

**Supplemental Table S1:** Food categories and their nutrient properties as the base for categorization of eating occasions

Category	Origin	Food Examples	Nutrient/Energy density	Nutrients
Category a	Animal origin	Meat and meat products, fish and shellfish, poultry, egg, milk and cheese	<i>High nutrient density</i>	Animal protein and fat, iron, zinc, calcium
Category b	Plant Origin	Rice, pasta, bread, dried legumes, seeds, potatoes	<i>High nutrient density</i>	Starch, plant protein, dietary fibre
Category c	Plant origin	Green vegetables, fruit, berries, roots	<i>High nutrient density, low energy density</i>	Starch, carotenoids, ascorbic acid
Category d	Plant origin	Nuts, olives, avocado	<i>High fat density</i>	Plant fat, plant protein
Category e	Animal and plant origin	Cooking fat, spreads, cream, fatty sauces	<i>High fat density</i>	Fat
Category f	Plant origin	Products in which white sugar often is added, beverages containing alcohol, ice cream, sweets, chocolate, biscuits, sweet desserts	<i>Low nutrient density</i>	Sugar, fat, alcohol
Category g	---	Water, coffee, tea, unsweetened light beverages	<i>No energy</i>	No nutrients
<b><i>Categorization of EOs due to the combination of food categories</i></b>				
Meal or snack	Abbreviation	Category of meal/snack	Combination	Example
Meals	CM	Complete meal	a+b+c	Meat, potatoes or bread, carrots
	IM	Incomplete meal	a+b	Meat, potatoes or bread
	LM	Less balanced meal	a+c	Meat, carrots
	VM	Vegetarian meal	b+c	Potatoes or bread, carrots
Snacks	HS	High-quality snack	a or b or c	An apple
	MS	Mixed-quality snack	Any of a or b or c and/or d and/or e and/or f	An apple and Some chocolate
	LS	No-quality snack	e and/or f	Some chocolate
	NC	No-energy snack	g	Coca cola light

**Supplemental Table S2: Baseline characteristics of study participants <sup>a</sup>**

<b>Characteristic <sup>b</sup></b>	<b>TRE (n = 11)</b>	<b>non TRE (n = 9)</b>	<b>p-value</b>
Age (Years)	46.5 (12.4)	44.2 (12.3)	0.69
Sex	9F/2M	8F/1M	0.66
Race (Black/White)	0/11	3/6	<b>0.04</b>
Ethnicity (Hispanic-Latino/non-Hispanic-Latino)	2/9	1/8	0.66
Weight (kg)	95.2 (22.6)	100.9 (28.1)	0.62
BMI (kg/m <sup>2</sup> )	33.8 (7.6)	34.4 (7.8)	0.86
Systolic blood pressure (mmHg)	132 (13.0)	123 (13)	0.14
Diastolic blood pressure (mmHg)	85 (4)	79 (8)	<b>0.04</b>
Eating window (hours)	15.2 (0.7)	15.5 (1.1)	0.47
Fasting glucose (mg/dL)	95 (10)	95 (13)	0.92
Fasting insulin (mU/L)	11 (6)	10 (5)	0.84
Hemoglobin A1c (%)	5.4 (0.4)	5.6 (0.4)	0.46
2 hour OGTT glucose (mg/dL)	142 (45)	96 (24)	<b>0.01</b>
HDL (mg/dL)	50 (14)	60 (18)	0.19
Triglycerides (mg/dL)	144 (54)	87 (21)	<b>0.01</b>
LDL (mg/dL)	95 (24)	105 (19)	0.31
TSH (mU/L)	2.2 (0.8)	1.4 (0.6)	<b>0.01</b>

<sup>a</sup> As the current paper is a secondary analysis, the baseline characteristics are summarized in Supplemental Table 2 for reader convenience. The full results were previously reported in Chow, L.S., et al., *Time-Restricted Eating Effects on Body Composition and Metabolic Measures in Humans who are Overweight: A Feasibility Study*. Obesity (Silver Spring), 2020. **28**(5): p. 860-869. <sup>b</sup> Continuous measures are reported as mean (SD). Categorical measures are reported as counts.

**Supplemental Table S3:** Correlation between weight loss and change in eating occasion, food types and beverages

	TRE (n = 11)		Non-TRE (n = 9)	
	Absolute weight loss correlation coefficient p-value	Percent weight loss correlation coefficient p-value	Absolute weight loss correlation coefficient p-value	Percent weight loss correlation coefficient p-value
Eating occasion*	0.009 0.98	0.068 0.84	0.269 0.48	0.375 0.32
<b>Food types*</b>				
Complete meal	0.441 0.17	0.579 0.06	-0.080 0.84	0.043 0.91
Incomplete meal	-0.425 0.19	-0.382 0.25	-0.026 0.95	-0.147 0.71
Less balanced meal	0.042 0.90	-0.082 0.81	0.067 0.86	-0.006 0.99
Vegetarian meal	-0.384 0.24	-0.377 0.25	-0.183 0.64	-0.243 0.53
High quality snack	0.526 0.10	0.341 0.31	0.567 0.11	0.670 <b>0.05</b>
Mixed quality snack	-0.602 <b>0.05</b>	-0.595 <b>0.05</b>	0.289 0.45	0.275 0.47
Low quality snack	-0.226 0.50	-0.118 0.73	0.087 0.82	0.184 0.63
<b>Beverages*</b>				
Water	0.279 0.41	0.240 0.48	-0.088 0.82	0.020 0.96
Caffeinated	-0.246 0.47	-0.112 0.74	0.420 0.26	0.440 0.24
Sugary	-0.379 0.25	-0.436 0.18	0.482 0.19	0.437 0.24
Artificially sweetened	-0.090 0.79	-0.139 0.68	-0.200 0.61	-0.169 0.66
Dairy	-0.315 0.35	0.037 0.91	-0.116 0.77	0.006 0.99
Alcohol	-0.008 0.98	0.110 0.75	0.117 0.76	0.055 0.89

\*Change in eating occasions, food types and beverages were calculated as the difference between T2 (end-intervention) and T0 (baseline). Pearson correlation coefficient was calculated by treatment group to evaluate the correlation between weight loss and change in eating frequency, food types and beverages