

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
	15	
2. Knowledge and Understanding Skills		
	30	
3. Cognitive and Intellectual Skills		
	30	
4. Practical Application Skills		
	10	
5. Transferable Skills for Life and Professional Practice		
	15	

Assessment Mark (Assessment marks are subject to ratification at the Exam board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% max)		
	Over 1 week late (0%)		

ABSTRACT

**EFFECTS OF INTERMITTENT FASTING DIETS IN
RELATION TO WEIGHT LOSS AND INFLAMMATION:**

A NARRATIVE REVIEW

UNIVERSITY OF WALES TRINITY SAINT DAVID

Independent Project (BMSS6007)

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Abstract

Objective

This review examines the effectiveness of intermittent fasting diets for weight loss and inflammation. It analyses various systematic reviews to provide reliable recommendations for individuals considering intermittent fasting. The purpose is to present a trustworthy overview of the current evidence to inform clinical practice and future research in the area. The review emphasizes the importance of combining intermittent fasting with a healthy and balanced diet for sustainable weight loss and inflammation control.

Introduction

Obesity is a growing health concern worldwide, with increasing rates of obesity-associated diseases such as diabetes, heart disease, and cancer (NHS, 2023). Obesity also contributes to chronic inflammation, which can lead to further health problems (Hotamisligil et al, 1995, pp. 2409-2415, and, De Luca and Olefsky, 2008, pp. 97-105). However, intermittent fasting has emerged as a promising intervention for inhibiting obesity and inflammation, with evidence suggesting that it can improve metabolic health and overall well-being (Tinsley and Bounty, 2015, pp. 661-674). By incorporating intermittent fasting into a healthy lifestyle, individuals can potentially achieve significant improvements in their weight and inflammatory status, leading to better long-term health outcomes (De Cabo and Mattson, 2019, pp. 2541-2551).

Method

This review analyzes the current evidence on the effectiveness of intermittent fasting diets for weight loss and inflammation. Various types of intermittent fasting diets were evaluated, and synthesis was conducted to assess their effectiveness, risks, and limitations. Based on this evaluation, the review provides evidence-based conclusions and recommendations for individuals considering intermittent fasting for weight loss or inflammation management. The study's findings can inform clinical practice and guide future research in this area, offering valuable insights into the effects of intermittent fasting diets on weight loss and inflammation.

Results

Data conducted from five systematic reviews indicate that intermittent fasting can have positive effects on blood glucose, lipids, weight loss, inflammation levels, and immune system function in individuals with metabolic syndrome, obesity, type 2 diabetes, and certain physiological and pathophysiological conditions, but it did not show significant long-term differences in outcomes related to body measurements, heart health, inflammation, appetite, or other metabolic parameters when compared with continuous energy restriction diets (Yuan et al, 2022, and,

Pinto et al, 2022, pp. 613-628, and, Morales et al, 2021, p. 3179, and, Wei et al, 2022, pp. 410-428, and, He et al, 2023, p. 269).

Discussion

Studies have shown that both intermittent fasting (IF) and short-term calorie-restricted diets (CR) can lead to comparable weight loss in individuals with obesity (Li et al, 2017, pp. 618-624, and, Kim et al, 2020, p. 638), however, some long-term clinical trials suggest that IF may be more effective than CR in reducing waist circumference and central fat distribution, which are important parameters in reducing cardiovascular risk (Park et al, 2020, p. 154336, and, Fitzgerald et al, 2018, pp. 33-39). Furthermore, research indicates that IF may slow down the progression of atherosclerosis by reducing levels of inflammatory markers, such as IL-6, homocysteine, and C-reactive protein (Welton et al, 2020, pp. Pp. 117-125, and, Washburn et al, 2019, p. 246). These findings have important implications for individuals seeking to improve their health through dietary interventions.

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