

## Effects of Six weeks of Time-based Intermittent Fasting on Body Composition, Metabolic Parameters in Young Adults

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### ABSTRACT

A growing number of people are using intermittent fasting (IF) as a dietary strategy for weight loss and general wellness. **PURPOSE:** The aim of the current study was to investigate how a time-restricted IF approach will affect overweight and obese young adults for six (6) weeks. **METHODS:** Twenty-five (n=25) individuals between the ages of 18-29 y were recruited through university banners and were randomly assigned to two groups; Group A and Group B. Each group fasted for 16 hours each. Group A fasted from 8pm to 12pm and Group B fasted from 4pm to 8am. Subjects were tested (baseline) before starting the trials with the following: Body anthropometric measurements including body mass (bm, kg), body mass index (BMI,  $\text{bm kg}^2\text{Ht m}^{-2}$ ), waist circumference (cm), hip circumference (cm), waist to hip ratio, body fat percentage (%) and Resting Metabolic Rate ( $\text{mL}\cdot\text{kg}^{-1}\cdot\text{min}^{-1}$ ). Each subject was tested at baseline, two (2) weeks, four (4) weeks and six (6) weeks (post-test) Statistical analysis included demographic means (standard deviation), an independent samples t-test for between group differences at each measurement term, a dependent samples t-test for within group differences between measurement terms. Statistical significance was set *a priori* at  $p \leq 0.05$ . **RESULTS:** After 6 weeks, between group differences were not statistically different. Statistically significant within groups indicated a decrease in weight ( $p=0.002$ ), BMI ( $p=0.0006$ ), Waist Circumference ( $p=0.02$ ), Hip Circumference ( $p=0.018$ ) after 6 weeks. **CONCLUSION:** The present study confirms that timings of fasting does not alter body anthropometrics and metabolic parameters but fasting has proven to show significant reduction in weight, BMI, Waist and Hip circumference.