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Rehn, B., Lidström, J., Skoglund, J. & Lindström, B.
Effects on leg muscular performance from whole-body vibration exercise: a systematic review.
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Table 4b. Overview of studies included on short-term exercise

Author and year	Purpose	Type of study	Subjects	Exercise	Results	Specification of vibration exercise	Specification of muscle performance
Bosco et al. (2000)	Investigate the acute effects of 60 s WBVE	Case study	Fourteen physically active male subjects, mean age 25 ± 4.6	Ten sessions of 60 s WBVE. 60 s of rest between the sessions with a knee angle at 100° of flexion	Mechanical output of leg extensor muscles significantly enhanced with 7% ($P=0.003$) Jumping performance significantly enhanced by 4% ($P<0.001$)	Acc: 17 g A: 4 mm F: 26 Hz S: 9	Dynamic leg press exercises on a slide machine with extra loads of 160% of the subjects' mass (70% of 1RM) Flight time and contact time were recorded and jump height was calculated, using a resistive platform
Cochrane et al. (2005)	Investigate effects of a 5-min WBVE session	Randomized cross-over (case study)	Eighteen female elite field hockey players (21.8 ± 5.9)	WBVE in six various positions. Four positions for 1 min and two positions for 30 s	8.1 ± 5.8% increase in ACMVJ height compared with cycling or control (standing)	A: 6 mm F: 26 Hz S: 8 (type not specified)	Vertical jump test (Six countermovement jumps with arm swing (ACMVJ) on a contact timing mat. Separated with a rest period of 10 s
de Ruyter et al. (2003a)	Investigate effects of a 5-minute WBVE session	Case study	Twelve untrained students (seven males) 23.3 (4.2) years	One standard WBVE session 5 × 1 min vibration, with a 2 min rest in between	Maximal knee extensor force reduced 90 s after vibration. MRFR not affected by vibration	A: 8 mm F: 30 Hz S: 7 (direction and type not specified)	Maximal voluntary contraction (MVC) force was determined as the highest value from three to six maximal voluntary knee extensions
Torvinen et al. (2002c)	Investigate effects of a 4-minute WBVE on muscle performance and body balance	Randomized cross-over (case study)	Sixteen young healthy subjects (eight males), 18–35 years	Multidirectional WBVE with light movements	No change in muscle performance or balance at 2 and 60 min after the exercise session	A: 2 mm F: 25-40 Hz S: 8 (type not specified)	Maximal isometric strength of leg extensors and a vertical countermovement jump test
Torvinen et al. (2002a)	Investigate effects of a 4-min vibration bout on muscle performance and body balance	Randomized cross-over (case study)	Sixteen young healthy subjects (eight men, 24–33 years)	Multidirectional WBVE with light movements	Transient net benefit (2.5%) in jump height, 3.2% benefit in isometric extension strength	A: 10 mm F: 15-30 Hz S: 8 (type not specified)	Isometric extension strength of lower extremities and jump height

WBVE, whole-body vibration exercise; A, amplitude; F, frequency; MRFR, maximal rate of isometric force

raise; S, score from the evaluation of vibration exercise (maximum=9); Acc, acceleration; g , earth acceleration (9.81 m/s^2).

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