Table 1. Summary of included studies

Study	Sample	Design	RT Protocol	Intervention Duration (Weeks)	Hypertrophy Measure	SMART- LD Score (/20)
Alegre et al. (2014)	19 young, untrained individuals	Parallel group random assignment to 1 of 2 groups: (1) K90(90° knee flexion); (2) K50(50° knee flexion)	5-s Isometric contractions of KE on IKD, 2-3 d/wk, consisting of 3-4 sets of 5-7 repetitions	8	US: MT of VL at 25, 50, 75%	11
Bloomquist et al. (2013)	17 young, untrained men	Parallel group random assignment to 1 of 2 groups: (1) Deep squat (0-120° knee flexion); (2) Shallow squat (0- 60° knee flexion)	Back squats performed 3 d/wk, consisting of 3-4 sets of 5-10 RM	12	MRI: CSA of FT and BT at 10, 20, 30, 40, 50, 60%	11
Maeo et al. (2021)	20 young, untrained individuals	Within-participant random assignment of legs to 1 of 2 conditions: (1) seated leg curl (~90° hip flexion); (2) prone leg curl (~30° hip flexion) from 0-90° knee flexion	Unilateral seated or prone leg curl performed 2 d/wk, consisting of 5 sets of 10 repetitions at 70% 1 RM	12	MRI: CSA of BFL, ST at 30, 70%	15
McMahon et al. (2014)	16 young, untrained individuals	Parallel group random assignment to 1 of 2 groups: (1) LR (0-90° knee flexion); (2) SR (0-50° knee flexion)	TB protocol performed 3 d/wk, consisting of 3 sets of 10-30 repetitions, with BW to 80% 1 RM	8	US: CSA of VL at 25, 50, 75%	10

McMahon et al. (2013)	21 young, untrained individuals	Parallel group random assignment to 1 of 2 groups: (1) LL (40-90° knee flexion); (2) SL (0-50° knee flexion)	TB protocol performed 3 d/wk, consisting of 3 sets of 10-30 repetitions, at 55 - 80% 1 RM	8	US: CSA of VL at 25, 50, 75%	10
Noorkõiv et al. (2014)	16 young, untrained men	Parallel group random assignment to 1 of 2 groups: (1) LL (87.5° knee flexion); (2) SL (38.1° knee flexion)	5-s isometric contractions of KE on IKD, 3 d/wk, consisting of 5 sets	6	MRI: CSA of RF, VL, VI, VM at 10, 20, 30, 40, 50, 60, 70, 90%	8
Noorkõiv et al. (2015)	16 young, untrained men	Parallel group random assignment to 1 of 2 groups: (1) LL (87.5° knee flexion); (2) SL (38.1° knee flexion)	5-s isometric contractions of KE on IKD, 3 d/wk, consisting of 5 sets	6	MRI: CSA of RF, VL, VI, VM at 10, 20, 30, 40, 50, 60, 70, 90%	8
Pedrosa et al. (2022)	45 young, untrained women	Parallel group random assignment to 1 of 2 groups: (1) INITIAL (100-65° knee flexion); (2) FINAL (65-30° knee flexion); (3) FULL (100-30°); (4) VAR (Alternation between INITIAL and FINAL ROM)	Knee extension exercise, 3 d/wk, consisting of 3-6 sets of 7 repetitions at 60% 1 RM	12	US: CSA of VL, RF at 40, 50, 60, 70%	9
Pedrosa et al. (2023)	19 young, untrained women	Within-participant random assignment of legs to 1 of 2 conditions: (1) INITIAL (0-68° elbow flexion); (2) FINAL (68-135° elbow flexion)	DB Preacher curl performed 3 d/wk, consisting of 4 sets carried out until volitional failure	8	US: CSA of EF at 50, 70%	13
Sato et al. (2021)	24 young, untrained individuals	Parallel group random assignment to 1 of 2 groups: (1) EXT (0-50° elbow flexion); (2) FLEX (80-130° elbow flexion)	EF training on a preacher curl bench, 2 d/wk, consisting of 3 sets of 10 repetitions	5	US: MT of EF at 50, 60, 70%	15
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Stasinaki et	10 young,	Within-participant random	Unilateral cable push	6	US: MT and CSA of	14
al. (2018)	untrained	assignment of arms to 1 of 2	down or overhead		TB LH at 50, 60%	
	women	conditions:	extension, 2 d/wk,			
		(1) S (cable pushdowns, 170-90°	consisting of 6 sets with			
		elbow extension); (2) L (cable	6 RM			
		overhead extensions, 110-30° elbow				
		extension)				
Valamatos et	11 young,	Within-participant random	Maximal concentric KE	15	MRI: CSA of VL at	12
al. (2018)	untrained	assignment of legs to 1 of 2	on IKD, 3 d/wk, 2-7 sets,		25, 50, 70%	
	men	conditions:	6-15 repetitions			
		(1) FULL (0-100° of knee flexion); (2)				
		PART (0-60° of knee flexion)				
Zabaleta-	31 young,	Parallel group random assignment to	Incline or preacher curl	9	US: MT of EF at 50,	14
Korta et al.	resistance	1 of 2 groups: (1) INC (0-110° elbow	exercise, 3 d/wk, 4 sets		60, 70%	
(2023)	trained	flexion); (2) PREA (40-75° elbow	to muscular failure			
	women	flexion)				

IKD: isokinetic dynamometer; US: ultrasound; MT: muscle thickness; MRI: magnetic resonance imaging; CSA: cross-sectional area; KE: knee extensors; TB: total body; DB: dumbbell; BW: bodyweight; RF: rectus femoris; VM: vastus medialis; VI: vastus intermedius; VL: vastus lateralis; FT: front thigh; BT: back thigh; BFL: biceps femoris long head; ST: sartorius EF: elbow flexors; TB LH: triceps brachii long head