

Supplemental Table S6. Subgroup Analysis according to Sleep Duration

Variable	MMS		P value ^a	Control		P value ^a	P value ^b
	Baseline	Week 12		Baseline	Week 12		
Long sleep duration (>6 hour)	n=18			n=27			
Primary outcome							
HbA1c, %	8.4±0.6	7.9±1.1	0.041	8.5±0.9	8.4±0.9	0.452	0.167
Secondary outcomes							
Glycemic control							
Fasting glucose, mg/dL	148.6±47.7	134.1±42.2	0.374	157.7±43.8	145.7±41.5	0.203	0.887
HbA1c <7.0%	0	3 (16.7)	-	0	0	-	0.058
Hypoglycemia	3 (16.7)	4 (22.2)	-	5 (18.5)	5 (18.5)	-	0.761
Lipid profiles							
Total cholesterol, mg/dL	149.2±28.6	153.6±38.2	0.503	145.2±39.0	143.2±31.1	0.684	0.425
Triglyceride, mg/dL	126.7±51.8	140.9±111.9	0.443	144.9±58.7	130.2±57.3	0.226	0.169
HDL-C, mg/dL	50.6±14.4	50.1±13.7	0.837	45.5±10.2	44.8±11.4	0.567	0.918
LDL-C, mg/dL	72.9±26.8	78.6±31.0	0.250	72.9±35.3	73.9±25.1	0.845	0.526
Lifestyle behavior							
Regular exercise	6 (33.3)	6 (33.3)	-	3 (11.1)	5 (18.5)	-	0.257
Meal time, min	14.2±5.2	13.6±3.3	0.651	14.0±5.4	13.9±4.1	0.862	0.739
Meal frequency, /day	2.8±0.4	2.8±0.4	0.331	2.7±0.5	2.8±0.4	0.083	0.485
Breakfast skipping, /wk	1.8±3.3	1.2±2.7	0.250	2.3±3.2	1.8±3.0	0.179	0.904
Sleep duration, hr	7.6±0.5	7.6±0.7	0.430	7.6±0.5	7.2±1.0	0.104	0.194
Exploratory outcome							
SMBG frequency, /day	0.6±0.7	1.1±1.1	0.041	0.5±0.9	0.6±0.9	0.327	0.019
Short sleep duration (≤6 hour)	n=24			n=22			
Primary outcome							
HbA1c, %	8.4±0.8	8.0±1.1	0.031	8.4±0.6	8.5±0.8	0.740	0.060
Secondary outcomes							
Glycemic control							
Fasting glucose, mg/dL	152.5±37.0	142.1±34.6	0.269	136.5±39.7	146.5±39.9	0.226	0.103
HbA1c <7.0%	0	3 (12.5)	-	0	0	-	0.235
Hypoglycemia	7 (29.2)	7 (29.2)	-	6 (27.3)	8 (36.4)	-	0.603
Lipid profiles							
Total cholesterol, mg/dL	158.39±32.7	150.8±30.3	0.234	142.3±23.4	146.2±28.0	0.380	0.151
Triglyceride, mg/dL	128.3±45.2	111.1±48.6	0.109	118.8±50.6	133.4±92.2	0.358	0.087
HDL-C, mg/dL	51.5±11.2	47.0±10.1	0.013	48.4±15.1	48.9±14.5	0.806	0.050
LDL-C, mg/dL	78.8±28.9	79.3±23.5	0.931	71.3±23.7	71.8±29.2	0.909	0.996
Lifestyle behavior							
Regular exercise	12 (50.0)	12 (50.0)	-	10 (45.5)	11 (50.0)	-	1.000
Meal time, min	15.2±4.8	14.6±3.1	0.266	13.6±3.5	13.9±3.4	0.576	0.213
Meal frequency, /day	2.8±1.1	2.8±1.0	0.890	2.6±0.6	2.6±0.6	0.747	0.293
Breakfast skipping, /wk	3.2±4.3	2.4±3.1	0.337	2.3±3.2	2.1±3.0	0.448	0.506
Sleep duration, hr	5.3±0.9	5.9±0.9	0.016	5.5±1.1	5.6±1.4	0.258	0.070
Exploratory outcome							
SMBG frequency, /day	0.8±1.1	1.5±1.3	0.005	0.8±0.9	0.9±1.0	0.329	0.037

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Supplemental Table S6. Continued

Values are expressed as mean \pm standard deviation or number (%).

MMS, mobile message system; HbA1c, glycated hemoglobin; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; SMBG, self-monitoring of blood glucose.

^a*P* values were calculated using a paired *t* test between the values at the baseline and after treatment; ^b*P* values were calculated using Student's *t* test for delta changes between the two groups.