



Figure S1. The target part of the body in the novel κ VT program (50 Hz, 4 mm, 25 postures with relaxation and stretching), R: Right, L: Left

Table S1. Comparison of the sleep time, walking, physical activity baseline and during the experiment period

Parameter, unit	Baseline	During the experiment period	<i>p</i>
Total sleep time, min/d	389.0 \pm 64.6	374.8 \pm 83.0	0.24
Walking step, step/d	10036.2 \pm 4463.4	10265.9 \pm 3768.2	0.54
Light PA, min/d	335.7 \pm 101.3	347.6 \pm 126.1	0.51
Moderate PA, min/d	110.0 \pm 71.4	129.3 \pm 84.8	0.21
Vigorous PA, min/d	14.0 \pm 19.1	15.1 \pm 26.1	0.78

Note: Wilcoxon signed-rank test, Mean \pm SD, PA: physical activity, d: day

Table S2. Comparison of ISF Glucose Concentration in CT and ET within 2 hours of OGTT

Parameter, unit	Time of OGTT	CT	ET	Time effect, <i>P</i>	Trial effect, <i>P</i>	Interaction, <i>P</i> (Times × Trials)
ISF Glucose Concentration for 2hours, (mg/dL)	Base line					
	0min	91.5 ± 7.3	90.7 ± 7.3			
	15min	101.9 ± 7.3	103.9 ± 7.3			
	30min	144.0 ± 7.3	147.1 ± 7.3			
	45min	178.2 ± 7.3	167.4 ± 7.3			
	1h	186.3 ± 7.3	171.6 ± 7.3	< 0.01	0.02	0.60
	1h 15min	184.5 ± 7.3	176.5 ± 7.3			
	1h 30min	178.4 ± 7.3	170.9 ± 7.3			
	1h 45min	172.5 ± 7.3	168.4 ± 7.3			
	2h	166.6 ± 7.3	161.0 ± 7.3			

Note: Liner Mixed Model, Mean ± SE, OGTT: oral glucose tolerance test, ISF: interstitial fluid, CT: controlled trial, ET: experimental trial