

Fasting as a lifestyle for cardiovascular disease prevention and therapy: The different modes of fasting and the neglected role of motivation

A narrative review

Introduction

Cardiovascular disease (CVD) is the leading cause of death worldwide

32% of all deaths in 2019

18 million CVD deaths in 2019

75% of CVD deaths in low-middle income countries

CVD also leads to lower quality of life, huge economic burden, impaired population development

85% CVD deaths ultimately consequence of atherosclerosis

CVD risk is clearly associated with lifestyle and is thus preventable

~25% of world population is accustomed to regular (intermittent) fasting

Aim: Investigating if and what type of intermittent fasting is feasible to include in lifestyle to decrease CVD risk.

Method

Search literature from past 5 years for 4 types of intermittent fasting:

(simplified)

Alternate day fasting: fasting 16 hours a day and not fasting the next day

Periodic fasting: fasting two days per week

Time restricted fasting: fasting 12-23 hours each day

Religious fasting: mostly Ramadan fasting from dawn to sunset for a month per year

108 articles screened, 18 primary research included

Results & Conclusion

ADF decreased LDL cholesterol, weight and BMI in obese and non-obese

PF decreased oxidative stress, inflammation and LDL in metabolic syndrome and catherisation patients, respectively

TRF decreased BMI, blood glucose and triglycerides

Religious fasting decreased blood pressure, triglycerides, inflammation

The degree of adherence to long-term fasting and the role of motivation was barely investigated.

Intermittent fasting seems promising to prevent and attenuate CVD cases

Twice weekly fasting seems most feasible
More long-term studies are required, which should include the important role of motivation