S9 Table. Studies reporting beneficial, non-significant and detrimental associations of activity patterns with cardio-metabolic summary scores.

Moderate-to-Vigorous Physical Activity patterns						
Time spent in bouts	**Beneficial (B)**	**Non-significant (NS)**	**Detrimental (D)**	**B**	**NS**	**D**
1-4 min	Summary score [44][AB]			1	0	0
1-9 min	Summary score [44][AB]			1	0	0
≥5 min	Summary score [44][AB]			1	0	0
≥10 min	Summary score [44][AB]			1	0	0
Sedentary patterns						
Frequency of bouts/breaks	**Beneficial (B)**	**Non-significant (NS)**	**Detrimental (D)**	**B**	**NS**	**D**
1-4 min	Summary score [59][CD], [59][CE]			2	0	0
5-9 min		Summary score [59][CD], [59][CE]		0	2	0
10-14 min		Summary score [59][CD], [59][CE]		0	2	0
15-29 min		Summary score [59][CD], [59][CE]		0	2	0
≥20 min		Summary score [34][F]	Summary score [34][G], [34][H]	0	1	0
≥30 min		Summary score [59][CD], [59][CE]		0	2	0
Breaks	Summary score [59][CD], [59][CE]	Summary score [34][F], [34][G], [34][H]		2	1	0

Time spent in bouts/breaks	**Beneficial (B)**	**Non-significant (NS)**	**Detrimental (D)**	**B**	**NS**	**D**
≥5 min			Summary score [33][I]	0	0	1
≥10 min			Summary score [33][I]	0	0	1
≥20 min		Summary score [33][I]		0	1	0
≥30 min		Summary score [33][I], [36][B]		0	2	0
Breaks		Summary score [36][BJ]		0	1	0
Duration of bouts/breaks	**Beneficial (B)**	**Non-significant (NS)**	**Detrimental (D)**	**B**	**NS**	**D**
≥20 min		Summary score [34][F], [34][G], [34][H]		0	1	0
Usual bout length		BMI [41][F]				
Breaks		Summary score [34][F], [34][G], [34][H]		0	1	0

Combined intensity patterns						
Activity Fragmentation	**Beneficial (B)**	**Non-significant (NS)**	**Detrimental (D)**	**B**	**NS**	**D**
Intradaily Variability (indication of changes between high and low activity)		Summary score [43][K]	Summary score [43][L]	0	3	0

Abbreviations; *B* Beneficial, *D* Detrimental, *NS* Non significant, *min* Minutes, *s* Seconds.

[A] The sample was divided in four quartiles and the odds ratio of beneficial health factors were presented. When the odds consistently increased/decreased in all quartiles, we assumed that the associations were significantly beneficial/detrimental; [B] Continuous score based on measures of waist circumference, non-HDL cholesterol, C-reactive protein, and systolic blood pressure; [C] Continuous score based on BMI, waist circumference, HDL cholesterol, triglycerides, insulin, glucose, systolic blood pressure, and diastolic blood pressure; [D] Boys; [E] Girls; [F] Paediatric criteria were used to define the metabolic syndrome in children on the basis of three or more of the following components: Waist circumference, low HDL cholesterol, hypertriglyceridemia, high blood pressure and impaired fasting glucose; [G] Continuous score based on waist circumference, TC:HDL ratio, blood glucose, triglycerides, and diastolic blood pressure; [H] A non-obesity score; removed waist circumference from previous continuous clustered cardio-metabolic score; [I] Continuous score based on waist circumference, LDL cholesterol, HDL cholesterol, triglycerides, C-peptide, glucose; [J] Percentage of time spent in intensity/percentage of sedentary time spent in breaks; [K] Continuous score based on waist circumference, fasting insulin, TC:HDL ratio, and mean arterial pressure; [L] Continuous score based on skinfolds, triglyceride, TC:HDL ratio, HOMA-IR, systolic blood pressure, and VO2-max.

The bold numbers in the right hand columns tables represent that specific activity patterns which were examined at least four times.

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