

Table S1. Baseline Characteristics of Participants that Completed vs Dropped Out, Related to Table 1

Baseline Characteristics	All completers (n=137)	Dropouts (n=12)	Pearson Chi-Sq (p-value)	Chi-Sq, asymptotic significance/2-sided (p-value)	Independent T-test (p-value) Equal variances assumed
Age, mean (SD), years	40.36 (9.04)	41.42 (11.26)	-	-	0.704
Male, n, (%)	125 (91%)	11 (92%)	0.017	0.895	-
Female, n, (%)	12 (9%)	1 (8%)			-
White	82 (60%)	10 (83%)	4.465	0.614	-
Black	5 (4%)	0 (0%)			-
Asian	5 (4%)	1 (8%)			-
Hispanic	21 (15%)	0 (0%)			-
Mixed Race	2 (1%)	0 (0%)			-
Unknown Race	22 (16%)	1 (8%)			-
95% Eating Window	14.09 (1.60)	14.14 (2.76)	-	-	0.926
Fasting Glucose, mean (SD), mg/dL	92.41 (7.69)	94.58 (9.61)	-	-	0.359
HbA1c, mean (SD)	5.29 (0.36)	5.43 (0.33)	-	-	0.216
HOMA-IR, mean (SD)	1.11 (0.74)	1.63 (1.06)	-	-	0.027
Fasting Insulin, mean (SD), mIU/L	4.80 (3.00)	6.83 (4.09)	-	-	0.031

HOMA-IR and insulin at baseline were the only main study outcomes that differed between participants who completed 3-months and those who dropped out. Demographics and other main study outcomes were not different between groups. The differences in HOMA-IR and insulin were magnified due to very large sample size differences and few outliers among the drop-out group.

Table S2. Feasibility: 95% Eating Window and Adherence, Related to Figure 3

Study Period	SOC					TRE					
	N	Duration (No. days (95% CI))	mCC app caloric entries (total No.)	Adherent logging (%; No. days (95% CI))	95% Eating window (hours, 95% CI)	N	Duration (days)	mCC app caloric entries (total No.)	Adherent logging (%; No. days (95% CI))	95% Eating window (hours, 95% CI)	Outside 10-h Eating Window (%; No. days)
Baseline	67	13.61 (13.46 to 13.76)	4354	85%, 11.52 (10.99 to 12.06)	13.98 (13.56 to 14.41)	70	13.51 (13.30 to 13.72)	4726	85%, 11.51 (10.91 to 12.12)	14.19 (13.86 to 14.52)	N/A
6-wk (wk 5-7)	65	14.00	2785	70%, 9.78 (9.01 to 10.56)	13.13 (12.66 to 13.60)	68	14.00	2973	68%, 9.51 (8.73 to 10.30)	10.68 (10.30 to 11.06)	21%, 2.91 (2.22 to 3.60)
12-wk (wk 10-12)	66	14.00	3298	77%, 10.71 (9.87 to 11.55)	13.35 (12.90 to 13.81)	66	14.00	3354	73%, 10.27 (9.48 to 11.06)	11.13 (10.73 to 11.53)	29%, 4.11 (3.19 to 5.02)
12-wk-RS	67	14.00	3195	72%, 10.07 (9.43 to 10.72)	13.59 (13.17 to 14.01)	70	14.00	3297	73%, 10.23 (9.59 to 10.86)	11.09 (10.76 to 11.43)	27%, 3.74 (2.95 to 4.53)

Data are presented as mean (95% CI) or % mean, No. (95% CI). 12-wk-RS was a random sample of 14 days of the 12-week intervention period with at least 1 food log. Adherent logging is defined as a minimum of 2 entries spanning at least 5 hours in a given day. Food logs that contain at least one food or beverage item with ≥ 5 Kcal energy content were included in analyses and are shown in the table. Logs of medication, water, or energy-free beverages such as herbal tea without sugar were excluded. Participants that had less than 5 days of at least 1 food log were excluded from the analysis. These exclusions were limited (SOC = 2 at 6-wk, and 1 at 12-wk; TRE = 2 at 6-wk, and 4 at 12-wk) and were a result of participants being deployed on special assignments such as strike teams. No participants were excluded from baseline or 12-wk-RS. Duration: Average number of days sampled for a given time period. mCC app caloric entries: Total number of caloric food or beverages entries for a given study period. 95% Eating window: The 95% interval of time that all caloric items were logged during a given study period. The earliest and latest 2.5% of entries were removed. Outside Eating window: Percent of days participants ate outside their designated eating interval by more than 15 mins in a given study period.

Table S3. Alternative Baseline Values for Post Hoc Sub-analysis of Health Metrics, Related to Table 3

Outcome Measure	Value at baseline	SOC				TRE				Time x Group x Elevated Factor (SOC vs TRE)		Time x Elevated Factor (Combined groups, elevated vs normal at baseline)		
		N	Baseline	12-wk	Change 12-wk - Baseline	P-value Time x Elevated Value	N	Baseline	12-wk	Change 12-wk - Baseline	P-value Time x Elevated Value	Change Equal Variance	P-value	P-value
HbA1c, %	HbA1c ≥ 5.7	7	5.81 (5.63 to 6.00)	5.71 (5.46 to 5.97)	-0.10 (-0.19 to -0.01)	0.220	7	6.07 (5.35 to 6.79)	5.56 (5.15 to 5.96)	-0.51 (-0.97 to -0.06)	2.14E-7***	-0.41 (-0.83 to 0.001)	0.003**	3.00E-6***
Systolic Blood Pressure, mmHg	≥ 120 mm Hg	35	126.92 (124.62 to 129.23)	122.95 (119.90 to 126.01)	-3.97 (-7.10 to -0.84)	0.001**	37	129.00 (126.74 to 131.26)	124.27 (121.15 to 127.39)	-4.73 (-7.63 to -1.83)	0.002**	-0.76 (-4.94 to 3.43)	0.715	4.00E-6***
Diastolic Blood Pressure, mmHg	≥ 80 mm Hg	17	84.84 (82.39 to 87.29)	80.24 (75.59 to 84.88)	-4.61 (-8.86 to -0.35)	0.056	22	84.83 (82.98 to 86.69)	77.59 (76.97 to 81.21)	-7.24 (-11.25 to -3.24)	1.35E-4***	-2.64 (-8.34 to 3.07)	0.239	6.30E-5***
LDL Cholesterol, mg/dL	≥ 100 mg/dL	49	134.29 (126.95 to 141.62)	131.08 (123.44 to 138.73)	-3.20 (-9.36 to 2.95)	0.671	58	129.76 (122.90 to 136.62)	129.14 (122.14 to 136.14)	-0.62 (-5.40 to 4.16)	0.144	2.58 (-5.01 to 10.18)	0.433	0.174

Post hoc sub-analysis. Data presented as mean (95% Confidence Interval). All p-values were determined via Mixed ANOVA. All analyses had one within-group factor of Time (Baseline and 12-week). For within intervention group analysis, there was one between-subjects factor of Elevated Value at Baseline (Elevated and Normal). For analysis between intervention groups, there were two between-subject variables, Elevated Value at Baseline and Intervention Group (SOC and TRE). For analysis of combined groups (all participants), there was one between groups factor of Elevated Value at Baseline. p<0.05 (*), p<0.01 (**), p<0.001 (***). See **Table 3** for other post hoc sub-analyses.

Table S4. Changes in Lipoprotein Particle Size and Number, Related to Table 2 and Figure 4

	SOC				TRE				Time X Group			
	N	Baseline	12-Week	Change	P-value	N	Baseline	12-Week	Change	P-value	Change (V3-V1) TRE-SOC	P-Value
Particle Size												
HDL Particle Size, nm	61	8.87 (8.76 to 8.97)	8.91 (8.80 to 9.03)	0.05 (-0.02 to 0.12)	0.188	69	8.98 (8.80 to 9.15)	8.99 (8.83 to 9.14)	0.01 (-0.05 to 0.07)	0.763	-0.04 (-0.13 to 0.05)	0.394
LDL Particle Size, nm	61	20.98 (20.90 to 21.06)	21.02 (20.93 to 21.11)	0.04 (-0.3 to 0.10)	0.227	69	21.05 (20.92 to 21.18)	21.02 (20.91 to 21.13)	-0.03 (-0.09 to 0.04)	0.374	-0.07 (-0.16 to 0.02)	0.139
VLDL Particle Size, nm	61	46.63 (45.91 to 47.35)	46.39 (45.67 to 47.10)	-0.25 (-0.86 to 0.36)	0.419	69	47.50 (46.66 to 48.33)	46.16 (45.30 to 47.01)	-1.34 (-2.20 to -0.49)	0.003**	-1.10 (-2.16 to -0.03)	0.044*
Particle number												
HDL Particle Number, umol/L	61	35.16 (34.26 to 36.07)	34.12 (33.09 to 35.16)	-1.04 (-1.82 to -0.26)	0.010*	68	35.34 (34.47 to 36.22)	35.32 (34.48 to 36.17)	-0.02 (-0.76 to 0.72)	0.956	1.03 (-0.03 to 2.10)	0.061
Large HDL Particle Number, umol/L	61	5.75 (5.05 to 6.44)	5.97 (5.17 to 6.77)	0.22 (-0.34 to 0.76)	0.401	69	6.57 (5.45 to 7.68)	6.77 (5.73 to 7.80)	0.20 (-0.16 to 0.55)	0.270	-0.01 (-0.64 to 0.62)	0.934
Small LDL Particle Number, nmol/L	61	531.62 (464.98 to 598.26)	494.09 (426.63 to 561.55)	-37.53 (-83.12 to 8.06)	0.105	64	567.04 (499.38 to 634.71)	541.83 (471.77 to 611.88)	-25.22 (-61.43 to 10.99)	0.169	12.31 (-37.50 to 79.39)	0.672
LDL Particle Number, nmol/L	61	1361.28 (1257.34 to 1465.22)	1310.67 (1207.22 to 1414.13)	-50.61 (-116.98 to 15.77)	0.133	69	1416.36 (1321.63 to 1511.10)	1436.13 (1346.57 to 1525.69)	19.77 (-38.13 to 77.66)	0.498	73.46 (-13.09 to 160.02)	0.111
Large VLDL Particle Number, nmol/L	60	2.50 (1.91 to 3.09)	2.09 (1.76 to 2.43)	-0.41 (-0.88 to 0.06)	0.089	69	2.66 (2.12 to 3.19)	2.45 (1.84 to 3.05)	-0.21 (-0.84 to 0.42)	0.510	0.20 (-0.60 to 1.00)	0.627

Data presented as mean (95% Confidence Interval). Lipoprofile was assessed via Lipofit by NMR. Missing values are due to interference in the assay. Between-group differences were assessed by Mixed ANOVA for all participants that completed the 12-wk intervention. Within-group differences were assessed with paired t-tests. $p < 0.05$ (*), $p < 0.01$ (**), $p < 0.001$ (***)

Table S5. Sleep and Quality of Life Questionnaires, Related to Figure 4

	SOC					TRE					Time X Group	
	N	Baseline	12-Week	Change	P-value	N	Baseline	12-Week	Change	P-value	Change TRE-SOC (V3-V1)	P-Value
Pittsburg Sleep Quality Index (PSQI). Each item scored 0-3, total 0-21; a lower score indicates better sleep.												
Sleep Duration	60	0.77 (0.56 to 0.97)	0.77 (0.56 to 0.98)	0.00 (-0.16 to 0.16)	1.000	68	0.85 (0.66 to 1.04)	0.96 (0.71 to 1.20)	0.10 (-0.15 to 0.35)	0.410	0.10 (-0.20 to 0.41)	0.503
Sleep Disturbance	62	1.45 (1.31 to 1.59)	1.32 (1.19 to 1.46)	-0.12 (-0.28 to 0.03)	0.127	68	1.41 (1.28 to 1.54)	1.25 (1.13 to 1.37)	-0.16 (-0.30 to -0.02)	0.027*	-0.03 (-0.24 to 0.18)	0.757
Sleep Latency	64	1.52 (0.92 to 2.11)	1.04 (0.85 to 1.24)	-0.46 (-1.07 to 0.14)	0.127	69	0.95 (0.77 to 1.14)	0.95 (0.76 to 1.16)	0.00 (-0.15 to 0.15)	1.000	0.47 (-0.13 to 1.07)	0.124
Daytime Dysfunction	64	0.95 (0.78 to 1.13)	0.84 (0.68 to 1.01)	-0.11 (-0.26 to 0.04)	0.146	69	0.73 (0.57 to 0.91)	0.62 (0.46 to 0.78)	-0.12 (-0.26 to 0.03)	0.117	-0.01 (-0.21 to 1.20)	0.950
Sleep Efficiency	60	0.80 (0.56 to 1.04)	0.72 (0.47 to 0.96)	-0.08 (-0.36 to 0.19)	0.546	68	0.82 (0.59 to 1.06)	0.72 (0.47 to 0.97)	-0.10 (-0.38 to 0.18)	0.467	-0.02 (-0.41 to 0.33)	0.921
Sleep Quality	65	1.40 (1.25 to 1.55)	1.23 (1.07 to 1.39)	-0.17 (-0.34 to 0.003)	0.055	68	1.32 (1.16 to 1.48)	1.19 (1.02 to 1.36)	-0.13 (-0.33 to 0.07)	0.191	0.04 (-0.23 to 0.30)	0.782
Meds	64	0.52 (0.30 to 0.75)	0.42 (0.19 to 0.64)	-0.11 (-0.31 to 0.09)	0.289	69	0.65 (0.40 to 0.91)	0.58 (0.35 to 0.81)	-0.07 (-0.26 to 0.12)	0.450	0.03 (-0.24 to 0.31)	0.800
Total Score	56	6.52 (5.78 to 7.25)	6.33 (5.55 to 7.13)	-0.18 (-0.90 to 0.54)	0.623	66	6.83 (6.09 to 7.58)	6.27 (5.47 to 7.07)	-0.56 (-1.29 to 0.17)	0.128	-0.38 (-1.40 to 0.64)	0.461
Epworth Sleepiness Scale (ESS). Scores from 0-24; a lower score is better, means less sleepy.												
ESS score	65	9.08 (8.06 to 10.11)	8.69 (7.62 to 9.57)	-0.39 (-0.99 to 0.21)	0.195	70	8.26 (7.36 to 9.15)	7.63 (6.73 to 8.52)	-0.63 (-1.35 to 0.09)	0.087	-0.24 (-1.17 to 0.70)	0.608
ESS score >5 at baseline	54	10.43 (9.49 to 11.36)	9.56 (8.50 to 10.61)	-0.87 (-1.49 to -0.25)	0.007**	52	9.79 (8.94 to 10.63)	8.69 (7.69 to 9.69)	-1.10 (-2.00 to -0.19)	0.019*	-0.23 (-1.30 to 0.85)	0.442
Quality of Life: 36-Item Short Form Survey (SF-36). Each item scored 0-100; a higher score indicates better health/wellness.												
Physical Functioning	65	94.44 (91.22 to 97.65)	97.46 (95.76 to 99.16)	3.03 (-0.003 to 6.05)	0.050	70	96.73 (94.92 to 98.55)	97.11 (95.80 to 98.42)	0.38 (-1.15 to 1.91)	0.623	-2.64 (-5.94 to 0.64)	0.114
Role Limitations Due to Physical Health	65	86.15 (79.05 to 93.25)	84.87 (77.56 to 92.18)	-1.28 (-9.50 to 6.94)	0.756	70	93.93 (89.34 to 98.52)	94.88 (90.96 to 98.80)	0.95 (-4.92 to 6.83)	0.747	2.23 (-7.67 to 12.14)	0.656

Role Limitations due to Emotional Problems	64	97.40 (94.70 to 100.10)	84.90 (77.20 to 92.59)	-12.50 (-19.84 to -5.16)	0.001**	70	95.71 (91.67 to 99.76)	93.81 (88.69 to 98.93)	-1.90 (-8.24 to 4.43)	0.550	10.60 (1.04 to 20.16)	0.030*
Energy/Fatigue	65	61.60 (56.98 to 66.22)	58.54 (53.22 to 63.86)	-3.06 (-7.46 to 1.35)	0.170	70	65.00 (60.97 to 69.03)	65.46 (60.85 to 70.08)	0.46 (-3.26 to 4.18)	0.804	3.52 (-2.16 to 9.21)	0.222
Emotional Well-Being	64	82.19 (79.57 to 84.81)	77.13 (73.13 to 81.12)	-5.06 (-8.75 to -1.37)	0.008**	70	84.54 (82.04 to 87.05)	83.94 (81.53 to 86.35)	-0.60 (-2.80 to 1.60)	0.588	4.46 (0.29 to 8.63)	0.036*
Social Functioning	65	93.38 (90.47 to 96.30)	90.35 (86.32 to 94.37)	-3.04 (-3.04 to -3.04)	0.131	70	94.25 (91.59 to 96.91)	93.43 (90.42 to 96.44)	-0.82 (-4.12 to 2.48)	0.621	2.22 (-2.87 to 7.30)	0.390
Pain	65	80.77 (76.46 to 85.08)	78.15 (73.66 to 82.65)	-2.62 (-6.51 to 1.28)	0.185	70	84.43 (81.47 to 87.39)	85.14 (81.61 to 88.67)	0.71 (-2.97 to 4.40)	0.700	3.33 (-1.98 to 8.64)	0.217
General Health	65	75.72 (71.79 to 79.66)	74.79 (70.93 to 78.65)	-0.93 (-4.02 to 2.15)	0.547	70	79.73 (76.66 to 82.80)	78.77 (75.54 to 82.00)	-0.96 (-3.39 to 1.46)	0.431	-0.03 (-3.92 to 3.86)	0.988
Health Change	62	53.24 (48.29 to 58.19)	58.87 (53.35 to 64.40)	5.62 (-1.31 to 12.57)	0.110	68	54.41 (48.89 to 59.94)	62.87 (57.69 to 68.04)	8.46 (2.58 to 14.33)	0.005**	2.83 (-6.13 to 11.78)	0.533

Data presented as mean (95% Confidence Interval). Between-group differences were assessed by Mixed ANOVA. Within-group differences were assessed with paired t-tests. $p < 0.05$ (*), $p < 0.01$ (**).

Table S6. Changes in Mediterranean Diet from 24-hour Dietary Recall Related to Table 2 and STAR Methods

Line #	Measurement	TRE		SOC	
		Baseline	6 weeks	Baseline	6 weeks
1	Number of participants	69	69	66	66
2	Number of food and beverages	1159	971	1143	861
3	Average number of food/beverage descriptors per participant	16.8	14.1	17.3	13.0
4	Number of food/beverage descriptors representing fruits	139	162	164	141
5	Number of food/beverage descriptors representing vegetables	229	214	212	159
6	Number of food/beverage descriptors representing Fish	14	16	11	15
7	Olive oil	13	16	7	16
8	Total number of food descriptors representing Med Diet (sum of lines 4-7)	395	408	394	331
9	Percent of all food/beverages that represent Med diet (line 8/2, %)	34%	42%	34%	38%

Data were taken from the 24-hour dietary recall with a dietitian. Med Diet = Mediterranean Diet.

We analyzed the 24-h dietary recall data collected by a trained dietitian. After parsing dietary recall data for fruits, vegetables, olive oil, fish, etc., that represent a Mediterranean diet, we found that these categories increased in both groups. The percent of Med-food names increased from 34% to 42% in TRE and 34% to 38% in SOC. However, we also recognize the limitation of the approach for the following examples. A mango smoothie prepared at a fire station may appear to increase the intake of fruit, but it also increases the intake of simple sugar and it was impossible to find what fraction of energy intake came from fruit vs. added sugar. Similarly, leafy vegetables in a steak salad may represent a med-diet, while red meat is not a preferred med-diet component. In both cases, we included fruit and leafy vegetables in our count of med-diet descriptors. However, the relative contribution of these components to the med-diet is debatable.