## STRATEGIES for OPTIMIZING PERFORMANCE

## a CoreFirst® Approach to Maximizing Athletic Potential

## **Bibliography**

Allison GT, Morris SL, Lay B. Feedforward Responses of Transversus Abdominus Are Directionally Specific and Act Asymmetrically: Implications for Core Stability Theories. *JOSPT*. 2008; 38(5):228-237.

Arockiaraj J, Korula RJ, Oommen AT, et al. Proprioceptive changes in the contralateral knee joint following anterior cruciate injury. *Bone Joint J.* 2013; 95-B(2): 188-191.

Barr KB, Griggs M, Cadby T. Lumbar Stabilization: Core Concepts and Current Literature, *Am J Phys Med & Rehab*. 2005; 84(6): 473-480.

Bergmark A. Stability of the lumbar spine. Acta Orthop Scand. 1989; 60(230): 1-54.

Brumitt J, Heiderscheit BC, Manske RC, et al. Preseason functional test scores are associated with future sports injury in female collegiate athletes. *J Strength Cond Res.* 32(6): 1692-1701.

Butler RJ, Lehr ME, Fink ML, et al. Dynamic balance performance and noncontact lower extremity injury in college football players: an initial study. *Sports Health.* 2013; 5(5): 417-422.

Clarke N, Voight ML, Campbell AM, et al. The relationship between segmental rolling ability and lumbar multifidus activation time. *International J of Sports Phys Ther.* 2017; 12(6): 921-930.

Chaudhari AM, McKenzie CS, Borchers JR, et al. Lumbopelvic control and pitching performance of professional baseball pitchers. *J Strength Cond Res.* 2011; 25(8): 2127-2132.

Chaudhari AM, McKenzie CS, Pan X, et al. Lumbopelvic control and days missed due to injury in professional baseball pitchers. *Am J Sports Med.* 2014; 42(11): 2734-2740.

Cholewicki J, McGill SM. Mechanical stability of the in vivo lumbar spine: implications for injury and chronic low back pain. *Clin Biomech.* 1996 Jan; 11(1):1-15.

Clarke N, Voight ML, Campbell AM, et al. The relationship between segmental rolling ability and lumbar multifidus activation time. *International J of Sports Phys Ther.* 2017; 12(6): 921-930.

Collins CK, Johnson VS, Godwin EM, Pappas E. The reliability and validity of the Saliba Postural Classification System. *J Man and Manip Ther.* 2016; 24(3): 174-181.

Conte SA, Thompson MM, Markis MA. Abdominal muscle strains in professional baseball. *Am J Sports Med.* 2012; 40(3): 650-656.

Cortell-Tormo JM, Garcia-Jaen M, Chulvi-Medrano I, et al. Influence of scapular position on the core musculature activation in the prone plank exercise. *J Strength Cond Res.* 2017; 31(8):2255-2262.

Davies GI, Dickoff-Hoffman S. Neuromuscular testing and rehabilitation of the shoulder complex. *JOSPT*. 1993; 18(2): 449-458.

Dawes J, Lentz D. Methods of improving power for acceleration for the non-track athlete. *Strength Cond J*. 2012; 34(6):44-51.

Dillman CJ. Proper mechanics of pitching. Sports Med Update. 1990; 5: 15-18.

Dionisio VC, de Baptista CR, de Sales Rodrigues A, et al. Is it possible to stabilize the trunk using rhythmic stabilization in the upper limb? A cross sectional study of asymptomatic individuals. *J Man & Manip Ther*. 2018.

Faigenbaum AD and Meadors L. A coach's dozen: An update on building healthy, strong, and resilient young athletes. *Strength Cond J.* 2017; 39 (2): 27-33.

Feltner ME, Dapena J. Three-dimensional interactions in a two-segment kinetic chain. Part I: General Model. *Int J Sports Biomech.* 1989a; 5:403-419.

Fleisig GS, Dillman CJ, Andrews JR. Biomechanics of the shoulder during throwing. In: Andrews JR, Wilk KE eds. *The Athlete's Shoulder*. New York: Churchill Livingstone; 1993:355.

Fleisig GS, Nicholls R, Elliott B, et al. Kinematics used by world class tennis players to produce high-velocity serves. *Sports Biomech.* 2003; 2(1): 51-71.

Fyhr C, Gustaysson L, Wassinger C, et al. The effect of shoulder injury on kinaesthesia: a systematic review and meta-analysis. *Man Ther.* 2015; 20(1): 28-37.

Garrison JC, Arnold A, Macko M, et al. Baseball players diagnosed with ulnar collateral ligament tears demonstrate decreased balance compared to healthy controls. *J Ortho Sports Phys Ther.* 2013; 43: 752-758.

Gibson N, Williams M, Maitland C, McCunn, R. A framework for progressing and regressing core training within athletic and general populations. *Strength Cond J.* 2017; 39(5): 45-50.

Gillies A, Dorgo S. Preventing lumbar injuries in rotational athletes. *J Strength Cond Research*. 2013; 35(2): 55-62.

Gullett JC, Tillman MD, Gutierrez GM, et al. A biomechanical comparison of back and front squats in healthy trained individuals. *IJ Strength Cond Research*. 2009; 23(1): 284-292.

Hedrick A. Training the trunk for improved athletic performance. Strength Cond J. 2000; 2:50-61.

Hedrick A. Weightlifting movements and sprint performance. Strength Cond J. 2018; 40(1): 92-97.

Herrington L, Horsley I, Whitaker, et al. Does a tackling task effect shoulder joint position sense in rugby players? *Phys Ther Sport.* 2008; 9(2): 67-71.

Hides J, Sims K. Effect of stabilization training on multifidus muscle cross-sectional area among young elite cricketers with low back pain. *J Orthop Sports Phys Ther.* 2008; 38(3): 101108.

Hides, Stanton. Can motor control training lower the risk of injury for professional football players? *Med Sci Sports Exerc.* 2014; 46(4): 762-8.

Hodges PW, Richardson CA. Contraction of the abdominal muscles associated with movement of the lower limb. *Phys Ther.* 1997; 77(2): 132-142.

Hoogenboom BJ, Voight ML. Rolling Revisited: Using rolling to assess and treat neuromuscular control and coordination of the core and extremities of athletes. *JJSPT*. 2015;10(6): 787-802.

Jacobs P. The overhand baseball pitch: a kinesiological analysis and related strengthconditioning programming. *Natl Cond Strength Assoc J.* 1987; 9:5-13.

Johnson CD, Whitehead PN, Pletcher ER, et al. The relationship of core strength and activation and performance on three functional movement screens. *J Strength Cond Research.* 2018; 32(4): 1166-1173.

Kibler B, Press J, Sciascia A. The role of core stability in athletic function. *Sports Med.* 2006; 36(3): 189-198.

Krause DA, Dueffert LG, Postma JL. Does body position affect shoulder and trunk muscle activation during resisted shoulder external rotation? *Sports Health.* 2018; 10(4): 355-360.

Laudner KG, Wong RH, Latal JR, et al. Descriptive profile of lumbopelvic control in collegiate baseball players. *J Strength Cond Res.* 2017; 32(4):1150-1154.

Lephart SM, Pincivero DM, Giraido JL. The role of proprioception in the management and rehabilitation of athletic injuries. *AJSM*. 1997; 25(1): 130-137.

Leung F, Hides JA, Franettovich Smith MM, et al. Spinal control is related to concussion in professional footballers. *British J Sports Med.* 2016; 51(11).

Lockie R. A 6-week base strength training program for sprint acceleration development and foundation for future progression in amateur athletes. *Strength Cond J.* 2018; 40(1): 92-97.

Loria K. Working with combat athletes. PT in Motion magazine. 2018; 4:16-25.

Lubiatowski P, Ogrodowicz P, Wojtaszek M, et al. Measurement of active shoulder proprioception: dedicated system and device. *Eur J Orthop Surg.* 2013; 23(2): 177-183.

Martinez AF, Lessi GC, Carvalho C, et al. Association of hip and trunk strength with threedimensional trunk, hip, and knee kinematics during a single-leg drop vertical jump. *J Strength Cond Res.* 2018; 32(7): 1902-1908.

Noh JW, Park BS, Kim MY, et al. Analysis of combat sports players' injuries according to playing style for sports physiotherapy research. *J Phys Ther Sci.* 2015; 27: 2425-2430.

Oliver GD, Adams-Blair HR. Improving core strength to prevent injury. *J Phys Ed*, *Recreation*, & *Dance*. 2010; 81(7):15-20.

Oliver GD, Holt T. Hip and upper extremity kinematics in youth baseball pitchers. *J Sports Sciences*. 2016; 34(9):856-861.

Oliver GD Keeley DW. Pelvis and torso kinematics and their relationship to shoulder kinematics in high-school baseball pitchers. *J Strength Cond Res.* 2010; 24: 3241-3246.

Oliver GD, Plummer H. Ground reaction forces, kinematics, and muscle activations during the windmill softball pitch. *J Sports Sciences*. 2011; 29(10): 1071-1077.

Oliver GD, Stone AJ, Plummer H. Electromyographic examination of selected muscle activation during isometric core exercises. *Clin J Sports Med.* 2010; 20:452-457.

Oliver GD, Weimar WH, Plummer HA. Gluteus medius and scapular muscle activations in youth baseball pitchers. *J Strength Cond Res.* 2015; 29(6): 1494-1499.

Oliver GD, Washington JK, Barfield JW, et al. Quantitative analysis of proximal and distal kinetic chain musculature during dynamic exercises. *J strength Cond Res.* 2018; 32(6): 15451553.

Ortega-Becerra M, Pareja-Blanco F, Jimenez-Reyes P, et al. Determinant factors of physical performance and specific throwing in handball players of different ages. *J Strength Cond Res.* 2018; 32(6): 1778-1786.

Oyama S, Myers JB. The relationship between the push off ground reaction force and ball speed in high school baseball pitchers. *J Strength Cond Res.* 2018; 32(5): 1324-1328.

Paoli A, Marcolin G, Petrone N. The effect of stance width on the electromyographical activity of eight superficial thigh muscles during back squat with different bar loads. *J Strength Cond Research*. 2009; 23(1): 246-250.

Panjabi MM. The stabilizing system of the spine. Part I. Function, dysfunction, adaptation, and enhancement. *J Spinal Disord*. 1992; 5(4): 383-389.

Plisky PJ, Rauh MJ, Kaminski TW, et al. Star excursion balance test as a predictor of lower extremity injury in high school basketball players. *J Orthop Sports Phys Ther*. 2006; 36(12): 911-919.

Popchak A, Burnett T, Weber N, et al. Factors related to injury in youth and adolescent baseball pitching, with an eye toward prevention. *Am J Phys Med Rehabil*. 2015; 94:395-409.

Pope MH, Panjabi M. Biomechanical definitions of spinal instability. Spine. 1985; 10:255-256.

Putnam CA. Sequential motions of body segments in striking and throwing skills: Description and explanations. *J Biomech.* 1993; 26(1): 125-135.

Radebold A, Cholewicki J, Polzhofer GK. Impaired postural control of the lumbar spine is associated with delayed muscle responses times in patients with chronic idiopathic low back pain. *Spine*. 2001; 26:724-730.

Relph N, Herrington L, Tyson S. The effects of ACL injury on knee proprioception- a metaanalysis. *Physiotherapy*. 2014; 100(3): 187-195.

Rice RP, Roach KE, Waltz B, et al. Side-to-side asymmetries in the core and hip are associated with back injuries in elite and professional tennis players.

Riva D, Bianchi R, Rocca F, et al. Proprioceptive training and injury prevention in a professional men's basketball team: A six year prospective study. *J strength Cond Res.* 2016; 30(2): 461-475.

Safran MR, Borsa PA, Lephart SM, et al. Shoulder proprioception in baseball pitchers. J *Shld Elbow Surg*. 2001; 10(5): 438-444.

Sahin E, Dilek B, Baydar M, et al. Shoulder proprioception in patients with subacromial impingement syndrome. *J Back Musculoskel Rehabil*. 2017; 30(4): 857-862.

Salles JI, Velasques B, Cossich, V, et al. Strength and shoulder proprioception. *J Athl Train.* 2015; 50(3): 277-280.

Schroeder S, Gorman SL. Decreased balance and injury risk in adolescent baseball players. *Orthopaedic Practice*. 2018; 30(3): 15--159.

Stodden DF, Fleisig GS, McLean SP, et al. Relationship of pelvis and upper torso kinematics to pitched baseball velocity. *J Applied Biomech.* 2001; 17:164-172.

Sugimoto D, Stracciolini A, Dawkins CI, et al. Implications for training in youth: Is specialization benefitting kids? *Strength Cond J*. 2017; 39(2):77-81.

Watkins RG, Dennis S, Dillin WH, et al. Dynamic EMG analysis of torque transfer in professional baseball pitchers. Spine. 1989; 14(4): 404-408.

Wilke HJ, Wolf S, Claes LE, et al. Stability increase of the lumbar spine with different muscle groups. A biomechanical in vitro study. *Spine*. 1995 Jan 15; 20(2):192-8.

Yamamoto A, Takagishi K, Kobayashi T, et al. The impact of faulty posture on rotator cuff tears with and without symptoms. *J Shoulder Elbow Surg*. 2015; 24(3):446-452.

Zazulak B, Choleiwicki J, Reeves P. Neuromuscular control of trunk stability: Clinical implications for sports injury prevention. *J Am Acad Ortho Surg.* 2008; 16:497-505.

Gilmore SL, Brilla LR, Suprak DN, et al. Effect of a high -intensity isometric potentiating warm-up on bat velocity. J Strength Cond Res. 2019; 33(1): 152-158.

LaPlaca DA, McCullick BA. Improving physical performance through instructional models. Strength Cond J. 2018; 40(4): 40-47.

Maloney SJ. Review of the badminton lunge and specific training considerations. Strength Cond J. 2018; 40(4): 7-17.

Naimo MA, Zourdous MC, Wilson JM, et al. Contextual interference effects on the acquisition of skill and strength of the bench press. Hum Move Sci. 2013; 32: 472-484.

Norikazu H, Tsuruike M. Differences in the electromyographic activity of the hamstrings, gluteus maximus, and erector spinae muscles in a variety of kinetic changes. J Strength Cond Res. 2018; 32(12): 3357-3363.

Pritchard T, Hawkins A, Wiegand R, et al. Effects of two instructional approaches on skill development, knowledge, and game performance. Meas Phys Educ Exer Sci. 2008; 12: 219236.

Ruas CV, Brown LE, Lima CD, et al. Effect of three different muscle action training protocols on knee strength ratios and performance. J Strength Cond Res. 2018; 32(8): 2154-2165.

Sekiguchi T, Hagiwara Y, Yabe Y, et al. Playing video games for more than 3 hours a day is associated with shoulder and elbow pain in elite young male baseball players. J Shoulder Elbow Surg. 2018; 27(9): 1629-1635.