Assessing physical fitness during pregnancy: validity and reliability of fitness tests, and relationship with maternal and neonatal health– a systematic review

Online Supplemental Material 1, table S1. PRISMA Checklist 2020

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	3
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	3-4
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	4
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	4
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	4
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	4
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	5
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	5
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	5
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	5
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	-
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	-

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Section and Topic	Item #	Checklist item	Location where item is reported
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	-
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	-
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	4
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	-
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	-
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	ESM2-3
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	ESM2-3
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	5
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	5
Study characteristics	17	Cite each included study and present its characteristics.	5-12
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	5-12
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	5-12
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	5-12
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	5-12
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	5-12
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	5-12
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	-
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	-

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Section and Topic	Item #	Checklist item	Location where item is reported
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	12-16
	23b	Discuss any limitations of the evidence included in the review.	17
	23c	Discuss any limitations of the review processes used.	17
	23d	Discuss implications of the results for practice, policy, and future research.	17
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	2
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	4
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	4
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	17
Competing interests	26	Declare any competing interests of review authors.	36
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	ESM5

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71
ESM=Electronic Material Suplement

For more information, visit: http://www.prisma-statement.org/

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Online Supplemental Material 2. Search strategy in **PubMed** and **Web of Science.**

For PubMed, we used Medical Subject Heading (MeSH) terms. This is a powerful method to enhance the quality of the search. In addition, all MeSH terms were included without the command MeSH attached, to consolidate our results and avoid losing those papers not included in MeSH database. This is because some MeSH terms were introduced in a specific date (e.g., 'physical fitness' was included in 1996). Hence papers published in a previous date would be lost. The same process was developed with terms not available in the MeSH database such as agility, aerobic capacity, etc. (see ESM 2-Table-S1) for search criteria and related terms.

All terms were combined using the connector OR for similar criteria. The connector 'AND' was used to combine population group (i.e., pregnant women), to delimit date of publication ("0001/01/01"[PDat]: "2021/01/15"[PDat]), to include full text papers, and to include studies performed in humans. A similar search strategy and terms combination was undertaken in WoS (ESM 2-Table-S2), although MeSH terms and its appropriate terms connection were not used as they are exclusive for PubMed.

The first step of the search was to look for systematic reviews and meta-analysis within the field of this systematic review. Since there was no such article published regarding our topic, the research team agreed on starting the search with no limit on the publication date. Then, an initial search was undertaken in both databases following the strategy explained in ESM 2-Table-S1 and ESM 2-Table-S2 for PubMed and WoS database respectively. The results from both, were merged.

Romero-Gallardo L, *et al. BMJ Open Sp Ex Med* 2022; 8:e001318. doi: 10.1136/bmjsem-2022-001318

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Online Supplemental Material 2, Table S2. Search strategy used and number of articles found in **Pubmed**.

Search Strategy			
("Pregnant Women"[Mesh] OR "Pregnant Women" OR "Pregnancy"[Mesh] OR "Pregnancy") AND ("Physical Fitness"[Mesh] OR "Physical Fitness" OR "Physical Conditioning" OR "Exercise Test"[Mesh] OR "Exercise Test" OR "Fitness Trackers"[Mesh] OR "Fitness Trackers" OR "Muscle Strength"[MeSH] or "Muscle Strength" OR "Muscular fitness" OR "Range of motion, articular"[Mesh] OR "Range of motion, articular" OR "Postural Balance"[MeSH] OR "Postural Balance" OR "Walk Test"[Mesh] OR "Walk Test" OR "Cardiorespiratory Fitness" [Mesh] OR "Cardiorespiratory Fitness" OR "Agility" OR "running speed" OR "aerobic fitness" OR "aerobic capacity" OR "maximal oxygen consumption" OR "V02max" OR "Physical function") AND full text[sb] AND ("0001/01/01"[PDat] : "2021/01/15"[PDat]) AND Humans[Mesh]			
Search criteria 1	**MeSH Entry Terms for Criteria 1**	**Search criteria 2**	**MeSH Entry Terms for Criteria 2**
Pregnant Women (MeSH)	Women, Pregnant Pregnant Woman Woman, Pregnant	Physical fitness (MeSH)	Fitness, Physical
Pregnancy (MeSH)		Exercise Test (MeSH)	Exercise Tests Test, Exercise Tests, Exercise Arm Ergometry Test Arm Ergometry Tests Ergometry Test, Arm Ergometry Tests, Arm Test, Arm Ergometry Tests, Arm Ergometry Bicycle Ergometry Test Bicycle Ergometry Tests

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		Ergometry Test, Bicycle Ergometry Tests, Bicycle Test, Bicycle Ergometry Tests, Bicycle Ergometry Fitness Testing Fitness Testings Testing, Fitness Testings, Fitness Step Test Step Tests Test, Step Tests, Step Stress Test Stress Tests Test, Stress Tests, Stress Treadmill Test Test, Treadmill Tests, Treadmill Treadmill Tests Physical Fitness Testing Fitness Testing, Physical Fitness Testings, Physical Physical Fitness Testings Testing, Physical Fitness Testings, Physical Fitness Cardiopulmonary Exercise Test Cardiopulmonary Exercise Tests Exercise Test, Cardiopulmonary Exercise Tests, Cardiopulmonary

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	Test, Cardiopulmonary Exercise
Fitness Trackers (MeSH)	Fitness Tracker Tracker, Fitness Trackers, Fitness Physical Fitness Trackers Fitness Tracker, Physical Fitness Trackers, Physical Physical Fitness Tracker Tracker, Physical Fitness Trackers, Physical Fitness Activity Trackers Activity Tracker Tracker, Activity Trackers, Activity Personal Fitness Trackers Fitness Tracker, Personal Fitness Trackers, Personal Personal Fitness Tracker Tracker, Personal Fitness Trackers, Personal Fitness
Muscle Strength (MeSH)	Strength, Muscle
Muscle strength dynamometer (MeSH)	Dynamometer, Muscle Strength Dynamometers, Muscle Strength Muscle Strength Dynamometers
Range of motion, articular (MeSH)	Joint Range of Motion Joint Flexibility Flexibility, Joint Range of Motion Passive Range of Motion
Postural Balance (MeSH)	Musculoskeletal Equilibrium

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			Equilibrium, Musculoskeletal Postural Equilibrium Equilibrium, Postural Balance, Postural
		Walk Test (MeSH)	Test, Walk Tests, Walk Walk Tests 6-Minute Walk Test 6 Minute Walk Test 6-Minute Walk Tests Test, 6-Minute Walk Tests, 6-Minute Walk Walk Test, 6-Minute Walk Tests, 6-Minute Incremental Shuttle Walk Test Endurance Shuttle Walk Test
		Cardiorespiratory fitness (MeSH)	Fitness, Cardiorespiratory
Total items found	**Without filters:** 1657		
	With Humans filter: 1135		
	With Full Text filter: 1388		
	With Humans & Full Text Filter: 930		

The search recruited articles published until 15.01.21: no starting date limit was set for the search.

MeSH (Medical Subject Headings) is the National Library of Medicine controlled vocabulary thesaurus used for indexing articles for PubMed

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Online Supplemental Material 2, Table S3. Search strategy used and number of articles found in **Web of Science**

Search Strategy	
TS=("Pregnant women" OR "pregnancy" OR "pregnan*") AND (("Physical Conditioning" OR "Physical fitness" OR "Exercise Test*" OR "Arm Ergometry Test*" OR "Bicycle Ergometry Test*" OR "Step Test*" OR "Treadmill Test*" OR "Physical Fitness Test*" OR "Cardiopulmonary Exercise Test*" OR "Fitness Tracker*" OR "Physical Fitness Tracker*" OR "Activity Tracker*" OR "Personal Fitness Tracker*") OR ("Muscle Strength" OR "Muscular Fitness" OR "Muscle strength dynamometer*") OR ("Joint Range of motion" OR "Joint flexibility" OR "Flexibility" OR "Range of motion" OR "Passive Range of Motion") OR ("Postural Balance" OR "Musculoskeletal Equilibrium" OR "Equilibrium" OR "Postural Equilibrium") OR ("Walk Test*" OR "6-Minute Walk Test*" OR "Incremental Shuttle Walk Test*" OR "Endurance Shuttle Walk Test") OR ("Cardiorrespiratory Fitness" OR "Cardiovascular Fitness OR "Aerobic Fitness" OR "Aerobic Capacity" OR "Maximal Oxygen Consumption" OR "V02max") OR ("Agility" OR "running speed" OR "aerobic fitness"))	
Total items found	1687

The search recruited articles published until 15.01.21 no starting date limit was set for the search.

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Online Supplemental Material 3. Comprehensive description of the three quality assessment scores used in the present systematic review.

The first quality score [24], was used to evaluate the quality of the articles that assessed validity. This list included three items based on sample size, description of the article population and statistical analysis to assess validity of each article. The validity quality score ranged from 0 to 6 (Table-S3). A score of 0-2 defined a very low-quality article; a score of 3-4 defined a low-quality article; and a score of 5-6 defined a high-quality article.

The second quality score [25] was employed to rate the studies that measured reliability (ESM 4 – Table-S4). This ranking was formed by four items based on description of the participants, the time interval, the results and appropriateness of statistical analyses. Each item in both, was rated from 0 (the lowest quality) to 2 (the highest quality). The reliability quality score ranged from 0 to 8 (ESM 4– Table-S4). A score of 0-1 defined a very low-quality article; a score of 2-5 defined a low-quality article; and a score of 6-8 defined a high-quality article.

The third quality score (ESM 4– Table-S5) was created to evaluate those studies that assessed association of PF with health-related outcomes. We adapted a score previously used in the Effective Public Health Practice Project (EPHPP) [26] which has been used in similar reviews [27]. The health-related outcomes quality score ranged from 0 to 5 (ESM 4– Table S5). A score of 0-2 defined a very low-quality article, a score of 3-4 defined a low-quality article, and a score of 5 defined a high-quality score. Three quality scores were calculated by counting the number of positive items.

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Online Supplemental Material 3 Table S4. Quality assessment criteria to evaluate validity studies.

Grading system parameter	Grade	Criterion
Number of study subjects	0	n < 10
	1	n= 11-50
	2	n>51
Description of the study population regarding to age, sex, health status, fitness levels, etc	0	Less items than required for grade 1
	1	At least age and week of gestation.
	2	Age, week of gestation, health status and fitness levels and more.
Statistical analysis included in the study	0	Those not included in grade 1
	1	Error indexes or regression analysis
	2	≥3 items of Bland-Altamn plot and or ANOVA for repeated measurements

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Electronic Supplementary Material 4 Table S5. Quality assessment criteria to evaluate reliability studies.

Grading system parameter	Grade	Criterion
Description of the participants	0	Less items than required for grade 1.
	1	At least age and week of gestation.
	2	Age, week of gestation, health status and fitness levels and more.
Description of the time interval	0	Interval unknown.
	1	Vague and imprecise information about interval.
	2	Precise and complete description about interval.
Description of the results	0	Less results presented than required for grade.
	1	Description of test-retest results or description of the differences.
	2	Description of test-retest results and description of the differences.
Appropriateness of statistic	0	Only coefficient of variation
	1	Everything between grades 0 and 2 (normally – but not always – correlation plus an additional statistic).
	2	At least paired statistics, ANOVA for repeated measures (or non-parametrical corresponding tests) or Bland-Altman method.

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Electronic Supplementary Material 4 Table S6. Quality assessment criteria to evaluate health-related outcomes studies.

Grading system parameter	Grade	Criterion
Description of the study sample regarding to number of participants, age, sex, health status, fitness levels, etc	0	n ≤ 25 and including less item than required for grade 1.
	1	N ≥26 and at least age and gestational week.
Adequate assessment and report of physical fitness test.	0	Items for grade 1 are not included within the article.
	1	Validity and/or reliability reported of test and detailed description of testing protocol.
Adequate assessment of health-related outcomes	0	Items for grade 1 are not included within the article.
	1	Validity or reliability of the outcome measure reported and/or measurement procedure adequately described.
Adequate adjustment of confounders	0	No adjustment was done.
	1	Adjustment of confounders such as age and sex were done.
Description of both number and reasons to withdrawal and dropout.	0	No description included.
	1	Description included.

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Electronic Supplementary Material 5 Table S7. Overview of studies included in the systematic review and description of physical fitness tests.

Reference (authors, year)	**Sample Size (n)**	**Gestation Weeks (SD) or range in weeks**	**Mean age (SD), or range, in years**	**Fitness Test and Short Description**
		Cardiorespiratory Fitness		
Cycle-ergometer protocol				
Pomerance et al., (1974)[1]	54	17.5-27	35-37	Ad hoc, steady-state test at 60 rpm at 450, 600 and 300 kpm.
Erkkola, (1976)[2]	120	(2 weeks before term)	20-26	1) Ad hoc, incremental submaximal test at 150, 300 and 450 kpm/min. 2) Arstila ECG test.
Morton et al, (1985)[3]	23	40.15 (1.5)	28.5 (2.1)	Ad hoc, steady-state test at 40 to 50 rpm and at 300 kpm . min^{-1} for 6 min.
Veille et al., (1985)[4]	17	35 (2)	31 (1)	Ad hoc, incremental submaximal test at 50 and 60 rpm at 50W for 10-15 min to 70% HR max (no formula).
Jovanovic et al., (1985)[5]	6	37.1 (0.9)	28.5 (1.7)	Ad hoc, incremental submaximal self-administered test to 50% VO_2 max or exertion equivalent to usual training.
Wong & McKenzie, (1987)[6]	20	3 time-points, (10-14; 22-24; 34-36)	29.13	Ad hoc, incremental submaximal test at 50 rpm at 25, 50, 75 and 100 W for 5-6 min to 150 bpm.
Kulpa et al., (1987)[7]	141	First trimester	18-34	Bruce protocol to 75% of HR max.

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Carpenter et al., (1988)[8]	45	29 (3.7)	25.2 (3)	Ad hoc, incremental test. 2 phases: a) *submaximal*: at 0, 30 and 60W for 6 min. b) *maximal*: at 60W to volitional fatigue.
Moore et al.,, (1988)[9]	11	21.3	26.6	Ad hoc, incremental submaximal test at free pace for 20 min to 60 to 75% HR max. (220-age).
Sady & Carpenter, (1988)[10]	40	29.2 (3.9)	25.9 (3.3)	2 incremental tests: 1) *Submaximal test* at 0 W, 30 W and 60 W at 30%, 50% and 70% of VO_2 max. 2) *Maximal test* increasing 10 W every 2-min stage to volitional fatigue.
Artal et al., (1989)[11]	37	29.8 (0.5)	28.3 (1.8)	Ad hoc, incremental maximal test at 25, 50, 75W and increments of 25W every 2-min stage until exhaustion.
Hume et al., (1990)[12]	30		28	Ad hoc, steady-state submaximal test at 60% VO_2 max for 20min.
Sady et al., (1990)[13]	9	25.6 (3.0);	29 (4.9)	Ad hoc, incremental test. 2 phases: a) *submaximal*: at 0, 30 and 60 W for 18 min. 6-min each stage. b) *maximal*: incremental continuous to volitional fatigue.
Field et al., (1991)[14]	13	33 ± 2	30 (4)	Modified Balke protocol to 70% HR max (no formula)
Rafla & Beazely, (1991)[15]	21	28-37	-	Ad hoc, incremental submaximal test from 60 rpm to 70% HR max (220-age)
Bung et al., (1991)[16]	1	3 time-points, (24, 28, 37)	25	Ad hoc, incremental submaximal test from 15 W to 150 bpm.
Young & Treadway, (1992)[17]	5	33 (1)	29 (1)	Ad hoc, steady-state submaximal test at 50% VO_2 max for 30 min.
Clapp et al., (1993)[18]	120	16-39	-	Ad hoc, steady-state submaximal test at 60% ± 3% VO_2 max for 30 min.
Lotgering et al., (1995)[19]	33	3 time-points, 16.1 (1); 25 (0.7); 35 (0.6)	30.9 (0.7)	Ad hoc, incremental submaximal test. After 3 min at 15W, to increase 10 W every 30 sec until peak aerobic power.

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Artal et al., (1995)[20]	7	33.86±1.46	24.9 (2.18)	Ad hoc, incremental submaximal test. After 5 min per stage at 25, 50 and 75W, to increase 25W every 2 min to volitional fatigue.
O'Neill, (1996)[21]	11	35.8 (1.1)	30.3 (3.3)	1) Ad hoc, steady-state test at 62.5 W for 15 min. 2) Ad hoc, steady-state test at 87.5 W for 15 min. 3) Ad hoc, steady-state test at 62.5 W for 30 min.
Soultanakis et al., (1996)[22]	20	27.1 (1.3)	31.4 (1.5)	1) Incremental maximal with modified Balke protocol, increasing 25 W every 2-min at 60 rpm to VO_2max 2) Ad hoc, steady-state submaximal test during 1 hour at 50%-60% VO_2max at 60 rpm.
Manders et al., (1997)[23]	12	29-32	20-36	Ad hoc, incremental maximal test. After 5-min per stage at 50W, to increase 25 W/min to volitional fatigue.
Kemp et al., (1997)[24]	23	33 (1)	-	Ad hoc, incremental maximal test at 20 W for 4 min. Then, increasing 20 W/min until exhaustion.
McGrath et al., (1999)[25]	41	3 time-points: 17.45 (0.45); 26.5 (0.2) and 37.15 (0.15)	29.4 (0.85)	Ad hoc, steady-state test with three 6-min stages and exercise brief (<5-min) between them. 1) 20 W to 110 bpm, 2) 45 W to 130 bpm 3) 70 W to 150 bpm.
Brenner et al., (1999)[26]	20	27.0 (1.0) and 37.0 (1.0)	29 (3.35)	Ad hoc incremental submaximal test for 3 min without resistance, then, increased 30 W/min to 170 bpm or RPE of 18.
MacPhail et al., (2000)[27]	23	32 (4)	20-40	Idem Kemp et al., (1997)
Heenan et al., (2001)[28]	28	34.7 (0.4)	30.8 (1.5	Idem Kemp et al., (1997)
Kennelly et al., (2002)[29]	22	32.1 (1.4)	25.9 (4.9)	Ad hoc incremental maximal test. After 2-min at 30 W, increasing 10 W/min at 50-60 rpm to achieve AT.
Heenan & Wolfe, (2003)[30]	22	37.0 (0.2)	29 (1.1)	1) Ad hoc, incremental submaximal test at 20 W for 4 min. Then, to increase 20 W/min until 170 bpm. 2) Ad hoc, incremental ramp test from 0 W increasing work rate in 30-sec periods to 70 or 110% of VT.

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Wolfe et al., (2003)[31]	18	3 time-points: 19.2 (0.8) 27.8 (0.3) 37.0 (0.3)	28.3 (0.25)	Ad hoc incremental submaximal test for 3 min of no resistance. Then, to increase 30 W/min to 170 bpm or RPE of 18.
Lindqvist et al., (2003)[32]	14	5 time-points: 8, 15, 22, 29 and 36.	29 (5)	Ad hoc incremental submaximal test for 2 min of no resistances. Then, to increase 20 W every 2 min to HR max or pulse oximetry below 95%.
Lynch et al., (2003)[33]	23	16, 20, 24, 28, 32, 36	28.7(4)	Ad hoc incremental submaximal test at 60 rpm no resistance. Then, to increase 0.5 or 1 kP during two 3-min stages to 130 ± 5 bpm and 1 stage more to 145 ± 5 beats/min.
Heenan et al., (2003)[34]	39	37.0 (0.2)	28.5 (1.4)	1) Ad hoc incremental submaximal test at 20 W for 4 min. Then, to increase 20 W/min until 170 bpm. 2) Ad hoc, incremental ramp test from 0 W increasing work rate in 30-sec period. (70 or 110% of VT)
Pirhonen et al., (2003)[35]	14	5 time-points: (8, 15, 22, 29, 36)	29.2 (4.6)	Ad hoc incremental submaximal test at 0 W and 20 W for 2 min. Then, to increase at 40 W and thereafter 30 W/min to 85% HR max (220-age) or pulse oximetry below 95%.
Kardel, (2005)[36]	41	17, 30, 36	27.7 (1.95)	Ad hoc, incremental maximal test for 3-min stages at 50 W, 100 W and 150 W. After a rest, (no longer than 3-min) work maximally (200-280 W) for the first 30 seconds of 3-min stages.
McAuley et al., (2005)[37]	14	17.05 (2.05)	29.9 (0.85)	Ad hoc incremental submaximal and maximal test for 4 min at 20 W at 60-80 rpm. Then, to increase 20 W/min to 170 bpm or volitional fatigue.
Weissgerber et al., (2006)[38]	11	7 - 22	25-40	Ad hoc incremental submaximal test at 20 W for 4 min. Then, increasing 5 W/min until volitional fatigue or 170 bpm.
Jensen et al., (2007)[39]	22	3 time-points: 19.7 (1.2), 28.2 (0.3), 36.3 (0.3)	30.9 (0.9)	Idem test 1 of Heenan & Wolfe (2003).
Jensen et al., (2008)[40]	15	34-38	30.6 (1.0)	Ad hoc incremental maximal test from 6-min resting period. After 25 W/2 min at cadence of 60 and 70 rpm to the point of volitional fatigue.

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Kardel et al., (2009)[41]	40	35-37	20-40	Ad hoc incremental maximal test at 20 W for 2 min. Then, to increase (8-12 min) to ramp up 10% of the predicted maximal load.
Ong et al., (2009)[42]	12	2 time-points: 18 and 28.	30 (4)	Ad hoc, incremental submaximal test increasing 25 W/min to 75 % HR Max (220-age).
Thorell et al., (2010)[43]	520	4 time-points: 10.9, 24.0, 29.7, 36.5.	29.0 (4.4)	Ad hoc incremental submaximal test at 50 or 75 W (based on previous level) increasing 25 W/min to ≥125 bpm.
Rojas-Vega et al., (2011)[44]	20	34±1.6	35.2 (3.6)	Ad hoc incremental submaximal test free of cadence and speed for 2 min. Then, to increase 25 W/ 2 min at 60 rpm to 150 bpm.
Thorell et al., (2015)[45]	520	10.9	29.6	Idem Thorell et al. (2010).
Kim et al., (2015)[46]	32	13-35	24.8 (2.5)	Ad hoc, steady-state test with three 20-min phases:1) standing 2) pedalling at 50 W for 20 min 3) sitting.
Nakagaki et al., (2016)[47]	20	25.1(6.3)	33.7(4.2)	Ad hoc, incremental submaximal test at 50 rpm to 160 bpm or impossibility to maintain the pedalling rate.
Jedrzejko,et al., (2016)[48]	22	37-41	24.4 (3.92)	Ad hoc, incremental submaximal test on supine cycle divided into three 4-min constant stages increasing from 25 W to 75 W.

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Sussman et al., (2019)[49]	23	2 time-points: 14-15 and 33-34 gw	30 (3)	YMCA protocol. Incremental test on semirecumbent to 60-80% HR_{Max} or RPE of 14 out 20.
Purdy et al., (2019)[50]	63	4 groups: 10-12, 20-27, 30-37	30.5 (4.5)	Ad hoc, incremental maximal test on recumbent cycle at 25 W at 50 rpm for 5 min. Then, to increase 25 W/min at same speed to volitional fatigue.
Bilodeau et al., (2019)[51]	58	3 time-points: 16.5 (1.0), 35.6 (0.9); 39.8 (1.1) gw	30 (3.7)	Modified Bruce ramp protocol.
Matenchuk et al., (2019)[52]	47	4 groups: nonpregnant; 1st trimester, 2nd trimester, 3rd trimester		Ad hoc, incremental maximal test at 25 W at 50 rpm for 5 min. Then, to increase 25 W/min to volitional fatigue.
Correa et al., (2020)[53]	48	2 time-points: 18; 36 gw.		Ad hoc, incremental ramp submaximal test at 4 W for 4 min. Then, to increase 20 W/min until symptom limitation or HR_{Max} (220-age).
Bijl et al., (2020)[54]	40	11 (1)		Ad hoc, incremental submaximal on an upright cycle ergometer for 3-min at 40rpm. Then, to increase at 60-70 rpm at 25 W followed by a rise of 5 Watt in every 12-s to 70% HR_{max} (Tanaka formula).
Treadmill protocol				
Sibley et al., (1981)[55]	13	2 time-points: 21.9 (2.3); 33.9 (2.3)	24.3 (1.4)	Balke protocol to 140 bpm.
Veille, (1985)[4]	17	35 (2)	31 (1)	Ad hoc, incremental submaximal walking test to 70% HR_{Max} (no equation to calculate HR_{max} shown).
Lewis et al., (1988)[56]	28	2 time-points: 22 wg and 30 wg	27.8 (3.3)	Modified Balke protocol.
Artal et al., (1989) [11]	37	30.3 (1.9)	25.9 (2.5)	Modified Balke protocol.

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Clapp, Little & Capeless, (1993)[18]	120	16-39	NR	1) Ad hoc, steady-state test at 40% ± 3% VO_2 max for 30 min. 2) Idem at 60% ± 3% VO2max.
Winn et al., (1994)[57]	12	26-36	32 (4)	Modified Bruce Protocol to 75% HR Max (220-age).
Marquez-Sterling et al., (2000)[58]	15	19.1 (2.15)	29.5 (3.1)	Ad hoc incremental test at 4 km/h and 0% grade for 2-min. Then, increasing 6 km/h and 2.5% every 2-min to 150 bpm.
Santos et al., (2005)[59]	72	17.9 (3.6)	27.3 (4.65)	Ad hoc, incremental ramp test from 2.4 km/h and 0% grade to AT.
Yeo et al., (2005)[60]	9	19 (5)	30 (3)	2 Cornell Protocol (85%MHR; Karvonen formula) with 2 systems (VO2000 and CPX/D).
Mottola et al., (2006)[61]	156	16-22	30.8 (3.7)	Modified Balke protocol with this equation VO_2 peak (predicted) = (0.055*peak HR) + (0.381* incline) + (5.541* speed (mph)) + (-0.090*BMI) -6.846 : incremental walking test at 3 mph for 5 min, 0% grade. Then, increase 2% every 2 min. Max inclination permitted 12% grade. Then, increasing speed 0.2 mph every 2-min to volitional fatigue.
Davenport, et al., (2008)[62]	106	16-20	20-39	Modified Balke protocol. Idem Mottola et al., 2006.
Oliveria et al., (2012)[63]	187	3 time-points: 13, 20, 28.	24.7 (5.5)	Modified Balke protocol. Idem Mottola et al. (2006).
Ruchat et al., (2012)[64]	44	2 time-points: 16-20 and 34-36	30.8 (4.2)	Modified Balke protocol. Idem Mottola et al. (2006).
Szymanski, (2012)[65]	45	30.4 (1)	33.36	Modified Balke protocol. Idem Mottola et al. (2006).
Salvesen et al., (2012)[66]	6	25.5	32	Ad hoc, incremental maximal test at 6% grade increasing speed in periods of 1km/h every 5-min to volitional fatigue.

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Mottola et al., (2013)[67]	40	35.7 (0.4)	33.5 (0.7)	Ad hoc, steady-state test for 40-min, preceded by a 5-min warm-up increasing speed and inclination to 95% VT.
Bisson et al., (2013)[68]	65	16	29.9 (4.5)	Modified Balke protocol.
LeMoyne et al., (2014)[69]	67	1st trimester, 2nd trimester, 3rd trimester	29.6 (5.5) 30.1 (3.1) 32.3 (3.7)	Ebbeling single-stage submaximal treadmill walking test.
Bisson et al., (2014)[70]	61	16 (0.6)	30.0 (4.5)	Modified Balke protocol.
Marshall et al., (2015)[71]	51	3 time-points: 20, 32	29.2(5.3)	Ad hoc, incremental submaximal test at 0% grade and 3.21 km/h for 5-min. Then, two 5-min stages with speed and grades self-administered to moderate (brisk walk) and vigorous (jog/run) respectively.
Santos et al., (2016)[72]	28	30.51 (3.3)	26 (6.9)	Modified Balke protocol.
Hesse et al., (2018)[73]	25	22.1 (1.4)	30 (3.6)	Bruce protocol until volitional fatigue.
Baena-García et al., (2020)[74]	127	16	32.9 (4.6)	Modified Bruce protocol until 85% HR_{Max}
Dobson et al., (2020)[75]	22	3 time-points: Early- (13–18 gw), mid- (24–28 gw) and late-pregnancy (34–37 gw).	31.4 (3.7)	Submaximal incremental Walking Exercise Test (SWET) during 21-min on a treadmill. From 3.2 km/hr at 4 min at 2% grade, to increase 2% every 3 min over seven stages.
On track				
Bung et al., (1991)[16]	1	3 time-points(24, 28, 37)	25	Ad hoc, maximal test. 3 sprints of 200 m and one of 100 m on track

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Da Silva et al., (2010)[76]	74	37	21.5	6-minute walk test.
Ramírez-Vélez et al., (2011)[77]	64	2 time-points: 18.6 (3.4) and 16 weeks later.	19.5 (2.3)	6-minute walk test.
Hjorth et al., (2012)[78]	304	25.0 (7.3)	23.0	Ad hoc, steady-state walking test for 250 m on ground level at their normal walking pace.
Price et al., (2012)[79]	62	5 time-points: 12–14, 18–20, 24–26 and 30–32	29.05	Ad hoc test walking or running as fast a as possible within comfort zone at a steady pace. Power = (weight x distance) / time.
Radzikowska et al., (2017)[80]	45	3-7	24-36	6-minute walk test.
Oviedo-Caro et al., (2018)[81]	134	20	32.5 (4.2)	6-minute walk test.
Dennis et al., (2019)[82]	300	37 (1.3)	31 (4.2)	6-minute walk test.
Amola et al., (2019)[83]	34	3rd trimestre	25.1 (7.5)	6-minute walk test.
Birnbaumer et al., (2020)[84]	39	26 (7)	26 (3.4)	Ad hoc, incremental walking test on a 400 Walking speed was paced by audio every 10 m and started at 3 km/h. Then, to increase 0.5 km/h every 50 m to participants were unable to walk the given pacer speed.
Step Protocol				
Dibblee & Graham (1983)[85]	16	3 time-points: (the last month of each trimester)	23-31	Canadian Home Fitness Test.
Williams, Reilly et al. (1988)[86]	16 (10 pregnant	First, second and third trimester.	25.6 (3.6)	Ad hoc, incremental test at 115, 135, and 155 bpm for 5 min.

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	and 6 non-pregnant)			
Melzer et al., (2010)[87]	44	38.27	31 (5.6)	Ad hoc, incremental test at 15-32.5 body lifts per minute (rate of change: 2.5 body lifts/ min^2). Mechanical power was calculated as: 9.81 m/s^2 x step height (m) x lift frequency (number of body weight lifts/ min) and expressed in J/min/kg
Muscular Fitness				
Baker & Johnson (1994)[88]	200	NR	28-32	Hand Grip Sphygmomanometer Test: Pressing an inflated cuff of for 30-sec to MVCF over 3-min period.
Rogers & Tomilson (1998)[89]	20	NR	5 times: 12, 18, 24, 30, 36	Hand Grip Sphygmomanometer Test at 30% of MVCF for 2-min.
Feiner et al. (2000)[90]	34	22-36	22-35	Isometric Hand-Grip Test with dominant hand for 3 min at one-third of MVCF.
Gutke et al., (2008)[91]	301	12-18	29	1) Maximal voluntary isometric hip extension test with a fixed sensor holding a sling around the thigh and pulling for 5 sec during 3 reps with 5-10-sec of rest. 2) Isometric back flexors endurance: Maintaining an abdominal crunch for a maximum of 120 sec.
Thorell et al., (2010)[43]	520	1 time-points: 10.9	29.0 (4.4)	Sit-up test. Supine position with the knees at a 90º angle and the feet flat on the floor. 3 sets per 5 repetitions, without a rest or to stop when they were unable to perform of 15 repetitions of sit-ups.
O'Connor et al., (2011)[92]	32	21-25	18-38	Ad hoc 5 tests: 1) Seated leg press; 2) Leg curls; 3) Leg extension; (4) Lat pull; (5) Back extension.

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Hjorth et al., (2012)[78]	304	25.0 (7.3)	23.0	Hand-Grip maximal strength test twice on dominant and non-dominant side alternatively.
Price et al. (2012)[79]	62	5 time-points: 12–14, 18–20, 24–26 and 30–32	29.1	Ad hoc test. Lifting a 7-kg medicine ball from the floor to waist height as many times possible for 1 min.
Bisson et al. (2013)[68]	65	16	29.9 (4.5)	Hand-Grip maximal strength test twice on dominant and non-dominant side alternatively. Adjusting the handle of dynamometer.
Atay et al., (2015)[93]	37	2 time-points: 20 and 32	29.6 (5.9)	Hand-Grip maximal strength test in a sitting position.
Petrov et al., (2015)[94]	92	2 time-points: 13 and 35	30.7 (3.5)	Hand-Grip isometric peak strength.
Wickboldt (2015)[95]	43	32 (4)	37-42	Hand-Grip maximal strength test during the uterine contraction.
Kalliokoski et al. (2016)[96]	51	NR	28.3(6.4)	1) Hand-Grip maximal strength test for 10 sec 3-times in each hand. 2) Ad hoc upper leg performance test through 3 movements: a) To rise once after a squat b) to stand on one leg for 30 sec 3) Trendelenburg's test. It was evaluated able or unable.
Ngaka et al. (2016)[97]	50	>37	28.8 (5.7)	Hand-Grip maximal strength test in a supine position.
Rodriguez-Díaz et al., (2017)[98]	105	24-30	32.2 (4.7)	Hand-Grip maximal strength test for each hand.

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Zelazniewicz, (2018)[99]	95	3 time-points (once in each trimester)	29.6 (3.4)	Hand-Grip maximal strength test twice on dominant and non-dominant side alternatively.
Takeda et al., (2019)[100]	21	22 and 23.25 gw.	32 (3.3)	1) Toe grip dynamometer 2) Hand-held dynamometer fixed to the legs of the chair with a belt not stretchable to assess quadriceps strength .
Baena-García et al., (2020)[74]	156	16	32.9 (4.6)	1) Hand-grip maximal strength twice on dominant and non-dominant side alternatively with 30 sec rest between them. 2) 30-sec Chair Stand Test
Yenisehir et al., (2020)[101]	167	Second and third trimester.	28.4 (4.6)	5 Times Sit to Stand test, 5 repetitions of sit-to-stand maneuver as fast as possible with fold arms across the chest.
		Flexibility		
Gilleard et al. (2002)[102]	21	4 time-points: 18 or less, 24, 32, 38	21-40	3 tests measured with Expert Vision™ Motion Analysis System: 1) Seated and standing forward flexion 2) Seated and standing side-to-side flexion 3) Seated axial rotation
Marnach et al. (2003)[103]	46	3 time-points: 8-12, 16-22, 34-36.	28.8 (0.8)	Wrist flexion-extension and medial-lateral deviation using goniometer
Garshasbi et al. (2005)[104]	212	17-22	26.4 (4.7)	Side bending test: Both sides.
rice et al., (2012)[79]	62	5 time-points: 12–14, 18–20, 24–26 and 30–32.	29.1	Sit-and-reach test.
Lindgren et al. (2014)[105]	200	3 time-points: 11, 24 and 36.	28.4 (5.9)	Ad hoc machine to test passive abduction of the left fourth finger.
Atay et al., (2015)[93]	37	2 time-points: 20 and 32,	29.6 (5.9)	Back scratch test.
Rodriguez-Díaz et al., (2017)[98]	105	24-30	32.2 (4.7)	Isquiosural flexibility test by goniometer.

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Cherni et al., (2019)[106]	17	3 occassions: first, second and third trimester	36 (2)	4 tests measured with optoelectronical system: 1) Extensometer of the metacarpophalangeal joint of the index. 2) Figertrip to floor test: from 20cm platform, to reach the floor with knees extended; 3) Sit-and-reach test adapted on delivery bed 4) Beighton score
Baena-García et al., (2020)[74]	156	16	32.9 (4.6)	Back Scratch
		Balance		
Stabilometry – On force platform or pressures platform				
Butler et al., (2006)[107]	12	3 time-points: 11-14, 19-22, 36-39	32.9 (5.5)	Standing with eyes open and eyes closed for 30 sec each. 3 trials. 1 piece. Force Platform.
Ribas et al., (2007)[108]	60	3 time-points: 1) Up to 12 week 2) 13-24 3) Upwards of 25 weeks	23.3 (4.8)	Standing with bipedal support and eyes open for 5 sec. 2 pieces at 40 Hz.
Nagai et al., (2009)[109]	43	30.3 (0.8)	33 (0.65)	Standing with feet parallel, gazing a black 12-cm circle fixed at a 1.5 m distance with eyes open and eyes closed for 1 min each. 1 piece.
Oliveira et al., (2009)[110]	20	3 time-points: 15.1 (1.8); 24.0 (2.4); 34.5 (2.5)	28.7 (6.2)	Standing with 4 protocols at 50Hz and 2-min rest periods between them: 1) Eyes open with feet comfortably apart; 2) Eyes closed with feet comfortably apart; 3) Eyes open with feet together; 4) Eyes closed with feet together. 1 piece.
Karadag-Saygi et al., (2010)[111]	35	33 (3)	29.8 (4.5)	Standing for 60 sec.
Yu et al., (2013)[112]	21	NR	30.2 (3.05)	Standing with heels on a line at 1.0 m from visual target with visual tasks and inspection tasks.
Ersal et al., (2014)[113]	69	2 time-points: 20.9 (1.2) and 35.8 (1.5)	28.3 (5.0)	Standing with feet hip-width apart and staring straight ahead on Equitest platform.

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7Opala-Berdzik et al., (2014)[114]	31	36.2 (1.2)	28.2 (3.6)	Standing with arms at both sides and in a comfortable stance on a stable force platform with eyes open and eyes closed for 2 trials of 30-sec and 1-min rest between them.
Opala-Berdzik et al., (2015)[115]	45	2 time-points: 13.1 (2.5) and 36.2 (1.2)	28.2 (3.6)	Idem Opala-Berdzik et al., (2014)
Ozturk, (2016)[116]	68	31.5 (4.73)	30.3 (3.6)	Standing and arms extended in 6 different positions for 32-sec: 1) facingforward eyes open and eyes closed; 2) Eyes closed head rotated at 45º to the right 3) Idem 45º to the left; 4) Eyes closed, head tilted at 30º backward and 5) Idem 30º forward; 6) Standing on an unstable cushion, facing forward eyes open and eyes closed. 4 pieces.
Shibayama et al., (2016)[117]	161	28-33	33.3 (4.7)	Standing and feet together for 30 sec on force platform. 1 piece.
Takeda et al., (2018)[118]	100	2nd and 3rd trimester	20-30	Standing with the medial malleoli 100 mm apart for 10-sec. Then, moving forward, backward, right and left for 10-sec each. 2 pieces.
Moreira et al., (2017)[119]	30	1st and 3rd trimester	26.8 (5.1)	Standing with each foot positioned on each triaxial force plate (feet apart by ~20 cm) and arms along the body with eyes open focusing on a target located ~2 m in front and eyes closed for 3 trails of 60-sec each and 2-min rest. 2 pieces.
Opala-Berdzik et al., (2018)[120]	70	10.8 (1.6)	28.6 (4.4)	Standing with arms at both sides and in a comfortable stance on a stable force platform, with eyes open looking straight ahead at a wall 3m away for 2 trials of 30-sec and 1-min rest between them.

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Catena et al., (2019)[121]	17	9 time-points: 16-20 gw, 36-40 gw and 1 time per month up to 7 months postpartum	28.9 (4.0)	2 trials: 1) quiet static in anatomical position for 10 s on a force plate; 2) Idem 1 on a back-board spanning two force plates.
Fontana et al., (2020)[122]	24	23 (3)	30 (6)	Standing barefoot two-legged stance with arms at both sides with eyes open at 2 m from a cross placed on a wall at eye level during 3 x 30s trials with 30 s rest intervals. The mean was retained on force platform.
Valerio et al., (2020)[123]	40	30.8 (3.9)	28 (2.5)	Standing barefoot with freestanding supports inside the platform and arms by their sides. And staring at a mark on the opposite wall. 3 trials with the eyes open and three trials with eyes closed, with 30 s rest intervals.
Takeda et al., (2019)[100]	21	22 and 23.25 gw.	32 (3.3)	Standing barefoot on 2 stabilometers. 3 trials: 1) 10-sec standing position; 2) 10-sec moving in the anterior position; 3) 10-sec moving in the posterior position.
Others				
Atay et al., (2015)[93]	37	2 time-points: 20 gw and 32 gw	29.6 (5.9)	One-legged stand test.
		Dynamic Balance		
		On platforms		
Davies et al., (2002)[124]	150	Day of labour	30.2 (5.8)	Balance Master Platform Tests: 1) Sit to Stand; 2) Walk Test, 3) Step and Quick Turn, 4) Step Up and Over.

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Karadag-Saygi et al., (2010)[111]	35	33 (3)	29.75 (4.5)	Walking barefoot 4 m.
McCrory et al, (2010)[125]	81	2 time-points: 20.9 (1.2) and 35.8 (1.5)	28 (5.7)	The Motor Control Test protocol with translational perturbations. Equitest posture platform.
Branco et al., (2013)[126]	22	27 (1.3)	32.5 (2.6)	Walking barefoot for 10 m between 2 points in a straight line at a natural and comfortable speed for 3 min.
Cakmak et al., (2014)[127]	41	6-12	26.5 (4.7)	Standing with knee flexed, arms placed across the chest and glare fixed ahead with open eyes on a movable platform provides up to 20º of surface tilt in a 360º range of motion for 3 trails of 20 sec each.
Inanir et al., (2014)[128]	110	3 groups: 1st trimester, 2nd trimester and 3rd trimester.	24.7 (5.2)	Idem to Cakmak et al., (2014)
3-D Camera motion capture system				
Wu et al., (2004)[129]	25	27	33.1	Walking on a treadmill at different velocities (incrementing 0.11 m/s, from 0.17 up to 1.72 m/s; for 3 min at each level).
Forczeck et al., (2012)[130]	13	NR	29.2 (3.5)	Walking barefoot at a self-selected speed across the room during 15 gait cycles.10
Takeda et al., (2012)[131]	16	24.85 (1.95)	35 (1.4)	Stand-to-sit motion assessing the time taken to sit down; the leg joint moment; the antero-posterior and vertical floor reaction forces; and the range of motion of the lower limbs and trunk.
Gottschall et al., (2013)[132]	13	2 time-points: 20 and 32	31.3 (4.5)	Walking along 25 m on a custom-built portable apparatus composed of a 2.4 m ramp inclined at 15° continuous with a 4.8 m plateau.
McCrory et al., (2014)[133]	69	28.35 (1.35)	28.0 (5.7)	Walking along the 8-m runway.

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Krkeljas, (2018)[134]	35	3 time-points: 9-12 gw; 20-22 gw and 28-32 gw.	27 (6.1)	Walking on a straight line, at a self-selected pace along the 15-m walkway.
Catena et al., (2019)[135]	15	5 time-points: 16-20; 20-24, 24-28; 28-32; 32-36 gw.	29.3 (3.7)	60-second trial of semi-continuous stand-to-sit motion. 54 reflective markers were adhered to body land.
Catena et al., (2019)[136]	15	7 time-points: 12-16; 16-20; 20-24, 24-28; 28-32; 32-36; 36-40 gw	28.1 (4.3)	Walking on a treadmill for 60 seconds at a self-selected comfortable speed.
Forczek et al., (2019)[137]	30	3 time-points: 12, 25, 36 gw.	30.3 (3.4)	Walking barefoot at a self-selected speed during 12m intervals. 10 gait cycles.
Forczek et al., (2019)[138]	14	2 time-points: pre-pregnancy; 1st trimester	20-40	Walking barefoot across room at a self-selected during 50 m with 1 min rest intervals. 10 gait cycles.
Catena et al., (2020)[139]	23	5 time-points: 18, 22, 26, 30, 34 gw.		Walking on a treadmill for 60 seconds at a self-selected comfortable speed.
Gimunova et al., (2020)[140]	41	4 time-points: 14, 28, 37 gw	30.5 (4.1)	Walking barefoot along a 6-meter walkway at a self-selected.
McCrory et al., (2020)[141]	95	2 time-points: 2nd and 3rd trimester	28.4 (5.5)	Walking along the 8m laboratory runway until walking speed stabilized.
Rothwell et al., (2020)[142]	17	2 time-points: 16-20; 36-40 gw	22-37	Walking on a treadmill for 60 seconds at a self-selected comfortable speed.
Forczek et al., (2019)[143]	36	3 time-points: 12; 25; 36 gw	30.3 (3.4)	Walking across the room 50 m with 1-min rest interval. 10 gait cycles.
Others				
Sawa et al., (2015)[144]	27	2 groups: early pregnancy (≤27 gw) or late pregnancy (≥27 gw)	30.9 (4.2)	Walking at self-pace speed along a 15-m smooth, horizontal corridor. It was recorded with 2 wireless motion-recording-sensor units and one piezo-resistive triaxial accelerometer.

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Błaszczyk et al., (2016)[145]	28	1st trimestrer and 3rd trimester	28.2 (3.4)	Walking along 10-m long walkway (back and forth 10 times) at self-space speed. It was recorded by custom made; self-adhesive copper foil electrodes attached to the soles of their shoes.
			Speed	
Evensen et al., (2015)[146]	17	28.7 (7.4)	31.1(2.3)	Ten-metres Timed walk Test (10mTWT)
Evensen et al., (2016)[147]	18	28.9 (7.3)	31.4 (2.7)	10mTWT
			Multicomponent	
Evensen et al., (2015)[146]	17	28.7 (7.4)	31.1(2.3)	Timed Up and Go Test (TUG)
Evensen et al., (2016)[147]	18	28.9 (7.3)	31.4 (2.7)	TUG
Christensen et al., (2019)[148]	74	23	31.2 (3.7)	TUG

Ad hoc: test designed specifically for that study; NR: Not reported; PFS: Physical Fitness Score; kpm: kilopoundimeter; min: minutes; sec: seconds; HR_{Max}: Heart Rate Maximum; VO_2 max: oxygen consumption maximum; RPE: rate of perceived exertion; AT: anaerobic threshold; ICC: intraclass correlation coefficient; MVCF: maximal voluntary contraction force; HGS: hand-grip strength; m: meters; mm: millimeters; FP: force platform; PP: pressure platform.

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