

Supplement 1. Effects of sleep restriction and follow-up on variables in the CH and non-CH groups

Variable /Time	CH group	Non-CH group	P-value	Interaction time x group [†]	
				Effect size	P-value
Stress (Score)					
Baseline	15.9±1.08	14.8±0.96	0.42 ^a	0.053	0.003 [*]
After SR	21±1.14	16.3±1.01	0.028 ^{b*}		
Follow-up	15.5±1.03	14.5±0.91	0.658 ^c		
QOL (score)					
Baseline	0.94±0.01	0.97±0.01	0.049 ^{a*}	0.07	0.001 [*]
After SR	0.91±0.01	0.98±0.01	0.010 ^{b*}		
Follow-up	0.98±0.01	0.98±0.01	0.161 ^c		
Cortisol (ug/dL)					
Baseline	11.1±0.6	12.7±0.54	0.041 ^{a*}	0.019	0.118
After SR	16.3±0.57	15.9±0.51	0.858 ^b		
Follow-up	11.6±0.67	12.5±0.6	0.467 ^c		
TC (mg/dL)					
Baseline	179.1±4.22	185.8±3.75	0.235 ^a	0.019	0.119
After SR	170.9±4.24	183.5±3.76	0.086 ^b		
Follow-up	179.8±4.18	188.2±3.71	0.269 ^c		
HDL-C (mg/dL)					
Baseline	57.6±1.9	56.2±1.69	0.602 ^a	0.002	0.748
After SR	54.7±1.8	53.8±1.6	0.250 ^b		
Follow-up	59±1.93	57.4±1.71	0.771 ^c		
LDL-C(mg/dL)					
Baseline	106.9±3.75	111.5±3.33	0.36 ^a	0.029	0.043 [*]
After SR	101.4±3.83	112.2±3.4	0.041 ^{b*}		
Follow-up	107.5±3.77	112.2±3.35	0.900 ^c		

CH, cold hypersensitivity; QOL, quality of life; TC, total cholesterol; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol.

Data are shown as estimated mean and standard error.

* P-value < 0.05.

† Two-way repeated-measures ANOVA analysis.

^a P-values are based on independent t-tests between the CH and non-CH groups in the baseline.

^{b-c} P-values are based ANCOVA analysis adjusted for sex, age, and baseline values of each outcome variable; (b) after sleep restriction, (c) follow-up.