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The effects of a short-term Mediterranean diet intervention on mood and mental wellbeing in adults

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Emerging evidence suggests protective properties of a Mediterranean diet (MD) in relation to prevention and management of mood disorders⁽¹⁾. However, there is paucity of dietary interventions investigating adherence to MD and effects on mood and wellbeing in individuals without a clinical diagnosis. The present study aimed to investigate the effects of adherence to a short-term MD on mood and wellbeing in healthy adults.

A controlled crossover design randomly assigned 18 adults (Age(yrs) 53.74 (\pm 7.10), BMI(kg.m²)26.62 (\pm 5.45)) to follow a MD or their habitual diet (control) for 7-days, before switching to the alternate condition (following a 7-day washout). At baseline, an Educational Group Session familiarised participants with MD principles through informal presentation and interactive explanation of participant resource booklets to use at home throughout the MD condition only. Anthropometric characteristics, self-reported mood (Profile of Mood States (POMS), Lader Visual Analogue Scale(VAS)) and wellbeing (Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)) were assessed at baseline and upon completion of each diet condition. The MD Adherence Screener (MEDAS) assessed adherence to the interventions.

A significant difference was found in MD adherence scores between MD (M = 11.3, SD = 1.8) and Control Diet (CD) (M = 2.5, SD = 1.5); $t(17) = 16.1$, $p < 0.001$). Main effects analysis using a general linear model controlling changes in body mass index showed significant effects of MD intervention versus the CD on the change in total mood disturbance (M(MD) = -15, SD = 12), M(CD) = -3, SD = 9), $F(1,31) = 4.9$, $p = 0.034$); feelings of calm (VAS) (M(MD) = 9, SD = 14), M (CD) = -2, SD = 6), $F(1,31) = 8.5$, $p = 0.006$); wellbeing (M(MD) = 6, SD = 5), M(CD) = -2, SD = 6), ($F(1,31) = 6.6$, $p = 0.015$).

These findings suggest that a short-term dietary change towards a MD can improve mood, feelings of calm and overall wellbeing in middle aged adults.

References

1. Lassale C, Batty GD, Baghdadli A *et al.* (2019) *Mol Psychiatry* **24**, 965–986.