

Assessing the Cardiovascular Impact of Intermittent Fasting on Type 2 Diabetes Mellitus Patient : A Systematic Review

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Introduction

For those with type 2 diabetes mellitus (T2DM) and other medical disorders, intermittent fasting (IF) has drawn interest as a possible treatment option for cardiovascular disease. The review embraces a range of research, including umbrella reviews and network meta-analyses, emphasizing the possible advantages of IF on weight loss, insulin sensitivity, cardiovascular markers, betterment in blood pressure, lipid profiles, and inflammatory markers, which are pivotal factors in reducing the risk of cardiovascular diseases.

Method

In accordance with a cohort study, people who fast on alternate days for six months routinely cut their caloric intake by about 28.5%. This was coupled to decreased levels of low- and very-low-density lipoproteins as well as circulating lipids, such as triglycerides, but no changes in high-density lipoprotein plasma levels were observed. Additionally, alternate-day fasting improved a number of cardiovascular health parameters, including pulse pressure, pulse wave velocity, systolic and diastolic arterial blood pressures, and resting heart rate. Short-term alternate-day fasting significantly lowered the Framingham Risk Score, which calculates the 10-year risk of developing cardiovascular disease, even though it had no effect on blood lipid levels. Although the literature currently in publication offers hope for the beneficial effects of IF on cardiovascular health outcomes, there are disparity in the findings of these studies, entailing additional research to determine the best fasting schedules and long-term effects of IF. The combination of IF with regular exercise provides added value in lowering cardiovascular risk and strengthening overall health outcomes.

Result

Furthermore, considering other approaches such as IF in the management of these diseases and the avoidance of related cardiovascular problems is vital given the prevalence of prediabetes and T2DM. To validate the results and evaluate the efficacy of IF in a variety of populations, more randomized controlled trials are requisite.

Conclusion

To sum up, there is a chance to improve cardiovascular health and alleviate the worldwide burden of cardiovascular illnesses by enforcing intermittent fasting. To best apply IF as a therapeutic intervention for people at risk of cardiovascular disorders and to elucidate the reasons behind its effects on cardiovascular risk factors, more research is required.

Keyword

Intermittent fasting, cardiovascular health, diabetes, lipid profile