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### THE EFFECT OF DRY INTERMITTENT FASTING ON ANTHROPOMETRIC OUTCOMES AND BODY COMPOSITION AMONG ADULTS WITH OVERWEIGHT AND OBESITY

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#### INTRODUCTION

Adult obesity and overweight pose a significant risk to global public health and are associated with various non-communicable diseases. The effectiveness of two days per week of dry fasting is still unknown, even though intermittent fasting is widely practised as a weight loss method. This study aimed to evaluate the effectiveness of a combined dry intermittent fasting and healthy plate (IFHP) versus healthy plate (HP) intervention in improving anthropometric outcomes and body composition.

#### METHODOLOGY

This quasi-experimental study involved 177 adults with overweight and obesity, of whom 91 (51.4%) were allocated to the IFHP group and 86 (48.6%) to the HP group. Data was collected at baseline, after the supervised phase (month 3), and after the unsupervised phase (month 6). Anthropometric (weight, height, waist circumference, and hip circumference) and body composition (body fat percentage, body fat mass, skeletal muscle mass, and visceral fat area) data were measured at all 3 points of data collection. Sociodemographic data were obtained using a questionnaire at baseline.

#### RESULT

Most of the participants were female (n=147, 83.1%) and Malays (n=141, 79.7%).

In the IFHP group, there were significant reductions in weight, body mass index (BMI), body fat percentage, body fat mass, and visceral fat area after 3 and 6 months compared to baseline ( $p < 0.05$ ). For waist and hip circumference, a significant decrease of these parameters was observed in both groups at month 6 compared to baseline and month 3 ( $p < 0.05$ ). No significant improvement in other parameters was observed among participants in the HP group. Similarly, no significant difference in between-group comparison was detected throughout the intervention.

#### CONCLUSION

A combined intermittent fasting and healthy plate intervention was effective for improving anthropometric outcomes and body composition in adults with overweight and obesity.