

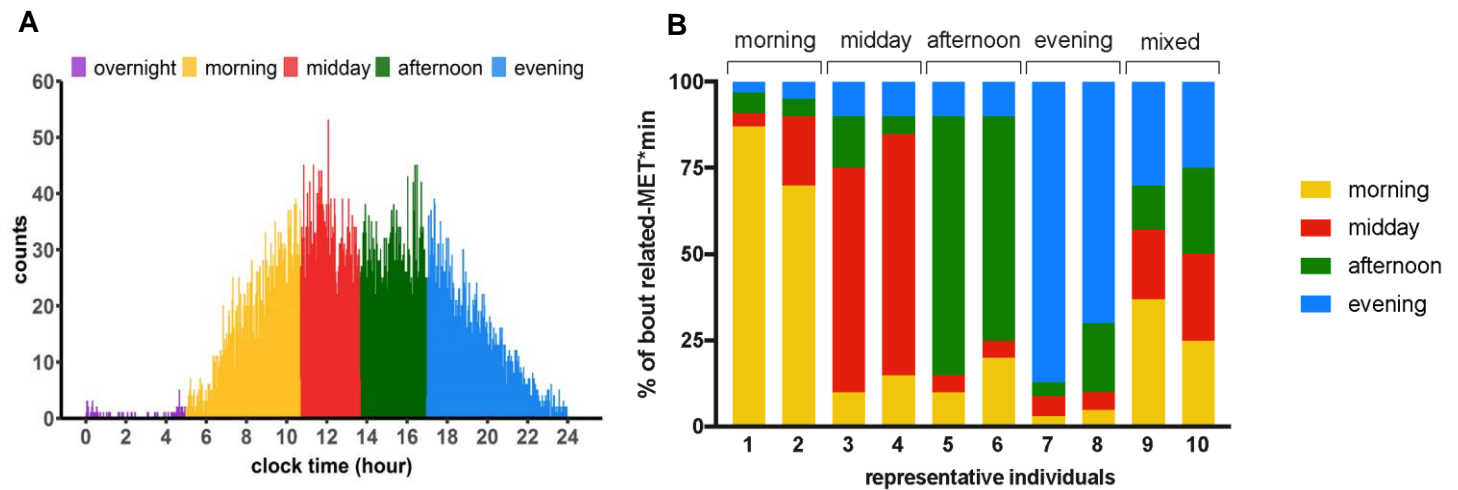
Supplementary Table 1. Baseline characteristics of participants with valid accelerometry recordings by sex in the Look AHEAD study population.

	men (N=869)	women (N=1166)	<i>P</i> *
Outcomes			
Cardiorespiratory fitness, METs	7.8 (2.1)	6.6 (1.6)	<0.0001
CVD history, n (%), yes/no	198 (22.8%)/ 671 (77.2%)	117 (10%)/ 1049 (90%)	<0.0001
Sociodemographic factors			
Age (years)	60.4 (6.5)	58.1 (6.8)	<0.0001
Race/ethnicity, n (%)			
African American	83 (9.6%)	286 (24.5%)	<0.0001
Hispanic/Latino	36 (4.1%)	66 (5.7%)	
Non-Hispanic white	724 (83.3%)	773 (66.3%)	
Other	26 (3%)	41 (3.5%)	
Education, n (%)			
High school or less	78 (9%)	222 (19%)	<0.0001
Some college	275 (31.6%)	487 (41.8%)	
College graduate	163 (18.8%)	160 (13.7%)	
Graduate school	338 (38.9%)	264 (22.6%)	
Other	15 (1.7%)	33 (2.8%)	
Lifestyle factors			
Current smoking, n, yes/no/NA	29/508/332	49/444/673	<0.0001
bout-related MVPA, METxmin/week	835 (936.3)	433.5 (578.7)	<0.0001
MVPA bout intensity, MET/min	4.36 (1.77)	3.88 (1.98)	<0.0001
beck depression score	4.7 (4.1)	6.1 (5)	<0.0001
Anthropometrics			
BMI, kg/m ²	35.5 (5.5)	37 (6.3)	<0.0001
Waist circumference, cm	120 (13.7)	111.7 (14)	<0.0001
Systolic blood pressure, mmHg	130.7 (16.9)	131.9 (17.7)	0.11
Diastolic blood pressure, mmHg	73.4 (9.3)	69.1 (9.2)	<0.0001
Cardiometabolic measurements			
4-year Framingham risk score, %	12.2 (7.5)	4.5 (4.3)	<0.0001
Duration of diabetes, years	7.3 (6.6)	6.7 (6.5)	0.005
HbA1c, %	7.2 (1.2)	7.2 (1.1)	0.75
Fasting glucose, mg/dL	155 (46.1)	148.9 (42.9)	0.002
Triglycerides, mg/dL	190.1 (126.1)	173.5 (113.5)	0.003
LDL, mg/dL	106.1 (30)	116.8 (33.2)	<0.0001

Data are n (%) or mean (SD). * p values obtained with the Kruskal-Wallis test for continuous variables and χ^2 test for categorical variables.

Supplementary Figure 1. Temporal distribution of bout-related MVPA.

(A) The distribution of the 12,267 MVPA bouts from all included participants ($n=2,038$, see method for details) across 24-h clock time. The overnight time window (0:00-4:59 AM) has the lowest number of bouts per hour (<20). The remaining 19 hours (5:00 AM-11:59 PM) were divided into quartiles based on the number of bouts within each time window. **(B)** Representative participants who are classified into the morning (yellow), the midday (red), the afternoon (green), the evening (blue), and the mixed group. The stacked bar plot presents the proportion of bout-related MET \times min MVPA they performed in each time windows as defined in (A). **(C)** Median percentage of bout-related MET \times min MVPA spent in each time window (i.e., morning, midday, afternoon, and evening) across the timing of bout-related MVPA groups.

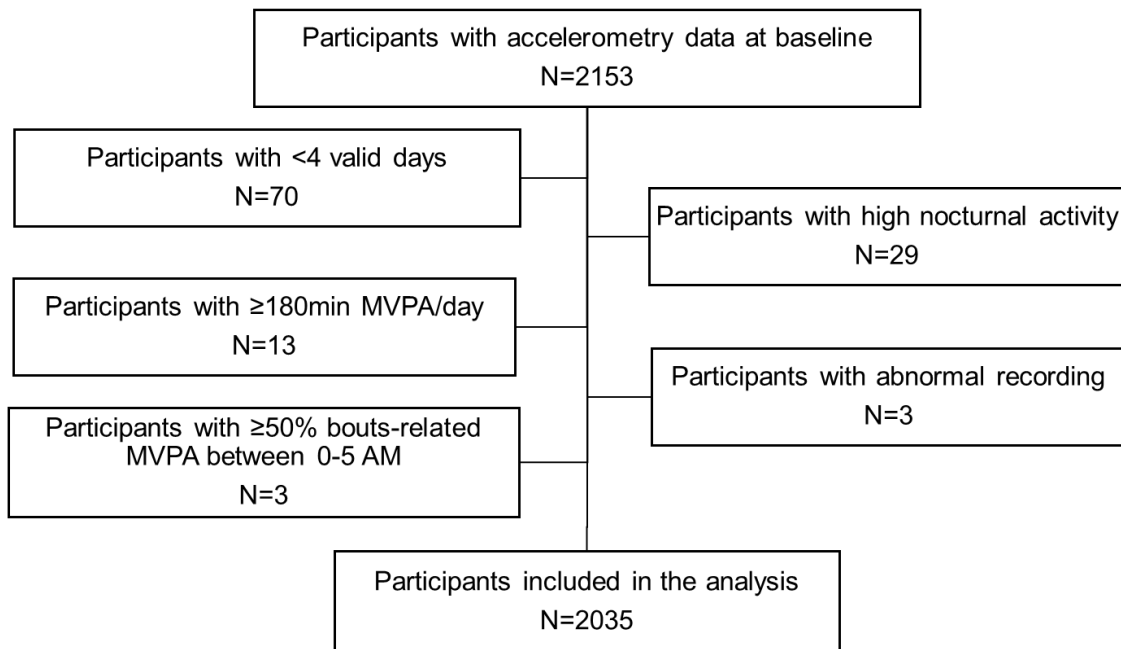


C

Time window	Timing of bout-related MVPA groups				
	Mixed	Morning	Midday	Afternoon	Evening
Morning	28.3 (23.9)	69.6 (28.0)	0 (17.3)	0 (13.4)	0 (17.8)
Midday	25.4 (19.4)	3.9 (18.6)	65.9 (21.6)	6.1 (20.8)	0 (16.9)
Afternoon	25.1 (22.8)	0 (16.3)	10.6 (23.6)	66.5 (20.4)	2.1 (16.7)
Evening	24.1 (22.7)	0 (11.9)	0 (12.7)	0 (16.8)	70.1 (23.7)

Note: Data are median (interquartile range) of the percentage of bout-related MVPA spent in each time window. Inactive group is not included, since the low overall activity made all values zero.

Supplementary Figure 2. CONSORT diagram.



Appendix: Look AHEAD Research Group at Baseline

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