mean age 61 years from the Sestre milosrdnice University Hospital Center were observed in longitudinal analyses from February 2025 to April 2025, at baseline (T0), after 6 week period (T1). All the patients underwent nutritional consultation and following data were analyzed: demographic, clinical and laboratory data, as well as composite indices and questionnaires assessing disease activity (DAS 28), function (HAQ-DI) and fatigue (FACIT-F). No pharmacological therapy was changed in the time frame of interest.

## Results

The mean DAS28 score significantly decreased from  $4.13 \pm 1.20$  at T0 to  $3.45 \pm 1.39$  at T1, with a mean change of  $-0.68 \pm 0.76$  ( $p < 0.001$ ). Mean HAQ-DI scores demonstrated modest improvement from 1.04 (SD=0.83) at T0 to 0.96 (SD=0.68) at T1 (mean change -0.08, 95% CI -0.32 to 0.16). While 54% of patients showed reduced disability scores (median improvement -0.5 points), the overall difference did not reach statistical significance ( $p=0.483$ ). Mean FACIT-F scores improved significantly from  $29.6 \pm 11.2$  (T0) to  $33.5 \pm 10.8$  (T1), with a mean increase of +3.9 points (95% CI: 1.5-6.3). Effect size was moderate-large.

## Conclusion

In our cohort of patients with established RA, Mediterranean diet showed positive effects on significantly improving disease activity and fatigue, with moderate improvement in function. Dietary guidelines for RA patients should be made in order to improve outcomes in these patients.

**Keywords:** Rheumatoid, arthritis; Mediterranean, diet; fatigue