

Abstract

Cross-sectional and longitudinal associations between time-restricted eating, modifiable lifestyle factors, and cardiometabolic health.

Worldwide, cardiometabolic diseases (CMDs) present not only health but also an economic burden. A prolonged daily eating window, inadequate sleep, insufficient physical activity, and chronic stress are an increasing concern in modern society and are associated with the disruption of circadian rhythm and impairments to cardiometabolic health. A growing body of evidence indicates that disruption of circadian rhythm is a risk factor for CMDs. Time-restricted eating (TRE), a shortened daily eating window to less than 12h, has been shown to improve markers of cardiometabolic health. However, no other study has investigated whether and to what extent lifestyle factors such as sleep, physical activity, and stress separately and combined (combined lifestyle factors) affect the association between TRE and cardiometabolic health. Moreover, it is unclear how TRE in combination with these lifestyle factors affects the risk of cardiometabolic-associated morbidity in the long term. Therefore, the project aims to examine the association of TRE and individual or combined lifestyle factors with markers of cardiometabolic health. Furthermore, the question should clarify which effect TRE combined with lifestyle factors has on the risk of CMDs.