

S2 Table. References grouped per activity pattern.

<i>Physical activity patterns (including LPA, MPA, VPA, MVPA, VHPA)</i>		
Pattern	References	Health outcomes included
≤15 s	[56]	Body fat
<1 min	[39]	BMI
0-5 min	[47]	Large Artery Compliance, Small Artery Compliance
≥4 s	[55]	Waist circumference, Acetylcholine, VO ₂ -peak
15-30 s	[56]	Body fat
30 s - 1 min	[56]	Body fat
1-2 min	[39]	BMI
1-3 min	[56]	Body fat
1-4 min	[44, 46]	BMI, Waist circumference, Non HDL-C, C-reactive protein, Systolic Blood Pressure, Summary score
1-9 min	[44]	Waist circumference, Non HDL-C, C-reactive protein, Systolic Blood Pressure, Summary score
≥2 min	[39]	BMI
3-10 min	[56]	Body fat
5 min	[49]	Intravenous glucose intolerance (K _g)
5-9 min	[46]	BMI
5-10 min	[47]	Large Artery Compliance, Small Artery Compliance
≥5 min	[44, 46, 51, 55]	BMI, Waist circumference, Non HDL-C, Acetylcholine, C-reactive protein, Systolic Blood Pressure, VO ₂ -peak, Summary score
10-20 min	[47]	Large Artery Compliance, Small Artery Compliance

≥10 min	[44, 46, 56]	BMI, Body fat, Waist circumference, C-reactive protein, Systolic Blood Pressure, VO ₂ -peak, Summary score
≥20 min	[47]	Large Artery Compliance, Small Artery Compliance
Pattern types	[58]	BMI, Waist circumference, HDL-C, Total cholesterol, Triglycerides, Glucose, Insulin, Diastolic Blood Pressure, Systolic Blood Pressure, Cardiovascular endurance
<i>Sedentary patterns</i>		
<30 min	[40, 60]	BMI, Skinfolds, Fitness
1-4 min	[37, 59]	BMI, Waist circumference, HDL-C, Triglycerides, C-reactive protein, Glucose, Insulin, Summary score
5-9 min	[37, 59]	BMI, Waist circumference, HDL-C, Triglycerides, C-reactive protein, Glucose, Insulin, Summary score
5-10 min	[14]	Adiponectin, BDNF, C-reactive protein, IL2, 6, 8, 10, PAI-1, Resistin, sE-selectin, sICAM-1, TNF- α , sVCAM-1, HOMA-IR
≥5 min	[33]	BMI, Waist circumference, HDL-C, LDL-C, Total cholesterol, Triglycerides, C-peptide, Glucose, Summary score
10-14 min	[59]	BMI, Waist circumference, HDL-C, Triglycerides, C-reactive protein, Glucose, Insulin, Summary score
10-19 min	[37]	BMI
≥10 min	[14, 33]	BMI, Waist circumference, HDL-C, LDL-C, Non HDL-C, Total cholesterol, Triglycerides, Adiponectin, BDNF, C-reactive protein, IL2, 6, 8, 10, PAI-1, Resistin, sE-

		selectin, sICAM-1, sVCAM-1, TNF- α , C-peptide, Glucose, HOMA-IR, Summary score
15-29 min	[59]	BMI, Waist circumference, HDL-C, Triglycerides, C-reactive protein, Glucose, Insulin, Summary score
20-29 min	[37]	BMI
≥ 20 min	[33, 34, 38]	BMI, Waist circumference, HDL-C, LDL-C, Non HDL-C, Total cholesterol, Triglycerides, C-peptide, Glucose, Diastolic Blood Pressure, Systolic Blood Pressure, Fitness, Summary score
≥ 30 min	[33, 36, 37, 40, 59, 60]	BMI, Skinfolds, Waist circumference, HDL-C, LDL-C, Non HDL-C, Total cholesterol, Triglycerides, C-reactive protein, C-peptide, Glucose, Insulin, Systolic Blood Pressure, Fitness, Summary score
≥ 40 min	[38]	BMI, Waist circumference, Non HDL-C, Diastolic Blood Pressure, Systolic Blood Pressure
≥ 60 min	[38]	BMI, Waist circumference, Non HDL-C, Diastolic Blood Pressure, Systolic Blood Pressure
≥ 80 min	[38]	BMI, Waist circumference, Non HDL-C, Diastolic Blood Pressure, Systolic Blood Pressure
≥ 100 min	[38]	BMI, Waist circumference, Non HDL-C, Diastolic Blood Pressure, Systolic Blood Pressure
≥ 120 min	[38]	BMI, Waist circumference, Non HDL-C, Diastolic Blood Pressure, Systolic Blood Pressure
Usual bout length	[41, 42]	BMI, Summary score

Fragmentation	[45]	BMI, Body fat
Breaks	[14, 34, 36-38, 40, 53, 57, 59, 60]	BMI, Body fat, Skinfolds, Waist circumference, HDL-C, Non HDL-C, Total Cholesterol, Triglycerides, Adiponectin, BDNF, C-reactive protein, IL2, 6, 8, 10, PAI-1, Resistin, sE-selectin, sVCAM-1, sICAM-1, TNF- α , Glucose, HOMA-IR, Insulin, Diastolic Blood Pressure, Systolic Blood Pressure, Fitness, Summary score
Experimental studies	[35, 48, 50, 52, 54]	Free fatty acids, HDL-C, LDL-C, Triglycerides, C-peptide, Glucose, Insulin, Superficial Femoral Artery Parameters, Cortisol,
<i>Combined patterns</i>		
Fragmentation	[43]	BMI, Body fat, Skinfolds, Waist circumference, HDL-C, LDL-C, Total Cholesterol, Triglycerides, Glucose, HOMA-IR, Insulin, Diastolic Blood Pressure, Systolic Blood Pressure, Fitness, Summary score

Abbreviations; *min* min, *s* Seconds, *LPA* light physical activity, *MPA* Moderate Physical Activity, *MVPA* Moderate-to-Vigorous physical activity, *VPA* Vigorous Physical Activity, *VHPA* Very High Physical Activity, *BMI* Body Mass Index, *BDNF* Brain-derived neurotrophic factor, *HOMA-IR* Homeostatic Model Assessment (-Insulin Resistance), *IL* interleukin, *PAI* Plasminogen activator inhibitor, *sICAM* Soluble intercellular adhesion molecule, *sVCAM* Soluble Vascular Cell Adhesion Molecule, *TNF* Tumor Necrosis Factor, *HDL-C* High Density Lipoprotein Cholesterol, *LDL-C* Low Density Lipoprotein Cholesterol, *VO_{2-peak}* Maximal oxygen uptake.

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