

Supplementary Online Content

Trepanowski JF, Kroeger CM, Barnosky A, et al. Effect of alternate-day fasting on weight loss, weight maintenance, and cardioprotection among metabolically healthy obese adults: a randomized clinical trial. *JAMA Intern Med*. Published online May 1, 2017.

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eFigure 1. Experimental Design

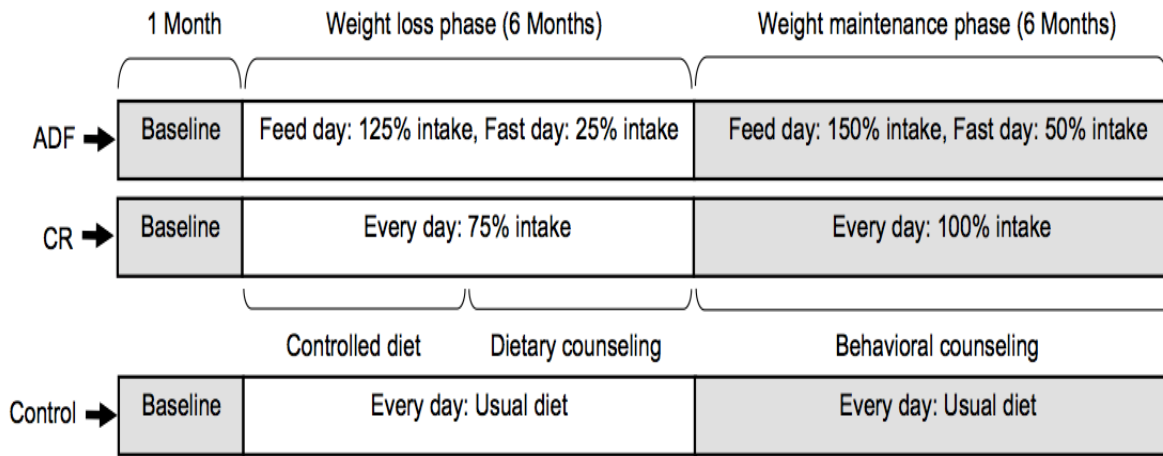
eFigure 2. Mean Energy Restriction by Diet Group at Month 6 Measured by Doubly Labeled Water

eTable 1. Dietary Intake by Diet Group and Time Point

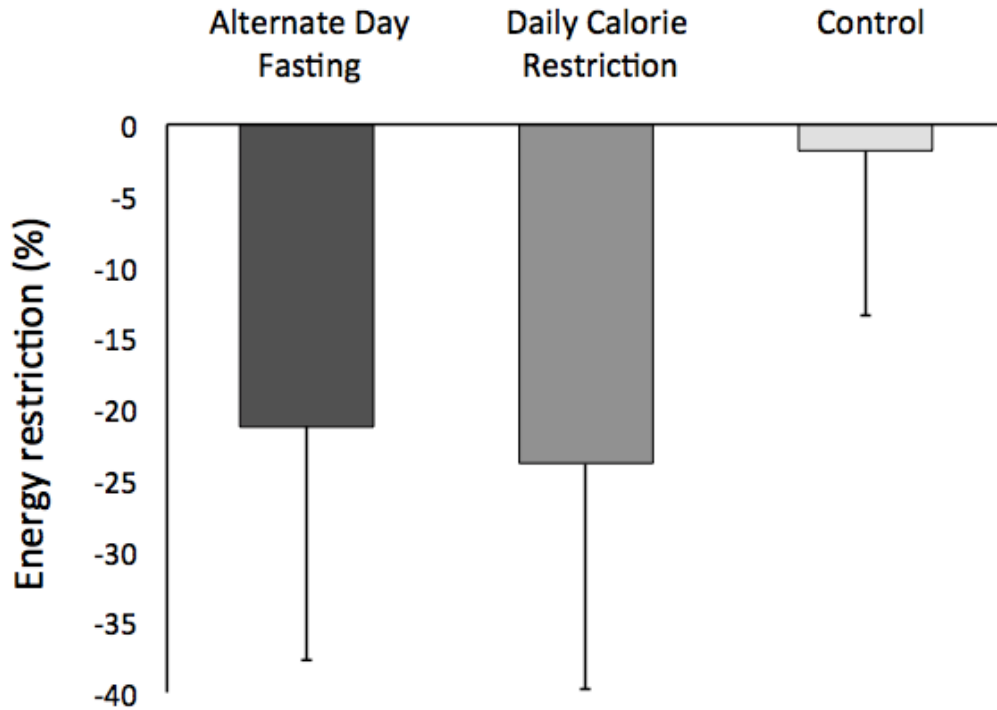
eTable 2. Physical activity by Diet Group and Time Point

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure 1. Experimental Design



eFigure 2. Mean Energy Restriction by Diet Group at Month 6 Measured by Doubly Labeled Water



Data are expressed as mean (SD). Percent energy restriction was significantly greater in the alternate day fasting group and daily calorie restriction group when compared to the Control group ($P = 0.001$). There was no statistically significant difference between the alternate day fasting group and daily calorie restriction group for percent energy restriction ($P = 0.65$) by month 6. The doubly labeled water analysis for energy restriction was only performed in a subset of subjects due to issues with improper water administration in certain individuals during the trial. Data were available from 16 participants in the alternate day fasting group, 21 participants in the daily calorie restriction group, and 11 participants in the control group.

eTable 1. Dietary Intake by Diet Group and Time Point

Variable	Alternate Day Fasting Group					Daily Calorie Restriction Group			Control Group		
	Baseline Value (n = 25)	Feast day		Fast day		Baseline Value (n = 30)	6-Month Value (n = 17)	12-Month Value (n = 20)	Baseline Value (n = 23)	6-Month Value (n = 13)	12-Month Value (n = 19)
Protein (% kcal)	18 ± 11	19 ± 7	18 ± 5	19 ± 10	19 ± 6	16 ± 3	17 ± 4	19 ± 7	17 ± 3	18 ± 6	18 ± 4
Carbohydrates (% kcal)	47 ± 8	46 ± 8	46 ± 7	47 ± 10	47 ± 20	48 ± 8	50 ± 5	47 ± 16	47 ± 8	47 ± 9	45 ± 6
Fat (% kcal)	35 ± 4	35 ± 5	36 ± 11	36 ± 43	36 ± 33	36 ± 6	33 ± 5	34 ± 11	36 ± 7	37 ± 7	37 ± 8
Cholesterol (mg)	220 ± 102	211 ± 106	241 ± 155	161 ± 109	151 ± 88	270 ± 131	230 ± 146	244 ± 91	280 ± 101	240 ± 83	258 ± 115
Fiber (g)	14 ± 5	14 ± 5	16 ± 6	11 ± 6	14 ± 6	16 ± 6	19 ± 8	19 ± 6	15 ± 6	12 ± 4	19 ± 12

Data are expressed as mean (SD); only observed values included. No differences in nutrient intake between the alternate day fasting group, daily calorie restriction group, or control group at baseline, month 6, or month 12. No differences in nutrient intake over time within each group.

eTable 2. Physical Activity by Diet Group and Time Point

Step/day	Alternate Day Fasting Group	Daily Calorie Restriction Group	Control Group
Baseline	7835 ± 3437 (n = 34)	7648 ± 2596 (n = 35)	7165 ± 3233 (n = 28)
Month 6	8143 ± 2051 (n = 25)	8832 ± 4495 (n = 24)	6948 ± 2723 (n = 22)
Month 12	8323 ± 3107 (n = 20)	8152 ± 4086 (n = 22)	7150 ± 2918 (n = 20)

Data are expressed as mean (SD); only observed values included. No differences in physical activity (steps/day) between the alternate day fasting group, daily calorie restriction group, or control group at baseline, month 6, or month 12. No differences in physical activity over time within each group.