

Morningness and sleep quality improve adherence to Mediterranean Diet

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Background and objectives:

Chronotype (morning or evening) and sleep quality (SQ) have been linked to obesity as well as to dietary intake (food and nutrients). Morning oriented people tend to have a more balanced diet and a healthier lifestyle compared to evening types; similar relationships have been found with SQ. However, no study has examined the relationship between chronotype, SQ, and adherence to the Mediterranean Diet (AtMD), which is a healthy dietary pattern that provides the right proportion of most nutrients. Our aim was to examine the potential relationship between chronotype and SQ with AtMD.

Methodology:

One hundred forty-nine students (20–32 years; 78.5% females) from the University of Barcelona (UB) were included in a cross-sectional study. Chronotype was assessed using the Spanish version of Horne and Östgeberg's morningness–eveningness questionnaire (MEQ), SQ with the Pittsburg Sleep Quality Index (PSQI) and AtMD with the KIDMED questionnaire. Higher scores of MEQ and KIDMED indicate morningness and higher AtMD respectively, whilst lower scores of the PSQI indicate good SQ. All the data were collected using the free software Open Data Kit. Scores were treated as continuous variables, significance level was considered when $p < 0.05$ and, after testing interactions, a linear regression model was performed and adjusted by confounding factors.

Results and conclusions:

Higher MEQ scores ($\beta = 0.047$, $p = 0.006$, $r^2 = 0.058$) and lower PSQI scores ($\beta = -0.163$, $p < 0.001$, $r^2 = 0.058$) predicted higher AtMD. Our results suggested that morningness and good SQ improve AtMD, these findings could contribute to provide holistic guidelines in order to reduce the prevalence of obesity during adulthood.

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