

Referanser til kapittel 9

1. Kannus, P. *et al.* The effects of training, immobilization and remobilization on musculoskeletal tissue. *Scand J Med Sci Sports* 2, 100-118 (1992)
2. Bruggemann, G. P. in *Neuromuscular aspects of sport performance*, XVII Ch. 11, 164-182 (Wiley-Blackwell, 2010)
3. Gahunia, H. K. & Pritzker, K. P. Effect of exercise on articular cartilage. *Orthop Clin North Am* 43, 187-199, v, doi:10.1016/j.ocl.2012.03.001 (2012)
4. Felsenthal, N. & Zelzer, E. Mechanical regulation of musculoskeletal system development. *Development* 144, 4271-4283, doi:10.1242/dev.151266 (2017)
5. Gabbett, T. J. *et al.* In pursuit of the 'Unbreakable' Athlete: what is the role of moderating factors and circular causation? *Br J Sports Med* 53, 394-395, doi:10.1136/bjsports-2018-099995 (2019)
6. Malone, S., Hughes, B., Doran, D. A., Collins, K. & Gabbett, T. J. Can the workload-injury relationship be moderated by improved strength, speed and repeated-sprint qualities? *J Sci Med Sport* 22, 29-34, doi:10.1016/j.jsams.2018.01.010 (2019)
7. Raysmith, B. P. & Drew, M. K. Performance success or failure is influenced by weeks lost to injury and illness in elite Australian track and field athletes: A 5-year prospective study. *J Sci Med Sport* 19, 778-783, doi:10.1016/j.jsams.2015.12.515 (2016)
8. Ekstrand, J., Gillquist, J., Moller, M., Oberg, B. & Liljedahl, S. O. Incidence of soccer injuries and their relation to training and team success. *Am J Sports Med* 11, 63-67, doi:10.1177/036354658301100203 (1983)
9. Arnason, A. *et al.* Physical fitness, injuries, and team performance in soccer. *Med Sci Sports Exerc* 36, 278-285, doi:10.1249/01.MSS.0000113478.92945. CA (2004)
10. von Rosen, P. & Heijne, A. Substantial injuries influence ranking position in young elite athletes of athletics, cross-country skiing and orienteering. *Scand J Med Sci Sports* 28, 1435-1442, doi:10.1111/sms.13032 (2018)
11. Gabbett, T. J. The training-injury prevention paradox: should athletes be training smarter and harder? *Br J Sports Med* 50, 273-280, doi:10.1136/bjsports-2015-095788 (2016)
12. Bahr, R. Why screening tests to predict injury do not work-and probably never will...: a critical review. *Br J Sports Med* 50, 776-780, doi:10.1136/bjsports-2016-096256 (2016)
13. Rossler, R. *et al.* Exercise-based injury prevention in child and adolescent sport: a systematic review and meta-analysis. *Sports Med* 44, 1733-1748, doi:10.1007/s40279-014-0234-2 (2014)
14. Lauersen, J. B., Bertelsen, D. M. & Andersen, L. B. The effectiveness of exercise interventions to prevent sports injuries: a systematic review and meta-analysis of randomised controlled trials. *Br J Sports Med* 48, 871-877, doi:10.1136/bjsports-2013-092538 (2014)
15. Emery, C. A., Roy, T. O., Whittaker, J. L., Nettel-Aguirre, A. & van Mechelen, W. Neuromuscular training injury prevention strategies in youth sport: a systematic review and meta-analysis. *Br J Sports Med* 49, 865-870, doi:10.1136/bjsports-2015-094639 (2015)
16. Ekstrand, J., Gillquist, J. & Liljedahl, S. O. Prevention of soccer injuries. Supervision by doctor and physiotherapist. *Am J Sports Med* 11, 116-120, doi:10.1177/036354658301100302 (1983)
17. Soomro, N. *et al.* The Efficacy of Injury Prevention Programs in Adolescent Team Sports: A Meta-analysis. *Am J Sports Med* 44, 2415-2424, doi:10.1177/0363546515618372 (2016)
18. Hecksteden, A., Faude, O., Meyer, T. & Donath, L. How to Construct, Conduct and Analyze an Exercise Training Study? *Front Physiol* 9, 1007, doi:10.3389/fphys.2018.01007 (2018)
19. Aaltonen, S., Karjalainen, H., Heinonen, A., Parkkari, J. & Kujala, U. M. Prevention of sports injuries: systematic review of randomized controlled trials. *Arch Intern Med* 167, 1585-1592, doi:10.1001/archinte.167.15.1585 (2007)
20. Grimm, N. L., Jacobs, J. C., Jr., Kim, J., Denney, B. S. & Shea, K. G. Anterior Cruciate Ligament and Knee Injury Prevention Programs for Soccer Players: A Systematic Review and Meta-analysis. *Am J Sports Med* 43, 2049-2056, doi:10.1177/0363546514556737 (2015)
21. Cuthbert, M. *et al.* The Effect of Nordic Hamstring Exercise Intervention Volume on Eccentric Strength and Muscle Architecture Adaptations: A Systematic Review and Meta-analyses. *Sports Med*, doi:10.1007/s40279-019-01178-7 (2019)

22. Lauersen, J. B., Andersen, T. E. & Andersen, L. B. Strength training as superior, dose-dependent and safe prevention of acute and overuse sports injuries: a systematic review, qualitative analysis and meta-analysis. *Br J Sports Med* 52, 1557-1563, doi:10.1136/bjsports-2018-099078 (2018)
23. Herman, K., Barton, C., Malliaras, P. & Morrissey, D. The effectiveness of neuromuscular warm-up strategies, that require no additional equipment, for preventing lower limb injuries during sports participation: a systematic review. *BMC Med* 10, 75, doi:10.1186/1741-7015-10-75 (2012)
24. Arnason, A., Andersen, T. E., Holme, I., Engebretsen, L. & Bahr, R. Prevention of hamstring strains in elite soccer: an intervention study. *Scand J Med Sci Sports* (2007)
25. Steffen, K., Myklebust, G., Olsen, O. E., Holme, I. & Bahr, R. Preventing injuries in female youth football--a cluster-randomized controlled trial. *Scand J Med Sci Sports* 18, 605-614, doi:10.1111/j.1600-0838.2007.00703.x (2008)
26. McCall, A., Dupont, G. & Ekstrand, J. Injury prevention strategies, coach compliance and player adherence of 33 of the UEFA Elite Club Injury Study teams: a survey of teams' head medical officers. *Br J Sports Med* 50, 725-730, doi:10.1136/bjsports-2015-095259 (2016)
27. Faude, O. *et al.* Neuromuscular Adaptations to Multimodal Injury Prevention Programs in Youth Sports: A Systematic Review with Meta-Analysis of Randomized Controlled Trials. *Front Physiol* 8, 791, doi:10.3389/fphys.2017.00791 (2017)
28. Kiely, J. Periodization Theory: Confronting an Inconvenient Truth. *Sports Med* 48, 753-764, doi:10.1007/s40279-017-0823-y (2018)
29. Kiely, J. Periodization paradigms in the 21st century: evidence-led or tradition-driven? *Int J Sports Physiol Perform* 7, 242-250 (2012)
30. Booth, F. W., Tseng, B. S., Fluck, M. & Carson, J. A. Molecular and cellular adaptation of muscle in response to physical training. *Acta Physiol Scand* 162, 343-350, doi:10.1046/j.1365-201X.1998.0326e.x (1998)
31. Fluck, M. & Hoppeler, H. Molecular basis of skeletal muscle plasticity--from gene to form and function. *Rev Physiol Biochem Pharmacol* 146, 159-216 (2003)
32. Lieber, R. L. & Friden, J. Functional and clinical significance of skeletal muscle architecture. *Muscle Nerve* 23, 1647-1666 (2000)
33. De Ste Croix, M. B. *et al.* Changes in short-term power output in 10- to 12-year-olds. *J Sports Sci* 19, 141-148, doi:10.1080/026404101300036352 (2001)
34. Martin, J. C., Farrar, R. P., Wagner, B. M. & Spirduso, W. W. Maximal power across the lifespan. *J Gerontol A Biol Sci Med Sci* 55, M311-M316 (2000)
35. Blimkie, C. J., Roache, P., Hay, J. T. & Bar-Or, O. Anaerobic power of arms in teenage boys and girls: relationship to lean tissue. *Eur J Appl Physiol Occup Physiol* 57, 677-683 (1988)
36. Bar-Or, O. The Wingate anaerobic test. An update on methodology, reliability and validity. *Sports Med* 4, 381-394 (1987)
37. Gastin, P. B. Quantification of anaerobic capacity. *Scand J Med Sci Sports* 4, 91-112 (1994)
38. Young, W. B. Transfer of strength and power training to sports performance. *Int J Sports Physiol Perform* 1, 74-83 (2006)
39. Kraemer, W. J., Ratamess, N. A. & French, D. N. Resistance training for health and performance. *Curr Sports Med Rep* 1, 165-171 (2002)
40. Behringer, M., Vom Heede, A., Matthews, M. & Mester, J. Effects of strength training on motor performance skills in children and adolescents: a meta-analysis. *Pediatr Exerc Sci* 23, 186-206 (2011)
41. Driss, T. & Vandewalle, H. The measurement of maximal (anaerobic) power output on a cycle ergometer: a critical review. *Biomed Res Int* 2013, 589361 [doi] (2013)
42. Frontera, W. R., Meredith, C. N., O'Reilly, K. P., Knutgen, H. G. & Evans, W. J. Strength conditioning in older men: skeletal muscle hypertrophy and improved function. *J Appl Physiol* 64, 1038-1044 (1988)
43. Frontera, W. R. *et al.* Aging of skeletal muscle: a 12-yr longitudinal study. *J Appl Physiol* 88, 1321-1326 (2000)
44. Suetta, C. *et al.* Effects of aging on human skeletal muscle after immobilization and retraining. *J Appl Physiol* 107, 1172-1180 (2009)
45. Herzog, W. Why are muscles strong, and why do they require little energy in eccentric action? *J Sport Health Sci* 7, 255-264, doi:10.1016/j.jshs.2018.05.005 (2018)
46. Edman, K. A. Contractile performance of striated muscle. *Adv Exp Med Biol* 682, 7-40, doi:10.1007/978-1-4419-6366-6_2 (2010)
47. Moo, E. K. & Herzog, W. Single sarcomere contraction dynamics in a whole muscle. *Sci Rep* 8, 15235, doi:10.1038/s41598-018-33658-7 (2018)
48. Komi, P. V. & Nicol, C. in *Neuromuscular aspects of sport performance* (ed P. V. Komi) Ch. 2, 15-31 (Wiley-Blackwell, 2010)
49. Wisdom, K. M., Delp, S. L. & Kuhl, E. Use it or lose it: multiscale skeletal muscle adaptation to mechanical stimuli. *Bio-mech Model Mechanobiol* 14, 195-215, doi:10.1007/s10237-014-0607-3 (2015)
50. Gans, C. & Gaunt, A. S. Muscle architecture in relation to function. *J Biomech* 24 Suppl 1, 53-65 (1991)
51. Fukunaga, T., Kawakami, Y., Kuno, S., Funato, K. & Fukashiro, S. Muscle architecture and function in humans. *J Biomech* 30, 457-463 (1997)
52. Eng, C. M., Azizi, E. & Roberts, T. J. Structural Determinants of Muscle Gearing During Dynamic Contractions. *Integr Comp Biol* 58, 207-218, doi:10.1093/icb/icy054 (2018)
53. Narici, M., Franchi, M. & Maganaris, C. Muscle structural assembly and functional consequences. *J Exp Biol* 219, 276-284, doi:10.1242/jeb.128017 (2016)
54. Brechue, W. F. & Abe, T. The role of FFM accumulation and skeletal muscle architecture in powerlifting performance. *Eur J Appl Physiol* 86, 327-336 (2002)
55. Kyriazis, T., Terzis, G., Karampatos, G., Kavouras, S. & Georgiadis, G. Body composition and performance in shot put athletes at preseason and at competition. *Int J Sports Physiol Perform* 5, 417-421 (2010)
56. Ford, L. E., Detterline, A. J., Ho, K. K. & Cao, W. Gender- and height-related limits of muscle strength in world weightlifting champions. *J Appl Physiol* (1985) 89, 1061-1064, doi:10.1152/jappl.2000.89.3.1061 (2000)

57. Silva, A. M. Structural and functional body components in athletic health and performance phenotypes. *Eur J Clin Nutr* 73, 215-224, doi:10.1038/s41430-018-0321-9 (2019)
58. Zaras, N. D. *et al.* Rate of Force Development, Muscle Architecture, and Performance in Young Competitive Track and Field Throwers. *J Strength Cond Res* 30, 81-92, doi:10.1519/JSC.0000000000001048 (2016)
59. Zaras, N. *et al.* Track and field throwing performance prediction: training intervention, muscle architecture adaptations and field tests explosiveness ability. *J Phys Educ Sport* 19, 436-443 (2019)
60. Bazyler, C. D. *et al.* Characteristics of a National Level Female Weightlifter Peaking for Competition: A Case Study. *J Strength Cond Res* 32, 3029-3038, doi:10.1519/JSC.0000000000002379 (2018)
61. Tottori, N. *et al.* Hip Flexor and Knee Extensor Muscularity Are Associated With Sprint Performance in Sprint-Trained Preadolescent Boys. *Pediatr Exerc Sci* 30, 115-123, doi:10.1123/pes.2016-0226 (2018)
62. Handsfield, G. G. *et al.* Adding muscle where you need it: non-uniform hypertrophy patterns in elite sprinters. *Scand J Med Sci Sports* 27, 1050-1060, doi:10.1111/smss.12723 (2017)
63. Kubo, K., Ikebukuro, T., Yata, H., Tomita, M. & Okada, M. Morphological and mechanical properties of muscle and tendon in highly trained sprinters. *J Appl Biomech* 27, 336-344 (2011)
64. Kumagai, K. *et al.* Sprint performance is related to muscle fascicle length in male 100-m sprinters. *J Appl Physiol* (1985) 88, 811-816, doi:10.1152/jappl.2000.88.3.811 (2000)
65. Monte, A. & Zamparo, P. Correlations between muscle-tendon parameters and acceleration ability in 20 m sprints. *PLoS One* 14, e0213347, doi:10.1371/journal.pone.0213347 (2019)
66. Luteberget, L. S., Raastad, T., Seynnes, O. & Spencer, M. Effect of traditional and resisted sprint training in highly trained female team handball players. *Int J Sports Physiol Perform* 10, 642-647, doi:2014-0276 [pii];10.1123/ijsspp.2014-0276 [doi] (2015)
67. Delecluse, C. *et al.* Influence of high-resistance and high-velocity training on sprint performance. *Med Sci Sports Exerc* 27, 1203-1209 (1995)
68. Seitz, L. B., Reyes, A., Tran, T. T., Saez de Villarreal, E. & Haff, G. G. Increases in lower-body strength transfer positively to sprint performance: a systematic review with meta-analysis. *Sports Med* 44, 1693-1702, doi:10.1007/s40279-014-0227-1 (2014)
69. Behringer, M., Behlau, D., Montag, J. C. K., McCourt, M. L. & Mester, J. Low-Intensity Sprint Training With Blood Flow Restriction Improves 100-m Dash. *J Strength Cond Res* 31, 2462-2472, doi:10.1519/JSC.0000000000001746 (2017)
70. Abe, T. *et al.* Eight days KAATSU-resistance training improved sprint but not jump performance in collegiate male track and field athletes. *Int J Kaatsu Training Res* 1, 19-23 (2005)
71. Marques, M. C. *et al.* Influence of Strength, Sprint Running, and Combined Strength and Sprint Running Training on Short Sprint Performance in Young Adults. *Int J Sports Med* 36, 789-795, doi:10.1055/s-0035-1547284 (2015)
72. Cronin, J., Ogden, T. & Lawton, T. Does increasing maximal strength improve sprint running performance? *Strength Cond J* 29, 86-95 (2007)
73. Barr, M. J., Sheppard, J. M., Agar-Newman, D. J. & Newton, R. U. Transfer effect of strength and power training to the sprinting kinematics of international rugby players. *J. Strength Cond. Res* 28, 2585-2596, doi:10.1519/JSC.0000000000000423 [doi] (2014)
74. Delecluse, C. Influence of strength training on sprint running performance. Current findings and implications for training. *Sports Med* 24, 147-156, doi:10.2165/00007256-199724030-00001 (1997)
75. Cristea, A. *et al.* Effects of combined strength and sprint training on regulation of muscle contraction at the whole-muscle and single-fibre levels in elite master sprinters. *Acta Physiol (Oxf)* 193, 275-289, doi:APS1843 [pii];10.1111/j.1748-1716.2008.01843.x [doi] (2008)
76. Van Hooren, B., Bosch, F. & Meijer, K. Can Resistance Training Enhance the Rapid Force Development in Unloaded Dynamic Isoinertial Multi-Joint Movements? A Systematic Review. *J Strength Cond Res* 31, 2324-2337, doi:10.1519/JSC.0000000000001916 (2017)
77. Perez-Gomez, J. *et al.* Role of muscle mass on sprint performance: gender differences? *Eur. J. Appl. Physiol* 102, 685-694, doi:10.1007/s00421-007-0648-8 [doi] (2008)
78. van der Zwaard, S. *et al.* Muscle morphology of the vastus lateralis is strongly related to ergometer performance, sprint capacity and endurance capacity in Olympic rowers. *J Sports Sci* 36, 2111-2120, doi:10.1080/02640414.2018.1439434 (2018)
79. Osteras, S. *et al.* Contribution of Upper-Body Strength, Body Composition, and Maximal Oxygen Uptake to Predict Double Poling Power and Overall Performance in Female Cross-Country Skiers. *J Strength Cond Res* 30, 2557-2564, doi:10.1519/JSC.0000000000001345 (2016)
80. Vandewalle, H., Peres, G., Heller, J. & Monod, H. All out anaerobic capacity tests on cycle ergometers. A comparative study on men and women. *Eur J Appl Physiol Occup Physiol* 54, 222-229 (1985)
81. Bar-Or, O. *et al.* Anaerobic capacity and muscle fiber type distribution in man. *Int. J Sports Med* 1, 82-85 (1980)
82. Komi, P. V., Rusko, H., Vos, J. & Vihko, V. Anaerobic performance capacity in athletes. *Acta Physiol Scand* 100, 107-114, doi:10.1111/j.1748-1716.1977.tb05926.x [doi] (1977)
83. Barclay, C. J. Energy demand and supply in human skeletal muscle. *J Muscle Res Cell Motil* 38, 143-155, doi:10.1007/s10974-017-9467-7 (2017)
84. Lai, A., Schache, A. G., Brown, N. A. & Pandy, M. G. Human ankle plantar flexor muscle-tendon mechanics and energetics during maximum acceleration sprinting. *J R Soc Interface* 13, doi:10.1098/rsif.2016.0391 (2016)
85. Lai, A., Schache, A. G., Lin, Y. C. & Pandy, M. G. Tendon elastic strain energy in the human ankle plantar-flexors and its role with increased running speed. *J Exp Biol* 217, 3159-3168, doi:10.1242/jeb.100826 (2014)
86. Alexander, R. M. Tendon elasticity and muscle function. *Comp Biochem Physiol A Mol Integr Physiol* 133, 1001-1011 (2002)

87. Martin, J. C., Davidson, C. J. & Pardyjak, E. R. Understanding sprint-cycling performance: the integration of muscle power, resistance, and modeling. *Int. J Sports Physiol Perform* 2, 5-21 (2007)
88. Alen, M., Hakkinen, K. & Komi, P. V. Changes in neuromuscular performance and muscle fiber characteristics of elite power athletes self-administering androgenic and anabolic steroids. *Acta Physiol Scand* 122, 535-544, doi:10.1111/j.1748-1716.1984.tb07542.x (1984)
89. Hornsby, G. *et al.* Brief examination of hypertrophy and performance with a discussion of recent claims. *J Strength Cond Res* (2019)
90. Blazevich, A. J., Gill, N. D., Bronks, R. & Newton, R. U. Training-specific muscle architecture adaptation after 5-wk training in athletes. *Med Sci Sports Exerc* 35, 2013-2022, doi:10.1249/01.MSS.0000099092.83611.20 [doi] (2003)
91. Abe, T. *et al.* Longitudinal associations between changes in body composition and changes in sprint performance in elite female sprinters. *Eur J Sport Sci*, 1-6, doi:10.1080/17461391.2019.1612950 (2019)
92. Haun, C. T. *et al.* A Critical Evaluation of the Biological Construct Skeletal Muscle Hypertrophy: Size Matters but So Does the Measurement. *Front Physiol* 10, 247, doi:10.3389/fphys.2019.00247 (2019)
93. Trezise, J., Collier, N. & Blazevich, A. J. Anatomical and neuromuscular variables strongly predict maximum knee extension torque in healthy men. *Eur J Appl Physiol* 116, 1159-1177, doi:10.1007/s00421-016-3352-8 (2016)
94. Blazevich, A. J., Coleman, D. R., Horne, S. & Cannavan, D. Anatomical predictors of maximum isometric and concentric knee extensor moment. *Eur J Appl Physiol* 105, 869-878, doi:10.1007/s00421-008-0972-7 (2009)
95. Baxter, J. R. & Piazza, S. J. Plantar flexor moment arm and muscle volume predict torque-generating capacity in young men. *J Appl Physiol* (1985) 116, 538-544, doi:10.1152/japplphysiol.01140.2013 (2014)
96. Bobbert, M. F. & Van Soest, A. J. Effects of muscle strengthening on vertical jump height: a simulation study. *Med Sci Sports Exerc* 26, 1012-1020 (1994)
97. Moir, G., Sanders, R., Button, C. & Glaisster, M. The effect of periodized resistance training on accelerative sprint performance. *Sports Biomech* 6, 285-300, doi:10.1080/14763140701489793 (2007)
98. Stone, M. H. *et al.* Maximum strength-power-performance relationships in collegiate throwers. *J Strength Cond Res* 17, 739-745 (2003)
99. Issurin, V. Block periodization versus traditional training theory: a review. *J Sports Med. Phys. Fitness* 48, 65-75 (2008)
100. Suchomel, T. J., Nimphius, S., Bellon, C. R. & Stone, M. H. The Importance of Muscular Strength: Training Considerations. *Sports Med* 48, 765-785, doi:10.1007/s40279-018-0862-z (2018)
101. Stone, M. H., O'Bryant, H. & Garhammer, J. A hypothetical model for strength training. *J Sports Med Phys Fitness* 21, 342-351 (1981)
102. Hakkinen, K., Pakarinen, A., Alen, M., Kauhanen, H. & Komi, P. V. Neuromuscular and hormonal adaptations in athletes to strength training in two years. *J Appl Physiol* (1985) 65, 2406-2412, doi:10.1152/jappl.1988.65.6.2406 (1988)
103. Thorstensson, A., Larsson, L., Tesch, P. & Karlsson, J. Muscle strength and fiber composition in athletes and sedentary men. *Med Sci Sports* 9, 26-30 (1977)
104. Trappe, S. *et al.* Skeletal muscle signature of a champion sprint runner. *J Appl. Physiol* (1985.) 118, 1460-1466, doi:japplphysiol.00037.2015 [pii];10.1152/japplphysiol.00037.2015 [doi] (2015)
105. Schiaffino, S. & Reggiani, C. Fiber types in mammalian skeletal muscles. *Physiol Rev* 91, 1447-1531, doi:91/4/1447 [pii];10.1152/physrev.00031.2010 [doi] (2011)
106. Pansarasa, O. *et al.* Resistance training of long duration modulates force and unloaded shortening velocity of single muscle fibres of young women. *J Electromyogr Kinesiol* 19, e290-300, doi:10.1016/j.jelekin.2008.07.007 (2009)
107. Miller, M. S., Bedrin, N. G., Ades, P. A., Palmer, B. M. & Toth, M. J. Molecular determinants of force production in human skeletal muscle fibers: effects of myosin isoform expression and cross-sectional area. *Am J Physiol Cell Physiol* 308, C473-484, doi:10.1152/ajpcell.00158.2014 (2015)
108. Philippe, A. G., Lionne, C., Sanchez, A. M. J., Pagano, A. F. & Candau, R. Increase in muscle power is associated with myofibrillar ATPase adaptations during resistance training. *Exp Physiol*, doi:10.1113/EP087071 (2019)
109. Haun, C. T. *et al.* Muscle fiber hypertrophy in response to 6 weeks of high-volume resistance training in trained young men is largely attributed to sarcoplasmic hypertrophy. *PLoS One* 14, e0215267, doi:10.1371/journal.pone.0215267 (2019)
110. Zatsiorsky, V. M. & Kraemer, W. J. in *Science and practice of strength training* Ch. 3, 47-64 (Human Kinetics Publishers, 2006)
111. Evangelidis, P. E., Massey, G. J., Pain, M. T. & Folland, J. P. Strength and size relationships of the quadriceps and hamstrings with special reference to reciprocal muscle balance. *Eur J Appl Physiol* 116, 593-600, doi:10.1007/s00421-015-3321-7 (2016)
112. van Dyk, N. *et al.* Hamstring and Quadriceps Isokinetic Strength Deficits Are Weak Risk Factors for Hamstring Strain Injuries: A 4-Year Cohort Study. *Am J Sports Med* 44, 1789-1795, doi:10.1177/0363546516632526 (2016)
113. Lee, J. W. Y., Mok, K. M., Chan, H. C. K., Yung, P. S. H. & Chan, K. M. Eccentric hamstring strength deficit and poor hamstring-to-quadriceps ratio are risk factors for hamstring strain injury in football: A prospective study of 146 professional players. *J Sci Med Sport* 21, 789-793, doi:10.1016/j.jsams.2017.11.017 (2018)
114. Timmins, R. G. *et al.* Short biceps femoris fascicles and eccentric knee flexor weakness increase the risk of hamstring injury in elite football (soccer): a prospective cohort study. *Br J Sports Med* 50, 1524-1535, doi:10.1136/bjsports-2015-095362 (2016)
115. Kilgallon, M., Donnelly, A. E. & Shafat, A. Progressive resistance training temporarily alters hamstring torque-angle relationship. *Scand J Med Sci Sports* 17, 18-24 (2007)
116. Guex, K., Degache, F., Morisod, C., Sailly, M. & Millet, G. P. Hamstring Architectural and Functional Adaptations Fol-

- lowing Long vs. Short Muscle Length Eccentric Training. *Front Physiol* 7, 340, doi:10.3389/fphys.2016.00340 (2016)
117. Brockett, C. L., Morgan, D. L. & Proske, U. Human hamstring muscles adapt to eccentric exercise by changing optimum length. *Med Sci Sports Exerc* 33, 783-790 (2001)
118. Lynn, R., Talbot, J. A. & Morgan, D. L. Differences in rat skeletal muscles after incline and decline running. *J Appl Physiol* 85, 98-104 (1998)
119. Blazevich, A. J., Cannavan, D., Coleman, D. R. & Horne, S. Influence of concentric and eccentric resistance training on architectural adaptation in human quadriceps muscles. *J Appl Physiol* (1985) 103, 1565-1575, doi:10.1152/japplphysiol.00578.2007 (2007)
120. Sharifnezhad, A., Marzilger, R. & Arampatzis, A. Effects of load magnitude, muscle length and velocity during eccentric chronic loading on the longitudinal growth of the vastus lateralis muscle. *J Exp Biol* 217, 2726-2733, doi:10.1242/jeb.100370 (2014)
121. Noorkoiv, M., Nosaka, K. & Blazevich, A. J. Neuromuscular adaptations associated with knee joint angle-specific force change. *Med Sci Sports Exerc* 46, 1525-1537, doi:10.1249/MSS.000000000000269 (2014)
122. Prasartwuth, O., Allen, T. J., Butler, J. E., Gandevia, S. C. & Taylor, J. L. Length-dependent changes in voluntary activation, maximum voluntary torque and twitch responses after eccentric damage in humans. *J Physiol* 571, 243-252, doi:jphysiol.2005.101600 [pii];10.1113/jphysiol.2005.101600 [doi] (2006)
123. Finni, T., Ikegawa, S., Lepola, V. & Komi, P. V. Comparison of force-velocity relationships of vastus lateralis muscle in isokinetic and in stretch-shortening cycle exercises. *Acta Physiol Scand* 177, 483-491, doi:10.1046/j.1365-201X.2003.01069.x (2003)
124. Ichinose, Y., Kawakami, Y., Ito, M., Kanehisa, H. & Fukunaga, T. In vivo estimation of contraction velocity of human vastus lateralis muscle during "isokinetic" action. *J Appl Physiol* (1985) 88, 851-856, doi:10.1152/jappl.2000.88.3.851 (2000)
125. de Brito Fontana, H., Han, S. W., Sawatsky, A. & Herzog, W. The mechanics of agonistic muscles. *J Biomech* 79, 15-20, doi:10.1016/j.biomech.2018.07.007 (2018)
126. Woodley, S. J. & Mercer, S. R. Hamstring muscles: architecture and innervation. *Cells Tissues Organs* 179, 125-141, doi:10.1159/000085004 (2005)
127. Thelen, D. G., Chumanov, E. S., Best, T. M., Swanson, S. C. & Heiderscheit, B. C. Simulation of biceps femoris musculotendon mechanics during the swing phase of sprinting. *Med Sci Sports Exerc* 37, 1931-1938 (2005)
128. Thelen, D. G. *et al.* Hamstring muscle kinematics during treadmill sprinting. *Med Sci Sports Exerc* 37, 108-114 (2005)
129. Yu, B., Liu, H. & Garrett, W. E. Mechanism of hamstring muscle strain injury in sprinting. *J Sport Health Sci* 6, 130-132, doi:10.1016/j.jshs.2017.02.002 (2017)
130. Blazevich, A. J., Gill, N. D. & Zhou, S. Intra- and intermuscular variation in human quadriceps femoris architecture assessed in vivo. *J Anat* 209, 289-310, doi:10.1111/j.1469-7580.2006.00619.x (2006)
131. Pimenta, R., Blazevich, A. J. & Freitas, S. R. Biceps Femoris Long-Head Architecture Assessed Using Different Sonographic Techniques. *Med Sci Sports Exerc* 50, 2584-2594, doi:10.1249/MSS.0000000000001731 (2018)
132. Otten, E. Concepts and models of functional architecture in skeletal muscle. *Exerc Sport Sci Rev* 16, 89-137 (1988)
133. Franchi, M. V., Fitz, D. P., Raiteri, B. J., Hahn, D. & Sporri, J. Ultrasound-derived Biceps Femoris Long-Head Fascicle Length: Extrapolation Pitfalls. *Med Sci Sports Exerc*, doi:10.1249/MSS.0000000000002123 (2019)
134. Franchi, M. V. *et al.* Muscle Architecture Assessment: Strengths, Shortcomings and New Frontiers of in Vivo Imaging Techniques. *Ultrasound Med Biol* 44, 2492-2504, doi:10.1016/j.ultrasmedbio.2018.07.010 (2018)
135. Ronnestad, B. R., Hansen, E. A. & Raastad, T. Effect of heavy strength training on thigh muscle cross-sectional area, performance determinants, and performance in well-trained cyclists. *Eur J Appl Physiol* 108, 965-975, doi:10.1007/s00421-009-1307-z [doi] (2010)
136. Ronnestad, B. R., Kojedal, O., Losnegard, T., Kvamme, B. & Raastad, T. Effect of heavy strength training on muscle thickness, strength, jump performance, and endurance performance in well-trained Nordic Combined athletes. *Eur J Appl Physiol* 112, 2341-2352, doi:10.1007/s00421-011-2204-9 [doi] (2012)
137. Bruusgaard, J. C., Johansen, I. B., Egner, I. M., Rana, Z. A. & Gundersen, K. Myonuclei acquired by overload exercise precede hypertrophy and are not lost on detraining. *Proc Natl Acad Sci USA*, doi:0913935107 [pii];10.1073/pnas.0913935107 [doi] (2010)
138. Gundersen, K. Muscle memory and a new cellular model for muscle atrophy and hypertrophy. *J Exp Biol* 219, 235-242, doi:10.1242/jeb.124495 (2016)
139. Egner, I. M., Bruusgaard, J. C., Eftestol, E. & Gundersen, K. A cellular memory mechanism aids overload hypertrophy in muscle long after an episodic exposure to anabolic steroids. *J Physiol*, doi:jphysiol.2013.264457 [pii];10.1113/jphysiol.2013.264457 [doi] (2013)
140. Petrella, J. K., Kim, J. S., Mayhew, D. L., Cross, J. M. & Bamman, M. M. Potent myofiber hypertrophy during resistance training in humans is associated with satellite cell-mediated myonuclear addition: a cluster analysis. *J Appl Physiol* (1985) 104, 1736-1742, doi:10.1152/japplphysiol.01215.2007 (2008)
141. Kadi, F. *et al.* The behaviour of satellite cells in response to exercise: what have we learned from human studies? *Pflugers Arch* 451, 319-327 (2005)
142. Gundersen, K. & Bruusgaard, J. C. Nuclear domains during muscle atrophy: nuclei lost or paradigm lost? *J Physiol* 586, 2675-2681 (2008)
143. Gundersen, K., Bruusgaard, J. C., Egner, I. M., Eftestol, E. & Bengtsen, M. Muscle memory: virtues of your youth? *J Physiol* 596, 4289-4290, doi:10.1113/JP276354 (2018)
144. Seaborne, R. A. *et al.* Human Skeletal Muscle Possesses an Epigenetic Memory of Hypertrophy. *Sci Rep* 8, 1898, doi:10.1038/s41598-018-20287-3 (2018)
145. Grindem, H. *et al.* How does a combined preoperative and postoperative rehabilitation programme influence the outcome of ACL reconstruc-

- tion 2 years after surgery? A comparison between patients in the Delaware-Oslo ACL Cohort and the Norwegian National Knee Ligament Registry. *Br J Sports Med* 49, 385-389, doi:10.1136/bjsports-2014-093891 (2015)
146. Murach, K. A., Dungan, C. M., Dupont-Versteegden, E. E., McCarthy, J. J. & Peterson, C. A. "Muscle Memory" Not Mediated By Myonuclear Number?: Secondary Analysis of Human Detraining Data. *J Appl Physiol* (1985), doi:10.1152/japplphysiol.00506.2019 (2019)
147. Andreoli, A. et al. Effects of different sports on bone density and muscle mass in highly trained athletes. *Med Sci Sports Exerc* 33, 507-511 (2001)
148. Chilibeck, P. D., Sale, D. G. & Webber, C. E. Exercise and bone mineral density. *Sports Med* 19, 103-122, doi:10.2165/00007256-199519020-00003 (1995)
149. Guimaraes, B. R. et al. Muscle strength and regional lean body mass influence on mineral bone health in young male adults. *PLoS One* 13, e0191769, doi:10.1371/journal.pone.0191769 (2018)
150. Goodman, C. A., Hornberger, T. A. & Robling, A. G. Bone and skeletal muscle: Key players in mechanotransduction and potential overlapping mechanisms. *Bone* 80, 24-36, doi:10.1016/j.bone.2015.04.014 (2015)
151. Popp, K. L. et al. Bone geometry, strength, and muscle size in runners with a history of stress fracture. *Med Sci Sports Exerc* 41, 2145-2150, doi:10.1249/MSS.0b013e3181a9e772 (2009)
152. Stone, M. H. & Karatzafiri, C. (ed P.V. Komi) Ch. 18, (Blackwell Science, 2003)
153. Duncan, C. S. et al. Bone mineral density in adolescent female athletes: relationship to exercise type and muscle strength. *Med Sci Sports Exerc* 34, 286-294, doi:10.1097/00005768-200202000-00017 (2002)
154. Mountjoy, M. et al. IOC consensus statement on relative energy deficiency in sport (RED-S): 2018 update. *Br J Sports Med* 52, 687-697, doi:10.1136/bjsports-2018-099193 (2018)
155. Mountjoy, M. et al. The IOC consensus statement: beyond the Female Athlete Triad--Relative Energy Deficiency in Sport (RED-S). *Br J Sports Med* 48, 491-497, doi:10.1136/bjsports-2014-093502 (2014)
156. Ebben, W. P. et al. The optimal back squat load for potential osteogenesis. *J Strength Cond Res* 26, 1232-1237, doi:10.1519/JSC.0b013e3182305321 (2012)
157. Gomez-Bruton, A., Matute-Llorente, A., Gonzalez-Aguero, A., Casajus, J. A. & Vicente-Rodriguez, G. Plyometric exercise and bone health in children and adolescents: a systematic review. *World J Pediatr* 13, 112-121, doi:10.1007/s12519-016-0076-0 (2017)
158. Kohrt, W. M., Bloomfield, S. A., Little, K. D., Nelson, M. E. & Yingling, V. R. American College of Sports Medicine Position Stand: physical activity and bone health. *Med Sci Sports Exerc* 36, 1985-1996, doi:00005768-200411000-00024 [pii] (2004)
159. Pedersen, B. K. Muscles and their myokines. *J. Exp. Biol* 214, 337-346, doi:214/2/337 [pii];10.1242/jeb.048074 [doi] (2011)
160. Pedersen, B. K. Muscle as a secretory organ. *Compr Physiol* 3, 1337-1362, doi:10.1002/cphy.c120033 (2013)
161. Pedersen, B. K. Physical activity and muscle-brain crosstalk. *Nat Rev Endocrinol* 15, 383-392, doi:10.1038/s41574-019-0174-x (2019)
162. Legård, G. E. & Pedersen, B. K. in *Muscle and exercise physiology* (ed J. A. Zoladz) Ch. 13, 285-307 (Academic Press, 2019)
163. Pernus, F. & Erzen, I. Arrangement of fiber types within fascicles of human vastus lateralis muscle. *Muscle Nerve* 14, 304-309, doi:10.1002/mus.880140403 (1991)
164. Richmond, F. J., MacGillis, D. R. & Scott, D. A. Muscle-fiber compartmentalization in cat splenius muscles. *J Neurophysiol* 53, 868-885, doi:10.1152/jn.1985.53.4.868 (1985)
165. Kwah, L. K., Pinto, R. Z., Diong, J. & Herbert, R. D. Reliability and validity of ultrasound measurements of muscle fascicle length and pennation in humans: a systematic review. *J Appl Physiol* (1985.) 114, 761-769, doi:japplphysiol.01430.2011 [pii];10.1152/japplphysiol.01430.2011 [doi] (2013)
166. Sanger, J. W. et al. Assembly and Maintenance of Myofibrils in Striated Mus- cle. *Handb Exp Pharmacol* 235, 39-75, doi:10.1007/164_2016_53 (2017)
167. Sanger, J. W., Wang, J., Fan, Y., White, J. & Sanger, J. M. Assembly and dynamics of myofibrils. *J Biomed Biotechnol* 2010, 858606, doi:10.1155/2010/858606 (2010)
168. Yu, J. G., Furst, D. O. & Thornell, L. E. The mode of myofibril remodelling in human skeletal muscle affected by DOMS induced by eccentric contractions. *Histo- chem Cell Biol* 119, 383-393 (2003)
169. Caiocco, V. J. et al. Effects of distraction on muscle length: mechanisms involved in sarcomerogenesis. *Clin Orthop Relat Res*, S133-145, doi:10.1097/00003086-200210001-00016 (2002)
170. Goldspink, D. F. et al. Muscle growth in response to mechanical stimuli. *Am J Physiol* 268, E288-E297 (1995)
171. Lehti, T. M., Kalliokoski, R. & Komulainen, J. Repeated bout effect on the cytoskeletal proteins titin, desmin, and dystrophin in rat skeletal muscle. *J Muscle Res Cell Motil* 28, 39-47 (2007)
172. Lindstedt, S. L. Skeletal muscle tissue in movement and health: positives and negatives. *J Exp. Biol* 219, 183-188, doi:219/2/183 [pii];10.1242/jeb.124297 [doi] (2016)
173. Gautel, M. & Djinovic-Carugo, K. The sarcomeric cytoskeleton: from molecules to motion. *J Exp Biol* 219, 135-145, doi:10.1242/jeb.124941 (2016)
174. Kjaer, M. Role of extracellular matrix in adaptation of tendon and skeletal muscle to mechanical loading. *Physiol Rev* 84, 649-698 (2004)
175. Boakes, J. L., Foran, J., Ward, S. R. & Lieber, R. L. Muscle adaptation by serial sarcomere addition 1 year after femoral lengthening. *Clin Orthop Relat Res* 456, 250-253, doi:10.1097/01. blo.0000246563.58091.af (2007)
176. Zollner, A. M., Abilez, O. J., Bol, M. & Kuhl, E. Stretching skeletal muscle: chronic muscle lengthening through sarcomerogenesis. *PLoS One* 7, e45661, doi:10.1371/journal.pone.0045661 (2012)
177. Moltsbakk, M. M., Magulas, M. M., Villars, F. O., Seynnes, O. R. & Bojsen-Møller, J. Specialized properties of the triceps surae muscle-tendon unit in professional ballet dancers. *Scand J Med Sci Sports* 28, 2023-2034, doi:10.1111/smss.13207 (2018)

178. Blazevich, A. J. *et al.* Range of motion, neuromechanical, and architectural adaptations to plantar flexor stretch training in humans. *J Appl Physiol* (1985) 117, 452-462, doi:10.1152/japplphysiol.00204.2014 (2014)
179. Freitas, S. R. *et al.* Can chronic stretching change the muscle-tendon mechanical properties? A review. *Scand J Med Sci Sports* 28, 794-806, doi:10.1111/sms.12957 (2018)
180. Simpson, C. L., Kim, B. D. H., Bourcet, M. R., Jones, G. R. & Jakobi, J. M. Stretch training induces unequal adaptation in muscle fascicles and thickness in medial and lateral gastrocnemii. *Scand J Med Sci Sports* 27, 1597-1604, doi:10.1111/sms.12822 (2017)
181. Freitas, S. R. & Mil-Homens, P. Effect of 8-week high-intensity stretching training on biceps femoris architecture. *J Strength Cond Res* 29, 1737-1740, doi:10.1519/JSC.0000000000000800 (2015)
182. Stauber, W. T., Miller, G. R., Grimmett, J. G. & Knack, K. K. Adaptation of rat soleus muscles to 4 wk of intermittent strain. *J Appl Physiol* 77, 58-62 (1994)
183. Wackerhage, H., Schoenfeld, B. J., Hamilton, D. L., Lehti, M. & Hulmi, J. J. Stimuli and sensors that initiate skeletal muscle hypertrophy following resistance exercise. *J Appl Physiol* (1985) 126, 30-43, doi:10.1152/japplphysiol.00685.2018 (2019)
184. Boppert, M. D. & Mahmassani, Z. S. Integrin Signaling: Linking Mechanical Stimulation to Skeletal Muscle Hypertrophy. *Am J Physiol Cell Physiol*, doi:10.1152/ajpcell.00009.2019 (2019)
185. Oranchuk, D. J., Storey, A. G., Nelson, A. R. & Cronin, J. B. Isometric training and long-term adaptations: Effects of muscle length, intensity, and intent: A systematic review. *Scand J Med Sci Sports* 29, 484-503, doi:10.1111/sms.13375 (2019)
186. Pinto, R. S. *et al.* Effect of range of motion on muscle strength and thickness. *J Strength Cond Res* 26, 2140-2145, doi:10.1519/JSC.0b013e31823a3b15 (2012)
187. Kubo, K., Ikebukuro, T. & Yata, H. Effects of squat training with different depths on lower limb muscle volumes. *Eur J Appl Physiol* 119, 1933-1942, doi:10.1007/s00421-019-04181-y (2019)
188. Bloomquist, K. *et al.* Effect of range of motion in heavy load squatting on muscle and tendon adaptations. *Eur J Appl Physiol* 113, 2133-2142, doi:10.1007/s00421-013-2642-7 (2013)
189. Herring, S. W., Grimm, A. F. & Grimm, B. R. Regulation of sarcomere number in skeletal muscle: a comparison of hypotheses. *Muscle Nerve* 7, 161-173, doi:10.1002/mus.880070213 (1984)
190. Gans, C. Fiber architecture and muscle function. *Exerc Sport Sci Rev* 10, 160-207 (1982)
191. Purslow, P. P. Strain-induced reorientation of an intramuscular connective tissue network: implications for passive muscle elasticity. *J Biomech* 22, 21-31 (1989)
192. Magnusson, S. P. Passive properties of human skeletal muscle during stretch maneuvers. A review. *Scand J Med Sci Sports* 8, 65-77, doi:10.1111/j.1600-0838.1998.tb00171.x (1998)
193. Magnusson, S. P. & Renstrom, P. The European College of Sports Sciences Position statement: The role of stretching exercises in sports. *Eur J Sport Sci* 6, 87-91 (2006)
194. Fatouros, I. G. *et al.* Resistance training and detraining effects on flexibility performance in the elderly are intensity-dependent. *J Strength Cond Res* 20, 634-642 (2006)
195. Leite, T. B. *et al.* Effects of Different Number of Sets of Resistance Training on Flexibility. *Int J Exerc Sci* 10, 354-364 (2017)
196. Barlow, J. C., Benjamin, B. W., Birt, P. & Hughes, C. J. Shoulder strength and range-of-motion characteristics in body-builders. *J Strength Cond Res* 16, 367-372 (2002)
197. Junior, R. M., Berton, R., de Souza, T. M., Chacon-Mikahil, M. P. & Cavaglieri, C. R. Effect of the flexibility training performed immediately before resistance training on muscle hypertrophy, maximum strength and flexibility. *Eur J Appl Physiol* 117, 767-774, doi:10.1007/s00421-016-3527-3 (2017)
198. Behm, D. G., Blazevich, A. J., Kay, A. D. & McHugh, M. Acute effects of muscle stretching on physical performance, range of motion, and injury incidence in healthy active individuals: a systematic review. *Appl Physiol Nutr Metab* 41, 1-11, doi:10.1139/apnm-2015-0235 [doi] (2016)
199. Blazevich, A. J. *et al.* No Effect of Muscle Stretching within a Full, Dynamic Warm-up on Athletic Performance. *Med Sci Sports Exerc* 50, 1258-1266, doi:10.1249/MSS.0000000000001539 (2018)
200. Leite, T. *et al.* Influence of strength and flexibility training, combined or isolated, on strength and flexibility gains. *J Strength Cond Res* 29, 1083-1088, doi:10.1519/JSC.0000000000000719 (2015)
201. Borges Bastos, C. L. *et al.* Chronic effect of static stretching on strength performance and basal serum IGF-1 levels. *J Strength Cond Res* 27, 2465-2472, doi:10.1519/JSC.0b013e31828054b7 (2013)
202. Behm, D. G. in *The science and physiology of flexibility and stretching* (ed D. G. Behm) Ch. 8, 106-135 (Routledge, 2019)
203. Behm, D. G. in *The science and physiology of flexibility and stretching* (ed D. G. Behm) Ch. 9, 136-138 (Routledge, 2019)
204. Blazevich, A. in *Sports injury prevention and rehabilitation* (eds D. Joyce & D. Lewindon) 169-178 (Routledge, 2015)
205. Shrier, I. Does stretching improve performance?: a systematic and critical review of the literature. *Clin J Sport Med* 14, 267-273 (2004)
206. Baxter, C., Mc Naughton, L. R., Sparks, A., Norton, L. & Bentley, D. Impact of stretching on the performance and injury risk of long-distance runners. *Res Sports Med* 25, 78-90, doi:10.1080/15438627.2016.1258640 (2017)
207. Marinho, D. A., Gil, M. H., Marques, M. C., Barbosa, T. M. & Neiva, H. P. Complementing warm-up with stretching routines: Effects in sprint performance. *Training & Testing* 1, E101-106 (2017)
208. Dintiman, G. B. Effects of various training programs on running speed. *Res Q* 35, 456-463 (1964)
209. Witvrouw, E., Mahieu, N., Roosen, P. & McNair, P. The role of stretching in tendon injuries. *Br J Sports Med* 41, 224-226, doi:10.1136/bjsm.2006.034165 (2007)
210. Davies, G., Riemann, B. L. & Manske, R. Current Concepts of Plyometric Exercise. *Int J Sports Phys Ther* 10, 760-786 (2015)

211. Wernbom, M., Augustsson, J. & Thomee, R. The influence of frequency, intensity, volume and mode of strength training on whole muscle cross-sectional area in humans. *Sports Med* 37, 225-264 (2007)
212. Marzilger, R., Bohm, S., Mersmann, F. & Arampatzis, A. Effects of lengthening velocity during eccentric training on vastus lateralis muscle hypertrophy. *Front Physiol* 10, doi:10.3389/fphys.2019.00957 (2019)
213. Duhig, S. J. *et al.* Effect of concentric and eccentric hamstring training on sprint recovery, strength and muscle architecture in inexperienced athletes. *J Sci Med Sport*, doi:10.1016/j.jsams.2019.01.010 (2019)
214. Butterfield, T. A., Leonard, T. R. & Herzog, W. Differential serial sarcomere number adaptations in knee extensor muscles of rats is contraction type dependent. *J Appl Physiol* 99, 1352-1358 (2005)
215. Alegre, L. M., Jimenez, F., Gonzalo-Orden, J. M., Martin-Acero, R. & Aguado, X. Effects of dynamic resistance training on fascicle length and isometric strength. *J Sports Sci* 24, 501-508 (2006)
216. Butterfield, T. A. & Herzog, W. The magnitude of muscle strain does not influence serial sarcomere number adaptations following eccentric exercise. *Pflugers Arch* 451, 688-700 (2006)
217. Timmins, R. G., Shield, A. J., Williams, M. D., Lorenzen, C. & Opar, D. A. Architectural adaptations of muscle to training and injury: a narrative review outlining the contributions by fascicle length, pennation angle and muscle thickness. *Br J Sports Med* 50, 1467-1472, doi:10.1136/bjsports-2015-094881 (2016)
218. Paulsen, G., Mikkelsen, U. R., Raastad, T. & Peake, J. M. Leucocytes, cytokines and satellite cells: what role do they play in muscle damage and regeneration following eccentric exercise? *Exerc Immunol Rev* 18, 42-97 (2012)
219. Erskine, R. M., Fletcher, G. & Folland, J. P. The contribution of muscle hypertrophy to strength changes following resistance training. *Eur J Appl Physiol* 114, 1239-1249, doi:10.1007/s00421-014-2855-4 (2014)
220. Douglas, J., Pearson, S., Ross, A. & McGuigan, M. Chronic Adaptations to Eccentric Training: A Systematic Review. *Sports Med* 47, 917-941, doi:10.1007/s40279-016-0628-4 (2017)
221. Bourne, M. N. *et al.* Impact of the Nordic hamstring and hip extension exercises on hamstring architecture and morphology: implications for injury prevention. *Br J Sports Med* 51, 469-477, doi:10.1136/bjsports-2016-096130 (2017)
222. Presland, J. D., Timmins, R. G., Bourne, M. N., Williams, M. D. & Opar, D. A. The effect of Nordic hamstring exercise training volume on biceps femoris long head architectural adaptation. *Scand J Med Sci Sports* 28, 1775-1783, doi:10.1111/sms.13085 (2018)
223. van den Tillaar, R., Solheim, J. A. B. & Bencke, J. Comparison of Hamstring Muscle Activation during High-Speed Running and Various Hamstring Strengthening Exercises. *Int J Sports Phys Ther* 12, 718-727 (2017)
224. Yu, B. *et al.* Hamstring muscle kinematics and activation during overground sprinting. *J Biomech* 41, 3121-3126, doi:10.1016/j.jbiomech.2008.09.005 (2008)
225. Goode, A. P. *et al.* Eccentric training for prevention of hamstring injuries may depend on intervention compliance: a systematic review and meta-analysis. *Br J Sports Med* 49, 349-356, doi:10.1136/bjsports-2014-093466 (2015)
226. Mjolsnes, R., Arnason, A., Osthaben, T., Raastad, T. & Bahr, R. A 10-week randomized trial comparing eccentric vs. concentric hamstring strength training in well-trained soccer players. *Scand J Med Sci Sports* 14, 311-317, doi:10.1046/j.1600-0838.2003.367.x [doi]:SMS367 [pii] (2004)
227. Van Hooren, B. & Bosch, F. Is there really an eccentric action of the hamstrings during the swing phase of high-speed running? Part II: Implications for exercise. *J Sports Sci* 35, 2322-2333, doi:10.1080/02640414.2016.1266019 (2017)
228. Mendez-Villanueva, A. *et al.* MRI-Based Regional Muscle Use during Hamstring Strengthening Exercises in Elite Soccer Players. *PLoS One* 11, e0161356, doi:10.1371/journal.pone.0161356 (2016)
229. Fernandez-Gonzalo, R. *et al.* Individual Muscle use in Hamstring Exercises by Soccer Players Assessed using Functional MRI. *Int J Sports Med* 37, 559-564, doi:10.1055/s-0042-100290 (2016)
230. Bourne, M. N. *et al.* Impact of exercise selection on hamstring muscle activation. *Br J Sports Med* 51, 1021-1028, doi:10.1136/bjsports-2015-095739 (2017)
231. Morin, J. B. *et al.* Sprint Acceleration Mechanics: The Major Role of Hamstrings in Horizontal Force Production. *Front Physiol* 6, 404, doi:10.3389/fphys.2015.00404 [doi] (2015)
232. Edouard, P., Samozino, P., Slotala, R., Mendiguchia, J. & Morin, J. B. Hamstring injury prevention: Contributions of biomechanics. *Ann Phys Rehabil Med* 59S, e15, doi:S1877-0657(16)30116-6 [pii];10.1016/j.rehab.2016.07.036 [doi] (2016)
233. Morin, J. B. *et al.* Very-Heavy Sled Training for Improving Horizontal-Force Output in Soccer Players. *Int J Sports Physiol Perform* 12, 840-844, doi:10.1123/ijsspp.2016-0444 (2017)
234. Westling, S. H., Cresswell, A. G. & Thorstensson, A. Muscle activation during maximal voluntary eccentric and concentric knee extension. *Eur J Appl Physiol Occup Physiol* 62, 104-108 (1991)
235. Edman, K. A. Double-hyperbolic force-velocity relation in frog muscle fibres. *J Physiol* 404, 301-321, doi:10.1111/jphysiol.1988.sp017291 (1988)
236. Stasinaki, A. N., Zaras, N., Methenitis, S., Bogdanis, G. & Terzis, G. Rate of Force Development and Muscle Architecture after Fast and Slow Velocity Eccentric Training. *Sports (Basel)* 7, doi:10.3390/sports7020041 (2019)
237. Maroto-Izquierdo, S. *et al.* Comparison of the musculoskeletal effects of different iso-inertial resistance training modalities: Flywheel vs. electric-motor. *Eur J Sport Sci*, 1-11, doi:10.1080/17461391.2019.1588920 (2019)
238. Suchomel, T. J. *et al.* Implementing eccentric resistance training - Part 1: A brief review of existing methods *J Funct Morphol Kinesiol* 4 (2019)
239. Bogdanis, G. C. *et al.* Muscle Fiber and Performance Changes after Fast Eccentric Complex Training. *Med Sci Sports Exerc* 50, 729-738, doi:10.1249/MSS.0000000000001507 (2018)

240. Maffuletti, N. A. *et al.* Rate of force development: physiological and methodological considerations. *Eur. J. Appl. Physiol* 116, 1091–1116, doi:10.1007/s00421-016-3346-6 [doi];10.1007/s00421-016-3346-6 [pii] (2016)
241. Hartmann, H. *et al.* Influence of squatting depth on jumping performance. *J Strength Cond Res* 26, 3243–3261, doi:10.1519/JSC.0b013e31824ede62 (2012)
242. Hartmann, H., Wirth, K. & Klusemann, M. Analysis of the load on the knee joint and vertebral column with changes in squatting depth and weight load. *Sports Med* 43, 993–1008, doi:10.1007/s40279-013-0073-6 (2013)
243. Tesch, P. A., Fernandez-Gonzalo, R. & Lundberg, T. R. Clinical Applications of Iso-Inertial, Eccentric-Overload (YoYo) Resistance Exercise. *Front Physiol* 8, 241, doi:10.3389/fphys.2017.00241 (2017)
244. Vicens-Bordas, J., Esteve, E., Fort-Vanmeerhaeghe, A., Bandholm, T. & Thorborg, K. Is inertial flywheel resistance training superior to gravity-dependent resistance training in improving muscle strength? A systematic review with meta-analyses. *J Sci Med Sport* 21, 75–83, doi:10.1016/j.jksam.2017.10.006 (2018)
- 245.. Maroto-Izquierdo, S. *et al.* Skeletal muscle functional and structural adaptations after eccentric overload flywheel resistance training: a systematic review and meta-analysis. *J Sci Med Sport* 20, 943–951, doi:10.1016/j.jksam.2017.03.004 (2017)
246. Petushek, E. J., Sugimoto, D., Stoolmiller, M., Smith, G. & Myer, G. D. Evidence-Based Best-Practice Guidelines for Preventing Anterior Cruciate Ligament Injuries in Young Female Athletes: A Systematic Review and Meta-analysis. *Am J Sports Med* 47, 1744–1753, doi:10.1177/0363546518782460 (2019)
247. Sale, D. G. Neural adaptation to resistance training. *Med. Sci. Sports Exerc* 20, S135–S145 (1988)
248. McNeill, C., Beaven, C. M., McMaster, D. T. & Gill, N. Eccentric training interventions and team sport athletes. *J Funct Morphol Kinesiol* 4, 67, doi:doi.org/10.3390/jfmk4040067 (2019)
249. Ishoi, L. *et al.* Effects of the Nordic Hamstring exercise on sprint capacity in male football players: a randomized controlled trial. *J Sports Sci* 36, 1663–1672, doi:10.1080/02640414.2017.1409609 (2018)
250. Suarez-Arromes, L. *et al.* Dissociation between changes in sprinting performance and Nordic hamstring strength in professional male football players. *PLoS One* 14, e0213375, doi:10.1371/journal.pone.0213375 (2019)
251. Vogt, M. & Hoppeler, H. H. Eccentric exercise: mechanisms and effects when used as training regime or training adjunct. *J Appl Physiol* (1985) 116, 1446–1454, doi:japplphysiol.00146.2013 [pii];10.1152/japplphysiol.00146.2013 [doi] (2014)
252. Franchi, M. V. & Maffuletti, N. A. Distinct modalities of eccentric exercise: different recipes, not the same dish. *J Appl Physiol* (1985), doi:10.1152/japplphysiol.00093.2019 (2019)
253. Leong, C. H., McDermott, W. J., Elmer, S. J. & Martin, J. C. Chronic eccentric cycling improves quadriceps muscle structure and maximum cycling power. *Int J Sports Med* 35, 559–565, doi:10.1055/s-0033-1358471 [doi] (2014)
254. Lovell, R. *et al.* Scheduling of eccentric lower limb injury prevention exercises during the soccer micro-cycle: Which day of the week? *Scand J Med Sci Sports* 28, 2216–2225, doi:10.1111/sms.13226 (2018)
255. Lacome, M. *et al.* Hamstring Eccentric Strengthening Program: Does Training Volume Matter? *Int J Sports Physiol Perform*, 1–27, doi:10.1123/ijspp.2018-0947 (2019)
256. Paulsen, G. & Benestad, H. B. Muscle soreness and rhabdomyolysis. *Tidsskr Nor Laegeforen* 139, doi:10.4045/tidsskr.18.0727 (2019)
257. Issurin, V. B. Benefits and Limitations of Block Periodized Training Approaches to Athletes' Preparation: A Review. *Sports Med* 46, 329–338, doi:10.1007/s40279-015-0425-5 [doi];10.1007/s40279-015-0425-5 [pii] (2016)
258. Roberts, T. J., Marsh, R. L., Weyand, P. G. & Taylor, C. R. Muscular force in running turkeys: the economy of minimizing work. *Science* 275, 1113–1115 (1997)
259. Kawakami, Y., Muraoka, T., Ito, S., Kanehisa, H. & Fukunaga, T. In vivo mus-cle fibre behaviour during counter-movement exercise in humans reveals a significant role for tendon elasticity. *J Physiol* 540, 635–646, doi:10.1113/jphysiol.2001.013459 (2002)
260. Arampatzis, A., Karamanidis, K., Morey-Klapsing, G., De Monte, G. & Staflidis, S. Mechanical properties of the triceps surae tendon and aponeurosis in relation to intensity of sport activity. *J Biomech* 40, 1946–1952, doi:10.1016/j.jbiomech.2006.09.005 (2007)
261. Komi, P. V. in *Strength and power in sport* Ch. 10, 184–202 (Blackwell Science, 1992)
262. Newton, R. U. *et al.* Influence of load and stretch shortening cycle on the kinematics, kinetics and muscle activation that occurs during explosive upper-body movements. *Eur J Appl Physiol Occup Physiol* 75, 333–342, doi:10.1007/s004210050169 (1997)
263. Lieber, R. L. in *Skeletal muscle structure, function, and plasticity* Ch. 3, (Lippincott Williams & Wilkins, 2010)
264. Roberts, T. J. & Azizi, E. Flexible mechanisms: the diverse roles of biological springs in vertebrate movement. *J Exp Biol* 214, 353–361, doi:10.1242/jeb.038588 (2011)
265. Pollock, C. M. & Shadwick, R. E. Allometry of muscle, tendon, and elastic energy storage capacity in mammals. *Am J Physiol* 266, R1022–1031, doi:10.1152/ajpregu.1994.266.3.R1022 (1994)
266. Morgan, D. L., Proske, U. & Warren, D. Measurements of muscle stiffness and the mechanism of elastic storage of energy in hopping kangaroos. *J Physiol* 282, 253–261, doi:10.1113/jphysiol.1978.sp012461 (1978)
267. Komi, P. V. & Bosco, C. Utilization of stored elastic energy in leg extensor muscles by men and women. *Med Sci Sports* 10, 261–265 (1978)
268. Bosco, C. *et al.* Relationship between the efficiency of muscular work during jumping and the energetics of running. *Eur J Appl Physiol Occup Physiol* 56, 138–143, doi:10.1007/bf00640636 (1987)
269. Bosco, C. *et al.* The effect of pre-stretch on mechanical efficiency of human skeletal muscle. *Acta Physiol Scand* 131, 323–329, doi:10.1111/j.1748-1716.1987.tb08246.x (1987)

270. Bosco, C. & Rusko, H. The effect of prolonged skeletal muscle stretch-shortening cycle on recoil of elastic energy and on energy expenditure. *Acta Physiol Scand* 119, 219-224, doi:10.1111/j.1748-1716.1983.tb07331.x (1983)
271. Sawicki, G. S., Sheppard, P. & Roberts, T. J. Power amplification in an isolated muscle-tendon unit is load dependent. *J Exp Biol* 218, 3700-3709, doi:10.1242/jeb.126235 (2015)
272. Sousa, F., Ishikawa, M., Vilas-Boas, J. P. & Komi, P. V. Intensity- and muscle-specific fascicle behavior during human drop jumps. *J Appl Physiol* (1985) 102, 382-389, doi:10.1152/japplphysiol.00274.2006 (2007)
273. Wade, L., Lichtwark, G. & Farris, D. J. Movement Strategies for Countermovement Jumping are Potentially Influenced by Elastic Energy Stored and Released from Tendons. *Sci Rep* 8, 2300, doi:10.1038/s41598-018-20387-0 (2018)
274. Konow, N., Azizi, E. & Roberts, T. J. Muscle power attenuation by tendon during energy dissipation. *Proc Biol Sci* 279, 1108-1113, doi:10.1098/rspb.2011.1435 (2012)
275. Griffiths, R. I. Shortening of muscle fibres during stretch of the active cat medial gastrocnemius muscle: the role of tendon compliance. *J Physiol* 436, 219-236, doi:10.1113/jphysiol.1991.sp018547 (1991)
276. Thelen, D. G., Chumanov, E. S., Sherry, M. A. & Heiderscheit, B. C. Neuromusculoskeletal models provide insights into the mechanisms and rehabilitation of hamstring strains. *Exerc Sport Sci Rev* 34, 135-141 (2006)
277. Mersmann, F., Charcharis, G., Bohm, S. & Arampatzis, A. Muscle and Tendon Adaptation in Adolescence: Elite Volleyball Athletes Compared to Untrained Boys and Girls. *Front Physiol* 8, 417, doi:10.3389/fphys.2017.00417 (2017)
278. Mersmann, F., Bohm, S. & Arampatzis, A. Imbalances in the Development of Muscle and Tendon as Risk Factor for Tendinopathies in Youth Athletes: A Review of Current Evidence and Concepts of Prevention. *Front Physiol* 8, 987, doi:10.3389/fphys.2017.00987 (2017)
279. Wiesinger, H. P., Rieder, F., Kosters, A., Muller, E. & Seynnes, O. R. Are Sport-Specific Profiles of Tendon Stiffness and Cross-Sectional Area Determined by Structural or Functional Integrity? *PLoS One* 11, e0158441, doi:10.1371/journal.pone.0158441 (2016)
280. Wiesinger, H. P., Rieder, F., Kosters, A., Muller, E. & Seynnes, O. R. Sport-Specific Capacity to Use Elastic Energy in the Patellar and Achilles Tendons of Elite Athletes. *Front Physiol* 8, 132, doi:10.3389/fphys.2017.00132 (2017)
281. Tucker, R. & Collins, M. What makes champions? A review of the relative contribution of genes and training to sporting success. *Br J Sports Med* 46, 555-561, doi:10.1136/bjsports-2011-090548 (2012)
282. Wiesinger, H. P., Kosters, A., Muller, E. & Seynnes, O. R. Effects of Increased Loading on In Vivo Tendon Properties: A Systematic Review. *Med Sci Sports Exerc* 47, 1885-1895, doi:10.1249/MSS.0000000000000603 [doi] (2015)
283. Magnusson, S. P. & Kjaer, M. The impact of loading, unloading, ageing and injury on the human tendon. *J Physiol* 597, 1283-1298, doi:10.1113/JP275450 (2019)
284. Bohm, S., Mersmann, F. & Arampatzis, A. Human tendon adaptation in response to mechanical loading: a systematic review and meta-analysis of exercise intervention studies on healthy adults. *Sports Med Open* 1, 7, doi:10.1186/s40798-015-0009-9 (2015)
285. Docking, S. I. & Cook, J. How do tendons adapt? Going beyond tissue responses to understand positive adaptation and pathology development: A narrative review. *J Musculoskelet Neuronal Interact* 19, 300-310 (2019)
286. Bohm, S., Mersmann, F. & Arampatzis, A. Functional adaptation of connective tissue by training. *German J Sport Med* 70, 105-109 (2019)
287. Massey, G. J., Balshaw, T. G., Maden-Wilkinson, T. M. & Folland, J. P. Tendinous tissue properties after short- and long-term functional overload: Differences between controls, 12 weeks and 4 years of resistance training. *Acta Physiol (Oxf)* 222, e13019, doi:10.1111/apha.13019 (2018)
288. Lichtwark, G. A. & Wilson, A. M. Is Achilles tendon compliance optimised for maximum muscle efficiency during locomotion? *J Biomech* 40, 1768-1775, doi:10.1016/j.jbiomech.2006.07.025 (2007)
289. Ekeberg, M. N. Muskel-senesystemets egenskaper hos tre ulike grupper idrettsutøvere med forskjellig arbeidskrav til underekstremiteten Mastergradsoppgave thesis, Norges idrettshøgskole, (2010)
290. Magnusson, S. P. & Kjaer, M. Region-specific differences in Achilles tendon cross-sectional area in runners and non-runners. *Eur J Appl Physiol* 90, 549-553, doi:10.1007/s00421-003-0865-8 (2003)
291. Couppé, C. et al. Habitual loading results in tendon hypertrophy and increased stiffness of the human patellar tendon. *J Appl Physiol* 105, 805-810 (2008)
292. Kongsgaard, M. et al. Region specific patellar tendon hypertrophy in humans following resistance training. *Acta Physiol (Oxf)* 191, 111-121 (2007)
293. Albracht, K. & Arampatzis, A. Exercise-induced changes in triceps surae tendon stiffness and muscle strength affect running economy in humans. *Eur J Appl Physiol* 113, 1605-1615, doi:10.1007/s00421-012-2585-4 (2013)
294. Arampatzis, A. et al. Influence of the muscle-tendon unit's mechanical and morphological properties on running economy. *J Exp Biol* 209, 3345-3357, doi:10.1242/jeb.02340 (2006)
295. Wang, X. T., Ker, R. F. & Alexander, R. M. Fatigue rupture of wallaby tail tendons. *J Exp Biol* 198, 847-852 (1995)
296. Nicol, C., Avela, J. & Komi, P. V. The stretch-shortening cycle : a model to study naturally occurring neuromuscular fatigue. *Sports Med* 36, 977-999 (2006)
297. Magnusson, S. P., Narici, M. V., Maganaris, C. N. & Kjaer, M. Human tendon behaviour and adaptation, *in vivo*. *J Physiol* 586, 71-81, doi:10.1113/jphysiol.2007.139105 (2008)
298. Nicol, C. & Komi, P. V. in *Neuromuscular aspects of sport performance* (ed P. V. Komi) Ch. 12, 183-215 (Wiley-Blackwell, 2010)
299. Blagrove, R. C., Howatson, G. & Hayes, P. R. Effects of Strength Training on the Physiological Determinants of Middle- and Long-Distance Running Performance: A Systematic Review. *Sports Med* 48, 1117-1149, doi:10.1007/s40279-017-0835-7 (2018)

300. Kubo, K., Ishigaki, T. & Ikebukuro, T. Effects of plyometric and isometric training on muscle and tendon stiffness in vivo. *Physiol Rep* 5, doi:10.14814/phy2.13374 (2017)
301. Kubo, K. *et al.* Effects of plyometric and weight training on muscle-tendon complex and jump performance. *Med Sci Sports Exerc* 39, 1801-1810, doi:10.1249/mss.0b013e31813e630a (2007)
302. Kubo, K., Kanehisa, H. & Fukunaga, T. Effects of resistance and stretching training programmes on the viscoelastic properties of human tendon structures in vivo. *J Physiol* 538, 219-226 (2002)
303. Wilson, G. J., Elliott, B. C. & Wood, G. A. Stretch shorten cycle performance enhancement through flexibility training. *Med Sci Sports Exerc* 24, 116-123 (1992)
304. Mahieu, N. N. *et al.* Effect of static and ballistic stretching on the muscle-tendon tissue properties. *Med Sci Sports Exerc* 39, 494-501, doi:10.1249/01.mss.0000247004.40212.f7 (2007)
305. Werkhausen, A. *et al.* Effect of Training-Induced Changes in Achilles Tendon Stiffness on Muscle-Tendon Behavior During Landing. *Front Physiol* 9, 794, doi:10.3389/fphys.2018.00794 [doi] (2018)
306. Massey, G. J., Balshaw, T. G., Maden-Wilkinson, T. M., Tillin, N. A. & Follland, J. P. Tendinous Tissue Adaptation to Explosive- vs. Sustained-Contraction Strength Training. *Front Physiol* 9, 1170, doi:10.3389/fphys.2018.01170 (2018)
307. Van Hooren, B. & Bosch, F. Is there really an eccentric action of the hamstrings during the swing phase of high-speed running? part I: A critical review of the literature. *J Sports Sci* 35, 2313-2321, doi:10.1080/02640414.2016.1266018 (2017)
308. Hansen, M. & Kjaer, M. Influence of sex and estrogen on musculotendinous protein turnover at rest and after exercise. *Exerc Sport Sci Rev* 42, 183-192, doi:10.1249/JES.0000000000000026 (2014)
309. Janssen, I., van der Worp, H., Hensing, S. & Zwerver, J. Investigating Achilles and patellar tendinopathy prevalence in elite athletics. *Res Sports Med* 26, 1-12, doi:10.1080/15438627.2017.1393748 (2018)
310. Arnoczky, S. P., Lavagnino, M. & Egerbacher, M. The mechanobiological aetiopathogenesis of tendinopathy: is it the over-stimulation or the under-stimulation of tendon cells? *Int J Exp Pathol* 88, 217-226, doi:10.1111/j.1365-2613.2007.00548.x (2007)
311. Lorimer, A. V. & Hume, P. A. Achilles tendon injury risk factors associated with running. *Sports Med* 44, 1459-1472, doi:10.1007/s40279-014-0209-3 (2014)
312. Bojsen-Møller, J. & Magnusson, S. P. Heterogeneous Loading of the Human Achilles Tendon In Vivo. *Exerc Sport Sci Rev* 43, 190-197, doi:10.1249/JES.0000000000000062 (2015)
313. Bojsen-Møller, J. & Magnusson, S. P. Mechanical properties, physiological behavior, and function of aponeurosis and tendon. *J Appl Physiol* (1985) 126, 1800-1807, doi:10.1152/japplphysiol.00671.2018 (2019)
314. Ranson, C., Joyce, D. & McGuigan, P. in *Sports injury prevention and rehabilitation* (eds D. Joyce & D. Lewindon) (Routledge, 2015)
315. Lorimer, A. V. & Hume, P. A. Stiffness as a Risk Factor for Achilles Tendon Injury in Running Athletes. *Sports Med* 46, 1921-1938, doi:10.1007/s40279-016-0526-9 (2016)
316. Kjaer, M. *et al.* From mechanical loading to collagen synthesis, structural changes and function in human tendon. *Scand J Med Sci Sports* 19, 500-510 (2009)
317. Mersmann, F. *et al.* Evidence of imbalanced adaptation between muscle and tendon in adolescent athletes. *Scand J Med Sci Sports* 24, e283-289, doi:10.1111/sms.12166 (2014)
318. Kongsgaard, M. *et al.* Corticosteroid injections, eccentric decline squat training and heavy slow resistance training in patellar tendinopathy. *Scand J Med Sci Sports* (2009)
319. Beyer, R. *et al.* Heavy Slow Resistance Versus Eccentric Training as Treatment for Achilles Tendinopathy: A Randomized Controlled Trial. *Am J Sports Med* 43, 1704-1711, doi:10.1177/0363546515584760 (2015)
320. Kongsgaard, M. *et al.* Fibril morphology and tendon mechanical properties in patellar tendinopathy: effects of heavy slow resistance training. *Am J Sports Med* 38, 749-756, doi:10.1177/0363546509350915 (2010)
321. Baker, D. Improving vertical jump performance through general, special, and specific strength training: Brief review. *J Strength Cond Res* 10, 131-136 (1996)
322. DeRenne, C., Ho, K. W. & Murphy, J. C. Effects of general, special, and specific resistance training on throwing velocity in baseball: a brief review. *J Strength Cond Res* 15, 148-156 (2001)
323. Booth, M. & Orr, R. Effects of plyometric training on sports performance. *Strength Cond J* 38, 30-37 (2016)
324. Hirayama, K. *et al.* Plyometric Training Favors Optimizing Muscle-Tendon Behavior during Depth Jumping. *Front Physiol* 8, 16, doi:10.3389/fphys.2017.00016 (2017)
325. Newton, R. U. & Kraemer, W. J. Developing explosive muscular power: Implications of mixed methods training strategy. *Strength Cond J*, 20-31 (1994)
326. Stone, M., Plisk, S. & Collins, D. Training principles: evaluation of modes and methods of resistance training--a coaching perspective. *Sports Biomech* 1, 79-103 (2002)
327. Cormie, P., McGuigan, M. R. & Newton, R. U. Developing maximal neuromuscular power: Part 1--biological basis of maximal power production. *Sports Med* 41, 17-38, doi:2 [pii];10.2165/11537690-00000000-00000 [doi] (2011)
328. Cormie, P., McGuigan, M. R. & Newton, R. U. Developing maximal neuromuscular power: part 2 - training considerations for improving maximal power production. *Sports Med* 41, 125-146, doi:2 [pii];10.2165/11538500-00000000-00000 [doi] (2011)
329. Garhammer, J. Power production by Olympic weightlifters. *Med Sci Sports Exerc* 12, 54-60 (1980)
330. Storey, A. & Smith, H. K. Unique aspects of competitive weightlifting: performance, training and physiology. *Sports Med* 42, 769-790, doi:10.2165/11633000-00000000-00000 [doi] (2012)
331. Gourgoulis, V., Aggelousis, N., Mavromatis, G. & Garas, A. Three-dimensional kinematic analysis of the snatch of elite Greek weightlifters. *J Sports Sci* 18, 643-652, doi:10.1080/02640410050082332 (2000)
332. Suchomel, T. J., Compton, P. & Stone, M. H. Weightlifting pulling deriva-

- tives: rationale for implementation and application. *Sports Med* 45, 823-839, doi:10.1007/s40279-015-0314-y [doi] (2015)
333. Suchomel, T., Comfort, P. & Lake, J. P. Enhancing the force-velocity profile of athletes using weightlifting derivatives. *Strength Cond J* 39, 10-20 (2017)
334. Haff, G. G., Whitley, A. & Potteiger, J. A. A brief review: Explosive exercises and sports performance. *Strength Cond J* 23, 13-20 (2001)
335. Kawamori, N. & Newton, R. U. Velocity specificity of resistance training: Actual movement velocity versus intention to move explosively *National Strength and Conditioning Association* 28, 6 (2006)
336. Sawicki, G. S., Robertson, B. D., Azizi, E. & Roberts, T. J. Timing matters: tuning the mechanics of a muscle-tendon unit by adjusting stimulation phase during cyclic contractions. *J Exp Biol* 218, 3150-3159, doi:10.1242/jeb.121673 (2015)
337. Roberts, T. J. Contribution of elastic tissues to the mechanics and energetics of muscle function during movement. *J Exp Biol* 219, 266-275, doi:10.1242/jeb.124446 (2016)
338. Hirayama, K., Yanai, T., Kanehisa, H., Fukunaga, T. & Kawakami, Y. Neural modulation of muscle-tendon control strategy after a single practice session. *Med Sci Sports Exerc* 44, 1512-1518, doi:10.1249/MSS.0b013e3182535da5 (2012)
339. Wilson, J. M. & Flanagan, E. P. The role of elastic energy in activities with high force and power requirements: a brief review. *J Strength Cond Res* 22, 1705-1715, doi:10.1519/JSC.0b013e31817ae4a7 (2008)
340. Herzog, W. Eccentric vs. concentric muscle contraction: That is the question. *J Sport Health Sci* 6, 128-129, doi:10.1016/j.jshs.2017.01.006 (2017)
341. Clark, K. P. & Weyand, P. G. Are running speeds maximized with simple-spring stance mechanics? *J Appl Physiol* (1985) 117, 604-615, doi:10.1152/japplphysiol.00174.2014 (2014)
342. Weyand, P. G., Sternlight, D. B., Bellizzi, M. J. & Wright, S. Faster top running speeds are achieved with greater ground forces not more rapid leg movements. *J Appl Physiol* (1985.) 89, 1991-1999, doi:10.1152/jappl.2000.89.5.1991 [doi] (2000)
343. de Villarreal, E. S., Requena, B. & Cronin, J. B. The effect of plyometric training on sprint performance: A meta-analysis. *J Strength Cond Res* 26, 575-584 (2012)
344. Oxfeldt, M., Overgaard, K., Hvid, L. G. & Dalgas, U. Effects of plyometric training on jumping, sprint performance, and lower body muscle strength in healthy adults: A systematic review and meta-analyses. *Scand J Med Sci Sports* 29, 1453-1465, doi:10.1111/sms.13487 (2019)
345. Kannas, T. M., Amiridis, I. G., Arabatzis, F., Katis, A. & Kellis, E. Changes in specific jumping performance after detraining period. *J Sports Med Phys Fitness* 55, 1150-1156, doi:R40Y9999N00A140126 [pii] (2015)
346. Kannas, T. M., Kellis, E. & Amiridis, I. G. Incline plyometrics-induced improvement of jumping performance. *Eur J Appl Physiol* 112, 2353-2361, doi:10.1007/s00421-011-2208-5 [doi] (2012)
347. Rodriguez-Rosell, D., Pareja-Blanco, F., Aagaard, P. & Gonzalez-Badillo, J. J. Physiological and methodological aspects of rate of force development assessment in human skeletal muscle. *Clin Physiol Funct Imaging* 38, 743-762, doi:10.1111/cpf.12495 (2018)
348. Behm, D. G. & Sale, D. G. Intended rather than actual movement velocity determines velocity-specific training response. *J Appl Physiol* (1985) 74, 359-368, doi:10.1152/jappl.1993.74.1.359 (1993)
349. Solberg, C. Short- versus full range of motion explosive training to enhance lower limb power production Master thesis, Norwegian School of Sport Sciences, (2019)
350. Eccles, J. C. Physiology of motor control in man. *Appl Neurophysiol* 44, 5-15 (1981)
351. Eccles, J. C. The initiation of voluntary movements by the supplementary motor area. *Arch Psychiat Nervenkr* (1970) 231, 423-441 (1982)
352. Van Cutsem, M., Feiereisen, P., Duchateau, J. & Hainaut, K. Mechanical properties and behaviour of motor units in the tibialis anterior during voluntary contractions. *Can J Appl Physiol* 22, 585-597 (1997)
353. Van Cutsem, M., Duchateau, J. & Hainaut, K. Changes in single motor unit behaviour contribute to the increase in contraction speed after dynamic training in humans. *J Physiol* 513 (Pt 1), 295-305, doi:10.1111/j.1469-7793.1998.295by.x (1998)
354. Del Vecchio, A. et al. The increase in muscle force after 4 weeks of strength training is mediated by adaptations in motor unit recruitment and rate coding. *J Physiol* 597, 1873-1887, doi:10.1113/JP277250 (2019)
355. Del Vecchio, A. et al. You are as fast as your motor neurons: speed of recruitment and maximal discharge of motor neurons determine the maximal rate of force development in humans. *J Physiol* 597, 2445-2456, doi:10.1113/JP277396 (2019)
356. Maas, H. & Finni, T. Mechanical Coupling Between Muscle-Tendon Units Reduces Peak Stresses. *Exerc Sport Sci Rev* 46, 26-33, doi:10.1249/JES.0000000000000132 (2018)
357. Crouzier, M., Lacourpaille, L., Nordez, A., Tucker, K. & Hug, F. Neuromechanical coupling within the human triceps surae and its consequence on individual force-sharing strategies. *J Exp Biol* 221, doi:10.1242/jeb.187260 (2018)
358. Malone, S. et al. High-speed running and sprinting as an injury risk factor in soccer: Can well-developed physical qualities reduce the risk? *J Sci Med Sport* 21, 257-262, doi:10.1016/j.jsams.2017.05.016 (2018)
359. Malone, S., Roe, M., Doran, D. A., Gabbett, T. J. & Collins, K. High chronic training loads and exposure to bouts of maximal velocity running reduce injury risk in elite Gaelic football. *J Sci Med Sport* 20, 250-254, doi:10.1016/j.jsams.2016.08.005 (2017)
360. Edouard, P. et al. Sprinting: a potential vaccine for hamstring injury? *SportPerf Sci Reports* 48 (2019)
361. Markovic, G. & Mikulic, P. Neuro-musculoskeletal and performance adaptations to lower-extremity plyometric training. *Sports Med* 40, 859-895, doi:10.2165/11318370-000000000-00000 (2010)
362. Weakley, J. et al. The Effects of Augmented Feedback on Sprint, Jump, and

- Strength Adaptations in Rugby Union Players Following a Four Week Training Programme. *Int J Sports Physiol Perform*, 1-21, doi:10.1123/ijsspp.2018-0523 (2019)
363. Weakley, J. *et al.* Show Me, Tell Me, Encourage Me: The Effect of Different Forms of Feedback on Resistance Training Performance. *J Strength Cond Res*, doi:10.1519/JSC.0000000000002887 (2018)
364. Ives, J. C. & Shelley, G. A. Psychophysics in functional strength and power training: review and implementation framework. *J Strength Cond Res* 17, 177-186, doi:10.1519/1533-4287(2003)017<0177:pif sap>2.0.co;2 (2003)
365. Visnes, H. & Bahr, R. Training volume and body composition as risk factors for developing jumper's knee among young elite volleyball players. *Scand J Med Sci Sports* 23, 607-613, doi:10.1111/j.1600-0838.2011.01430.x (2013)
366. Visnes, H., Aandahl, H. A. & Bahr, R. Jumper's knee paradox--jumping ability is a risk factor for developing jumper's knee: a 5-year prospective study. *Br J Sports Med* 47, 503-507, doi:10.1136/bjsports-2012-091385 (2013)
367. Jacobsson, J. *et al.* Injury patterns in Swedish elite athletics: annual incidence, injury types and risk factors. *Br J Sports Med* 47, 941-952, doi:10.1136/bjsports-2012-091651 (2013)
368. Lopes, A. D., Hespanhol Junior, L. C., Yeung, S. S. & Costa, L. O. What are the main running-related musculoskeletal injuries? A Systematic Review. *Sports Med* 42, 891-905, doi:10.2165/11631170-00000000-00000 (2012)
369. Helland, C. *et al.* Mechanical properties of the patellar tendon in elite volleyball players with and without patellar tendinopathy. *Br J Sports Med* 47, 862-868, doi:bjsports-2013-092275 [pii];10.1136/bjsports-2013-092275 [doi] (2013)
370. Heinemeier, K. M. *et al.* Carbon-14 bomb pulse dating shows that tendinopathy is preceded by years of abnormally high collagen turnover. *FASEB J* 32, 4763-4775, doi:10.1096/fj.201701569R (2018)
371. Coffey, V. G. *et al.* Effect of high-frequency resistance exercise on adaptive responses in skeletal muscle. *Med Sci Sports Exerc* 39, 2135-2144 (2007)
372. Meeusen, R. *et al.* Prevention, diagnosis, and treatment of the overtraining syndrome: joint consensus statement of the European College of Sport Science and the American College of Sports Medicine. *Med Sci Sports Exerc* 45, 186-205, doi:10.1249/MSS.0b013e318279a10a (2013)
373. Silbernagel, K. G., Thomee, R., Eriksson, B. I. & Karlsson, J. Continued sports activity, using a pain-monitoring model, during rehabilitation in patients with Achilles tendinopathy: a randomized controlled study. *Am J Sports Med* 35, 897-906, doi:10.1177/0363546506298279 (2007)
374. Suchomel, T. J., Nimphius, S. & Stone, M. H. The Importance of Muscular Strength in Athletic Performance. *Sports Med* 46, 1419-1449, doi:10.1007/s40279-016-0486-0 [doi];10.1007/s40279-016-0486-0 [pii] (2016)
375. Morin, J. B. & Samozino, P. Interpreting Power-Force-Velocity Profiles for Individualized and Specific Training. *Int. J. Sports Physiol Perform* 11, 267-272, doi:2015-0638 [pii];10.1123/ijsspp.2015-0638 [doi] (2016)
376. Cormie, P., McGuigan, M. R. & Newton, R. U. Adaptations in athletic performance after ballistic power versus strength training. *Med Sci Sports Exerc* 42, 1582-1598, doi:10.1249/MSS.0b013e3181d2013a [doi] (2010)
377. Rumpf, M. C., Lockie, R. G., Cronin, J. B. & Jalilvand, F. The effect of different sprint training methods on sprint performance over various distances: a brief review. *J Strength Cond Res*, doi:10.1519/JSC.0000000000001245 [doi] (2015)
378. Rumpf, M. C., Cronin, J. B., Pinder, S. D., Oliver, J. & Hughes, M. Effect of different training methods on running sprint times in male youth. *Pediatr Exerc Sci* 24, 170-186 (2012)
379. Toumi, H., Best, T. M., Martin, A. & Poumarat, G. Muscle plasticity after weight and combined (weight + jump) training. *Med. Sci. Sports Exerc* 36, 1580-1588 (2004)
380. Ronnestad, B. R., Kvamme, N. H., Sunde, A. & Raastad, T. Short-term effects of strength and plyometric training on sprint and jump performance in professional soccer players. *J Strength Cond Res* 22, 773-780, doi:10.1519/JSC.0b013e31816a5e86 [doi] (2008)
381. Cormie, P., McGuigan, M. R. & Newton, R. U. Influence of strength on magnitude and mechanisms of adaptation to power training. *Med Sci Sports Exerc* 42, 1566-1581, doi:10.1249/MSS.0b013e3181cf818d [doi];00005768-201008000-00017 [pii] (2010)
382. James, L. P. *et al.* The impact of strength level on adaptations to combined weightlifting, plyometric, and ballistic training. *Scand J Med Sci Sports* 28, 1494-1505, doi:10.1111/sms.13045 (2018)
383. Matveyev, L. *Fundamentals of sport training*. (Central Books Ltd, 1981)
384. Issurin, V. B. Generalized training effects induced by athletic preparation. A review. *J Sports Med Phys Fitness* 49, 333-345, doi:R40093065 [pii] (2009)
385. Pritchard, H., Keogh, J., Barnes, M. & McGuigan, M. Effects and mechanisms of tapering in maximizing muscular strength. *Strength Cond J* 37, 73-83 (2015)
386. Bazyler, C. D. *et al.* Changes in Muscle Architecture, Explosive Ability, and Track and Field Throwing Performance Throughout a Competitive Season and After a Taper. *J Strength Cond Res* 31, 2785-2793, doi:10.1519/JSC.0000000000001619 (2017)
387. Issurin, V. B. New horizons for the methodology and physiology of training periodization. *Sports Med* 40, 189-206, doi:2 [pii];10.2165/11319770-00000000-00000 [doi] (2010)
388. Plisk, S. S. & Stone, M. H. Periodization startegies. *National Strength and Conditioning Association* 25, 19 (2003)
389. Turner, A. The science and practice of periodization: A brief review. *Strength Cond J* 33, 34-46 (2011)
390. Samozino, P., Morin, J. B., Hintzy, F. & Belli, A. A simple method for measuring force, velocity and power output during squat jump. *J Biomech* 41, 2940-2945, doi:10.1016/j.jbiomech.2008.07.028 (2008)
391. Samozino, P. *et al.* A simple method for measuring power, force, velocity properties, and mechanical effectiveness in sprint running. *Scand J Med Sci Sports*, doi:10.1111/sms.12490 [doi] (2015)

392. Jimenez-Reyes, P., Samozino, P., Brughelli, M. & Morin, J. B. Effectiveness of an Individualized Training Based on Force-Velocity Profiling during Jumping. *Front Physiol* 7, 677, doi:10.3389/fphys.2016.00677 (2016)
393. Cross, M. R. *et al.* Training at maximal power in resisted sprinting: Optimal load determination methodology and pilot results in team sport athletes. *PLoS One* 13, e0195477, doi:10.1371/journal.pone.0195477 (2018)
394. Rakovic, E., Paulsen, G., Helland, C., Eriksrud, O. & Haugen, T. The effect of individualised sprint training in elite female team sport athletes: A pilot study. *J Sports Sci*, 1-7, doi:10.1080/02640414.2018.1474536 [doi] (2018)
395. Colyer, S. L., Stokes, K. A., Bilzon, J. L. J., Holdcroft, D. & Salo, A. I. T. Training-Related Changes in Force-Power Profiles: Implications for the Skeleton Start. *Int J Sports Physiol Perform* 13, 412-419, doi:10.1123/ijsp.2017-0110 (2018)
396. Zatsiorsky, V. M. & Kraemer, W. J. in *Science and practice of strength training* Ch. 8, 155-169 (Human Kinetics Publishers, 2006)
397. Scott, B. R., Duthie, G. M., Thornton, H. R. & Dascombe, B. J. Training Monitoring for Resistance Exercise: Theory and Applications. *Sports Med* 46, 687-698, doi:10.1007/s40279-015-0454-0 (2016)
398. Kellmann, M. *et al.* Recovery and Performance in Sport: Consensus Statement. *Int J Sports Physiol Perform* 13, 240-245, doi:10.1123/ijsp.2017-0759 [doi] (2018)
399. Foster, C., Rodriguez-Marroyo, J. A. & de Koning, J. J. Monitoring Training Loads: The Past, the Present, and the Future. *Int J Sports Physiol Perform* 12, S22-S28, doi:10.1123/ijsp.2016-0388 (2017)
400. Hopkins, M. G. Design and analysis for studies of individual response. *Sportscience* 22, 39-51 (2018)
401. Clark, D. R., Lambert, M. I. & Hunter, A. M. Contemporary perspectives of core stability training for dynamic athletic performance: a survey of athletes, coaches, sports science and sports medicine practitioners. *Sports Med Open* 4, 32, doi:10.1186/s40798-018-0150-3 (2018)
402. Prieske, O., Muehlbauer, T. & Granacher, U. The Role of Trunk Muscle Strength for Physical Fitness and Athletic Performance in Trained Individuals: A Systematic Review and Meta-Analysis. *Sports Med* 46, 401-419, doi:10.1007/s40279-015-0426-4 (2016)
403. Akuthota, V., Ferreiro, A., Moore, T. & Fredericson, M. Core stability exercise principles. *Curr Sports Med Rep* 7, 39-44, doi:10.1097/01.CSMR.0000308663.13278.69 (2008)
404. Hibbs, A. E., Thompson, K. G., French, D., Wrigley, A. & Spears, I. Optimizing performance by improving core stability and core strength. *Sports Med* 38, 995-1008, doi:10.2165/00007256-200838120-00004 (2008)
405. De Blaiser, C. *et al.* Is core stability a risk factor for lower extremity injuries in an athletic population? A systematic review. *Phys Ther Sport* 30, 48-56, doi:10.1016/j.ptsp.2017.08.076 (2018)
406. De Blaiser, C. *et al.* Impaired Core Stability as a Risk Factor for the Development of Lower Extremity Overuse Injuries: A Prospective Cohort Study. *Am J Sports Med* 47, 1713-1721, doi:10.1177/0363546519837724 (2019)
407. Huxel Bliven, K. C. & Anderson, B. E. Core stability training for injury prevention. *Sports Health* 5, 514-522, doi:10.1177/1941738113481200 (2013)
408. Burton, L. & Cook, G. in *Sports injury prevention and rehabilitation* (eds D. Joyce & D. Lewindon) 153-168 (Routledge, 2015)
409. Perrott, M. A., Pizzari, T. & Cook, J. Lumbo pelvic exercise reduces lower limb muscle strain injury in recreational athletes. *Phys Ther Rev* 18, 24-33 (2013)
410. Saeterbakken, A. H., van den Tillaar, R. & Seiler, S. Effect of core stability training on throwing velocity in female handball players. *J Strength Cond Res* 25, 712-718, doi:10.1519/JSC.0b013e3181cc227e (2011)
411. Willardson, J. M. Core stability training: applications to sports conditioning programs. *J Strength Cond Res* 21, 979-985 (2007)
412. Myer, G. D. *et al.* Sport Specialization, Part I: Does Early Sports Specialization Increase Negative Outcomes and Reduce the Opportunity for Success in Young Athletes? *Sports Health* 7, 437-442, doi:10.1177/1941738115598747 (2015)
413. Myer, G. D. *et al.* Sports Specialization, Part II: Alternative Solutions to Early Sport Specialization in Youth Athletes. *Sports Health* 8, 65-73, doi:10.1177/1941738115614811 (2016)
414. Lloyd, R. S. *et al.* Long-term athletic development, part 2: barriers to success and potential solutions. *J Strength Cond Res* 29, 1451-1464, doi:10.1519/JSC.0000465424.75389.56 [doi]; 00124278-201505000-00037 [pii] (2015)
415. Lloyd, R. S. *et al.* Long-term athletic development- part 1: a pathway for all youth. *J Strength Cond Res* 29, 1439-1450, doi:10.1519/JSC.0000000000000756 [doi] (2015)
416. Risberg, M. A. & Myklebust, G. Neuromuskulær trening som rehabilitering og forebygging - relatert til kneskader. *Fysioterapeuten* 68, 12-20 (2001)
417. Pedersen, A. V., Størksen, J. H. & Moholdt, T. T. Hva er egentlig neuromuskulær trening? *Fysioterapeuten* 11, 18-22 (2005)
418. Wirth, K. *et al.* Core Stability in Athletes: A Critical Analysis of Current Guidelines. *Sports Med* 47, 401-414, doi:10.1007/s40279-016-0597-7 (2017)
419. Lederman, E. The myth of core stability. *J Bodyw Mov Ther* 14, 84-98, doi:10.1016/j.jbmt.2009.08.001 (2010)
420. McNeill, W. Core stability is a subset of motor control. *J Bodyw Mov Ther* 14, 80-83, doi:10.1016/j.jbmt.2009.10.001 (2010)
421. Saeterbakken, A. H., Chaudhari, A., van den Tillaar, R. & Andersen, V. The effects of performing integrated compared to isolated core exercises. *PLoS One* 14, e0212216, doi:10.1371/journal.pone.0212216 (2019)
422. Lee, K. B. *et al.* Correlation between lateral abdominal, rectus femoris, and triceps brachii muscle thickness and endurance during prone bridge exercise in healthy young adults. *Phys Ther Rehabil Sci* 4, 11-16, doi:dx.doi.org/10.14474/ptrs.2015.4.1.11 (2015)
423. Kummel, J., Kramer, A., Giboin, L. S. & Gruber, M. Specificity of Balance Training in Healthy Individuals: A Systematic Review and Meta-Analysis. *Sports Med* 46, 1261-1271, doi:10.1007/s40279-016-0515-z (2016)
424. Hrysomallis, C. Balance ability and athletic performance. *Sports Med* 41, 221-232, doi:10.2165/11538560-000000000-00000 (2011)

425. Taube, W. & Gollhofer, A. in *Neuromuscular aspects of sport performance* Ch. 14, 254-269 (Wiley-Blackwell, 2010)
426. Donath, L., Roth, R., Zahner, L. & Faude, O. Slackline Training (Balancing Over Narrow Nylon Ribbons) and Balance Performance: A Meta-Analytical Review. *Sports Med* 47, 1075-1086, doi:10.1007/s40279-016-0631-9 (2017)
427. Behm, D. G., Drinkwater, E. J., Willardson, J. M. & Cowley, P. M. The use of instability to train the core musculature. *Appl Physiol Nutr Metab* 35, 91-108, doi:10.1139/H09-127 (2010)
428. Hughes, G. & Watkins, J. A risk-factor model for anterior cruciate ligament injury. *Sports Med* 36, 411-428, doi:10.2165/00007256-200636050-00004 (2006)
429. Pinto, M. D., Blazevich, A. J., Andersen, L. L., Mil-Homens, P. & Pinto, R. S. Hamstring-to-quadriceps fatigue ratio offers new and different muscle function information than the conventional non-fatigued ratio. *Scand J Med Sci Sports* 28, 282-293, doi:10.1111/sms.12891 (2018)
430. Woods, C. et al. The Football Association Medical Research Programme: an audit of injuries in professional football--analysis of hamstring injuries. *Br J Sports Med* 38, 36-41, doi:10.1136/bjsm.2002.002352 (2004)
431. Ekstrand, J., Hagglund, M. & Walden, M. Injury incidence and injury patterns in professional football: the UEFA injury study. *Br J Sports Med* 45, 553-558, doi:10.1136/bjsm.2009.060582 (2011)
432. Benjaminse, A., Webster, K. E., Kimp, A., Meijer, M. & Gokeler, A. Revised Approach to the Role of Fatigue in Anterior Cruciate Ligament Injury Prevention: A Systematic Review with Meta-Analyses. *Sports Med* 49, 565-586, doi:10.1007/s40279-019-01052-6 (2019)
433. Bourne, M. N., Webster, K. E. & Hewett, T. E. Is Fatigue a Risk Factor for Anterior Cruciate Ligament Rupture? *Sports Med* 49, 1629-1635, doi:10.1007/s40279-019-01134-5 (2019)
434. Bucher, E. et al. Exercise-induced trunk fatigue decreases double poling performance in well-trained cross-country skiers. *Eur J Appl Physiol* 118, 2077-2087, doi:10.1007/s00421-018-3938-4 (2018)
435. Zech, A. et al. Balance training for neuromuscular control and performance enhancement: a systematic review. *J Athl Train* 45, 392-403, doi:10.4085/1062-6050-45.4.392 (2010)
436. Shield, A. J. & Bourne, M. N. Hamstring Injury Prevention Practices in Elite Sport: Evidence for Eccentric Strength vs. Lumbo-Pelvic Training. *Sports Med* 48, 513-524, doi:10.1007/s40279-017-0819-7 (2018)
437. Martuscello, J. M. et al. Systematic review of core muscle activity during physical fitness exercises. *J Strength Cond Res* 27, 1684-1698, doi:10.1519/JSC.0b013e318291b8da (2013)
438. Andersen, V. et al. Muscle activation and strength in squat and Bulgarian squat on stable and unstable surface. *Int J Sports Med* 35, 1196-1202, doi:10.1055/s-0034-1382016 (2014)
439. Saeterbakken, A. H. & Fimland, M. S. Muscle activity of the core during bilateral, unilateral, seated and standing resistance exercise. *Eur J Appl Physiol* 112, 1671-1678, doi:10.1007/s00421-011-2141-7 (2012)
440. Saeterbakken, A. H. & Fimland, M. S. Muscle force output and electromyographic activity in squats with various unstable surfaces. *J Strength Cond Res* 27, 130-136, doi:10.1519/JSC.0b013e3182541d43 (2013)
441. Behm, D. G., Colado, J. C. & Colado, J. C. Instability resistance training across the exercise continuum. *Sports Health* 5, 500-503, doi:10.1177/1941738113477815 (2013)
442. Prieske, O. et al. Neuromuscular and athletic performance following core strength training in elite youth soccer: Role of instability. *Scand J Med Sci Sports* 26, 48-56, doi:10.1111/sms.12403 (2016)
443. Soligard, T. et al. Compliance with a comprehensive warm-up programme to prevent injuries in youth football. *Br J Sports Med* 44, 787-793, doi:10.1136/bjsm.2009.070672 (2010)