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REFERENCES:

- 1. St. John N. Reformer 1- A Detailed Guide for Teaching Pilates. Sacramento: Balanced Body Inc: 2007.
- 2. Pilates JH, Miller WJ. Pilates' Return to Life Through Contrology. Presentation Dynamics: 1998.
- 3. Byrnes k, Ping-Jung W, Whillier S; Is Pilates an effective rehabilitation tool? A systematic review. *J Body Work Mov Ther*. 2018;22(1):192-202.
- 4. Roller M, Kachingwe A, Beling J, Ickes D-M, Cabot A, Shrier G. Pilates Reformer exercises for fall risk reduction in older adults: A randomized controlled trial. *J Body MovTher*. 2018;22(4):983-998.
- 5. Cruz-Diaz D, Bergamin M, Gobbo S, Martinez-Amat A, Hita-Contreras F. Comparative effects of 12 weeks of equipment and mat Pilates in patients with Chronic Low Back Pain on pain, function and transversus abdominis activation. A randomized controlled trial. *Complem Ther*. 2017;33: 72-77.
- 6. Endleman I, Critchley D. Transversus Abdominis and Obliquus Internus Activity During Pilates Exercises: Measurement with Ultrasound Scanning. *Arch Phys Med Rehabil*. 2008;89:2205-2212.
- 7. Kao Y-H, Liou T-H, Huang Y-C, Tsai Y-W, Wang K-M. Effects of a 12-week Pilates course on lower limb muscle strength and trunk flexibility in women living in the community. *Health Care Women Int*. 2014;36(3):303-319.
- 8. Menacho, M., Obara, K., Conceição, J., Chitolina, M., Krantz, D., Da Silva, R., & Cardoso, J. (2010). Electromyographic effect of mat Pilates exercise on the back muscle activity of healthy adult females. *J Manipulative and Physiol Ther.* 2010; 33(9), 672-678.
- 9. Pereria ILR, Queiroz B, Amorim C, Sacco ICN. Trunk muscle EMG during intermediate Pilates mat exercises in beginner healthy and chronic low back pain individuals. *J Manipulative Physiol Ther*.2017; 40:350-357.
- 10. Queiroz B, Cagliari M, Amorim C, Sacco I. Muscle Activation During Four Pilates Core Stability Exercises in Quadruped Position. *Arch Phys Med Rehabil*.2010; 91:86-92.
- 11. Prompaet S, Paungmali A, Pirunsan U, Sitilertpisan P. Effects of Pilates Training on Lumbo-Pelvic Stability and Flexibility. *Asian J Sports Med*. 2011;2(1):16-22.
- 12. Cruz-Díaz D, Martínez-Amat A, Osuna-Pérez MC, Torre-Cruz MJDL, Hita-Contreras F. Short- and long-term effects of a six-week clinical Pilates program in addition to physical therapy on postmenopausal women with chronic low back pain: a randomized controlled trial. *Disabil Rehabil*. 2015;38(13):1300-1308.

- 13. Hasanpour-Dehkordi, A., Dehghani, A., & Solati, K. A comparison of the effects of Pilates and Mckenzie training on pain and general health in men with chronic low back pain: A randomized trial. *Indian J Palliat Care*. 2017;23(1):36.
- 14. Natour J, Cazotti LA, Rierio LH, et al. Pilates improves pain, function and quality of life in patients with chronic low back pain: a randomized controlled trial. *Clin Rehabil* 2015;29:59-68.
- 15. Yamato TP, Maher CG, Saragiotto BT, Hancock MJ, Ostelo RWJG, Cabral CMN, Menezes Costa LC, Costa LOP. Pilates for low back pain. *Cochrane Database Syst Rev.* 2015;7.
- 16. Myers, T. *Anatomy Trains: Myofascial Meridians for Manual & Movement Therapists, 3e.* Churchill Livingstone: 2014.
- 17. Lee, D. The Pelvic Girdle: *An integration of clinical expertise and research, 4e*. Edinburgh: Churchill Livingstone: 2011.
- 18. St. John N, Puleo J. *Balanced Body ®Movement Principles ™: A Guide to How the Body Moves.* Sacramento: Balanced Body Inc: 2017.
- 19. Shirley A. Sahrmann; The Human Movement System: Our Professional Identity, Physical Therapy, Volume 94, Issue 7, 1 July 2014, Pages 1034–1042.
- 20. American Physical Therapy Association. Vision statement for physical therapy profession. Available at: www.apta.org/Vision/. Accessed December 2018.

LOWER BODY REFERENCES not cited:

- Bagwell JJ, Snibbe J, Gerhardt M, Powers CM. Hip kinematics and kinetics in persons with and without cam femoroacetabular impingement during a deep squat task. *Clin Biomech* (Bristol, Avon).
 2016;31:87-92. doi: 10.1016/j.clinbiomech.2015.09.016
- Casartelli NC, Maffiuletti NA, Item-Glatthorn JF, et al. Hip muscle weakness in patients with symptomatic femoroacetabular impingement. *OARS*. 2011;19(7):816-821. doi: 10.1016/j.joca.2011.04.001
- Enseki K et al. Nonarthritic hip joint pain: Clinical practice guidelines linked to the international classification of functioning, disability, and health from the orthopedic section of the american physical therapy association. *J Orthop Sports Phys Ther*. 2014;44(6):A1-A32. doi:10.2519/jospt.2014.0302

- Grooms, D, et al. Brain-Behavior Mechanisms for the Transfer of Neuromuscular Training
 Adaptations to Simulated Sport: Initial Findings From the Training the Brain Project. *J Sport Rehab*.
 2018, Technical Report 46. doi.org/10.1123/jsr.2017-0241
- Nepple JJ, Goljan P, Briggs KK, Garvey SE, Ryan M, Philippon MJ. Hip strength deficits in patients with symptomatic femoroacetabular impingement and labral tears. *Arthroscopy*. 2015;31(11):2106-2111. doi: 10.1016/j.arthro.2015.04.095
- Palmer K, Hebron C, Williams JM. A randomized trial into the effect of an isolated hip abductor strengthening programme on knee kinematics and hip muscle strength. *BMC Musculoskeletal Disorders*. 2015; 16:105 1-8. doi: 10.1186/s12891-015-0563-9
- Pietrosimone BG, McLeod MM, Lepley AS. A Theoretical Framework for Understanding
 Neuromuscular Response to Lower Extremity Joint Injury. SportsHealth. 2012; 4 (1): 31-35. Doi: 10.1177/1941738111428251