Supplementary Table 1: Search strategy for Ovid Medline

1	exp Breakfast/ph [Physiology]
2	morning meal.ti.
3	meal timing.tw.
4	Omitting breakfast.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
5	skipping meals.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
6	eating habits.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
7	eating habits.tw.
8	eating habits.ti.
9	eating patterns.ti.
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11	weight loss.tw.
12	exp Weight Gain/ph [Physiology]
13	Body Mass Index/ or exp Weight Loss/ or exp Obesity/ or Diet, Reducing/ or Weight Gain/
14	Energy intake.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
15	energy balance.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
16	caloric intake.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
17	fat loss.mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]
18	11 or 12 or 13 or 17
19	14 or 15 or 16
20	Adult/ or Obesity/ or Obes*.mp. or Obesity, Morbid/
21	10 and 18 and 19
22	1 and 21
23	20 and 21

Supplementary Table 2: Sensitivity analyses

	Random-effects meta-analysis of weight (kg)		Random-effects meta-analysis of total daily energy intake (kcal/d)	
	MD (95% CI)	**I^2**	**MD (95% CI)**	**I^2**
Primary analysis				
Estimated SE of MD in crossover trials assuming a correlation coefficient of 0.3	0.44 (0.07 to 0.82)	43%	259.79 (78.87 to 440.71)	80%
Sensitivity analyses				
Estimated SE of MD in crossover trials assuming a correlation coefficient of 0.5	0.44 (0.06 to 0.81)	43%	257.66 (81.45 to 433.87)	80%
Estimated SE of MD in crossover trials assuming a correlation coefficient of 0.7	0.43 (0.06 to 0.81)	43%	254.06 (85.60 to 422.53)	80%
Estimated SE of MD in crossover trials assuming a correlation coefficient of 0.9	0.42 (0.04 to 0.79)	45%	245.69 (93.12 to 398.25)	80%

CI = confidence interval; MD = mean difference; SE = standard error

Supplementary figure 1: Meta-analysis of the mean difference (MD) in weight (kg) based on baseline BMI