

The Acute Effect of Intermittent Fasting on Resting Energy Expenditure in College-Aged Males.

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Intermittent fasting has recently gained considerable attention within popular press as a dietary method for weight and/or fat loss. The protocol for these diets often recommends completely abstaining from food consumption for anywhere from 16 to 20 hours per day, sometimes for multiple days of the week. There appears to be a limited amount of research which examines the effect of fasting for such a time period on resting energy expenditure (REE). **PURPOSE:** The purpose of the study was to examine the short-term effect of fasting for three different time-points on REE in active college-aged males. **METHODS:** This study was a cross-over design where eleven subjects (age, 21.55 ± 1.33 years), who were instructed to consume a eucaloric diet, fasted for 10-12, 16, or 20 hours separated by a one- to two-week wash-out period. REE was measured after each fast via a ventilated hood technique. **RESULTS:** Results for REE for 10-12, 16, and 20 hour fasts were 2048.53 ± 274.31 kcal/day, 1976.64 ± 181.42 kcals/day, and 2064.00 ± 254.54 kcals/day, respectively. No statistical significance was found between conditions, though REE did decrease slightly for the 16-hour fast, and increase slightly for the 20-hour fast. **CONCLUSION:** The results suggest that one day of fasting while maintaining a eucaloric diet for up to 20 hours does not negatively impact REE.