

Appendix

Title: The Effect of Carbohydrate Intake on Muscle Hypertrophy: A Systematic Review and Meta-Analysis

Journal: Sports Medicine

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Appendix A: literature searches

MEDLINE and SPORTDiscus databases via EBSCOhost

“((MH “Carbohydrates” OR DE "CARBOHYDRATES" OR carbohydrate* OR keto* OR (maltodextrin N2 (supplement* OR intake)) OR (glucose N2 (ingestion OR intake OR supplement*))) AND (MH “Resistance Training” OR MH “Weight Lift*” OR DE "RESISTANCE training" OR DE "STRENGTH training" OR isokinetic OR “strength training” OR “resistance training” OR “resistance exercise” OR powerlift* OR weightlift* OR “power lift*” OR CrossFit) AND (MH “Muscle Hypertrophy” OR DE "MUSCULAR hypertrophy" OR DE "MUSCLE growth" OR “muscle growth” OR “muscle volume” OR “muscle size” OR “muscle fiber size” OR “cross-sectional area” OR CSA OR “muscle thickness” OR “body composition” OR “lean body mass” OR “fat-free mass” OR LBM OR FFM)).”

Google Scholar

Advanced Scholar Search using Publish or Perish (Version 8.14.4703):

(“carbohydrate intake” OR “carbohydrate supplementation” OR “ketogenic diet”) AND (“resistance training” OR weight lifting OR powerlifting OR CrossFit) AND (“muscle hypertrophy” OR “muscle growth” OR “muscle thickness” OR “body composition”) AND RCT

Note that the Google Scholar search was abbreviated due to its 256-character limit and RCT was specified to limit irrelevant hits.

SciELO

(Carbohydrate* OR keto*) AND (“resistance training” OR “weight lift*” OR “weightlift*” OR “strength training” OR isokinetic OR “resistance exercise” OR powerlift* OR “power lift*” OR CrossFit) AND (“musc* hypertrophy” OR “muscle growth” OR “muscle volume” OR “muscle size” OR “muscle fiber size” OR “cross-sectional area” OR CSA OR “muscle thickness” OR “body composition” OR “lean body mass” OR “fat-free mass”)

Appendix B: study quality overview

	TESTEX point													
Study	1	2	3	4	5	6	7	8	9	11	12	Total	Study quality	
Sanchez et al. 2023	1	1	1	0	1	2	0	2	1	1	1	11	Good	
Krings et al. 2020	1	0	1	0	1	2	0	2	1	1	1	10	Good	
Santos et al. 2020	1	0	1	1	0	0	0	2	1	1	1	8	Fair	
Paoli et al. 2021	1	1	1	1	1	1	1	2	1	1	0	11	Good	
Vidic et al. 2021	1	0	1	1	1	2	0	2	1	0	1	10	Good	
Vargas et al. 2018	1	0	1	1	1	1	0	2	1	1	1	10	Good	
Kysel et al. 2020	1	1	1	1	1	1	1	2	1	1	0	11	Good	
Jabekk et al. 2010	1	0	1	0	1	3	0	2	1	1	1	11	Good	
Greene et al. 2018	1	0	1	0	1	1	0	1	0	1	1	7	Fair	
Wilson et al. 2020	1	0	1	1	1	0	0	2	1	1	1	9	Fair	
Gregory et al. 2017	1	0	1	1	1	3	0	2	1	0	0	10	Good	