

Personality, Chrono-nutrition and Cardiometabolic Health: A Narrative Review of the Evidence

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ABSTRACT

Growing evidence suggests that personality traits play a role in obesity and cardiometabolic health. In addition, irregularity of food intake has emerged as a potential risk factor for obesity, cardiovascular disease, and metabolic syndrome. Recent studies suggest that when we eat, termed “chrono-nutrition,” may be as important to what we eat. This concept covers 3 aspects: 1) irregularity of energy intake in meals (varying amounts of energy intake throughout the day and at different times from one day to the next), 2) frequency (number of meals per day), and 3) timing of food intake (actual time of day). A narrative review was conducted to identify literature evaluating the effect of personality on chrono-nutrition and subsequently obesity and cardiometabolic health. The search focused on research published since 2000 in MEDLINE using the search terms “personality,” “chrono-nutrition,” “cardiometabolic,” “BMI,” “obesity,” and “metabolic rate.” Findings indicate an inverse relation between conscientiousness and obesity, with people who are more conscientious having a lower risk of obesity. Furthermore, time of day of energy intake has been linked to obesity, since meals consumed in the evening have been associated with lower resting metabolic rate. Inconsistent timing and frequency of meals have also been linked to increased body weight and worse cardiometabolic health. Together, the data indicate that eating meals at the same time every day at regular intervals might be the reason why those who score high in conscientiousness are able to maintain a healthier weight. Despite the reviewed

observational evidence, there is an apparent gap in the existing literature on the interplay between personality, chrono-nutrition, and obesity and particularly on how dietary interventions should be designed considering different personality traits. Future research is needed to clarify this association and how it interacts with other factors, thus elucidating the role of chrono-nutrition in health.

Keywords: [personality](#), [chrono-nutrition](#), [cardiometabolic health](#), [BMI](#), [obesity](#)

Topic: [obesity](#), [body mass index procedure](#), [personality](#), [eating](#), [science of nutrition](#), [narrative review](#), [conscientiousness](#)

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