



Keeping Your Yoga Teaching Current

References & Research Studies

3D Organization of the Body's Tissues

van der Wal, Jaap. 2009. "The architecture of the connective tissue in the musculoskeletal system—an often overlooked functional parameter as to proprioception in the locomotor apparatus." *International journal of therapeutic massage & bodywork* 2.4: 9.

Fascia Definition

Schleip, Robert, Heike Jäger, and Werner Klingler. 2012. "What is 'fascia'? A review of different nomenclatures." *Journal of bodywork and movement therapies* 16.4: 496-502.

Movement & Motor Units

van der Wal, Jaap. 2009. "The architecture of the connective tissue in the musculoskeletal system—an often overlooked functional parameter as to proprioception in the locomotor apparatus." *International journal of therapeutic massage & bodywork* 2.4: 9.

Young, Michael, and L. Michael. 2003. "A review on postural realignment and its muscular and neural components." *Elite Track*, Retrieved on September 5, 2017.

Strengthening & Flexibility

Potier, Tara G., Caroline M. Alexander, and Olivier R. Seynnes. 2009. "Effects of eccentric strength training on biceps femoris muscle architecture and knee joint range of movement." *European journal of applied physiology* 105.6: 939-944.

O'Sullivan, Kieran, Sean McAuliffe, and Neasa DeBurca. 2012. "The effects of eccentric training on lower limb flexibility: a systematic review." *Br J Sports Med*: bjsports-2011.



Keeping Your Yoga Teaching Current

References & Research Studies

Strengthening & Flexibility Cont'd.

Sharman, Melanie J., Andrew G. Cresswell, and Stephan Riek. 2006. "Proprioceptive neuromuscular facilitation stretching." *Sports Medicine* 36.11: 929-939.

Strengthening, Stretching, & Posture

Hrysomallis, Con, and Craig Goodman. 2001. "A review of resistance exercise and posture realignment." *The Journal of Strength & Conditioning Research* 15.3: 385-390.

Young, Michael, and L. Michael. 2003. "A review on postural realignment and its muscular and neural components." *Elite Track*, Retrieved on September 5, 2017.

Li, Yenchen, Philip W. McClure, and Neal Pratt. 1996. "The effect of hamstring muscle stretching on standing posture and on lumbar and hip motions during forward bending." *Physical therapy* 76.8: 836-845.

Stretching & Injury Prevention

Garber, Carol Ewing, et al. 2011. "Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: guidance for prescribing exercise." *Medicine & Science in Sports & Exercise* 43.7: 1334-1359.

Hart, Lawrence. 2005. "Effect of stretching on sport injury risk: a review." *Clinical Journal of Sport Medicine* 15.2: 113.

Rubini, Ercole C., André LL Costa, and Paulo SC Gomes. 2007. "The effects of stretching on strength performance." *Sports medicine* 37.3: 213-224.



Keeping Your Yoga Teaching Current

References & Research Studies

Stretch Tolerance

Freitas, Sandro R., et al. 2017. "Can chronic stretching change the muscle-tendon mechanical properties? A review." *Scandinavian Journal of Medicine & Science in Sports*.

Weppler, Cynthia Holzman, and S. Peter Magnusson. 2010. "Increasing muscle extensibility: a matter of increasing length or modifying sensation?." *Physical therapy* 90.3: 438-449.

Sharman, Melanie J., Andrew G. Cresswell, and Stephan Riek. 2006. "Proprioceptive neuromuscular facilitation stretching." *Sports Medicine* 36.11: 929-939.

How Ligaments Respond to Stretching

Yu, Hye-Sun, et al. 2016. "Impact of mechanical stretch on the cell behaviors of bone and surrounding tissues." *Journal of tissue engineering* 7: 2041731415618342.

Which Connective Tissue is Targeted in Longer Passive Stretches

Nakamura, Masatoshi, et al. 2013. "Time course of changes in passive properties of the gastrocnemius muscle-tendon unit during 5 min of static stretching." *Manual therapy* 18.3: 211-215.



Keeping Your Yoga Teaching Current

References & Research Studies

Sarcomeres & Stretching

Potier, Tara G., Caroline M. Alexander, and Olivier R. Seynnes. 2009. "Effects of eccentric strength training on biceps femoris muscle architecture and knee joint range of movement." *European journal of applied physiology* 105.6: 939-944.

Van Dyke, Jonathan M., James LW Bain, and Danny A. Riley. 2012. "Preserving sarcomere number after tenotomy requires stretch and contraction." *Muscle & nerve* 45.3: 367-375.

Length Tension Curve

Brughelli, Matt, and John Cronin. 2007. "Altering the length-tension relationship with eccentric exercise." *Sports Medicine* 37.9: 807-826.

Cowell, John F., John Cronin, and Matt Brughelli. 2012. "Eccentric muscle actions and how the strength and conditioning specialist might use them for a variety of purposes." *Strength & Conditioning Journal* 34.3: 33-48.

Alegre, Luis M., et al. 2014. "Effects of isometric training on the knee extensor moment–angle relationship and vastus lateralis muscle architecture." *European journal of applied physiology* 114.11: 2437-2446.



Keeping Your Yoga Teaching Current

References & Research Studies

"Movement Micro-managing" Leading to Less Efficient Movement

Wulf, Gabriele, Nancy McNevin, and Charles H. Shea. 2001. "The automaticity of complex motor skill learning as a function of attentional focus." *The Quarterly Journal of Experimental Psychology: Section A* 54.4: 1143-1154.

Winkelman, Nick. "Hot Topic: What We Say Matters, Parts I & II."

Wulf, Gabriele, and Wolfgang Prinz. 2001. "Directing attention to movement effects enhances learning: A review." *Psychonomic bulletin & review* 8.4: 648-660.

Reciprocal Inhibition

Mitchell, Ulrike H., et al. 2009. "Neurophysiological reflex mechanisms' lack of contribution to the success of PNF stretches." *Journal of sport rehabilitation* 18.3: 343-357.

Sharman, Melanie J., Andrew G. Cresswell, and Stephan Riek. 2006. "Proprioceptive neuromuscular facilitation stretching." *Sports Medicine* 36.11: 929-939.

Osternig, Louis R., et al. 1987. "Muscle activation during proprioceptive neuromuscular facilitation (PNF) stretching techniques." *American Journal of Physical Medicine & Rehabilitation* 66.5: 298-307.



Keeping Your Yoga Teaching Current

References & Research Studies

Core Strength & Low Back Pain

Lederman, Eyal. "The myth of core stability." 2010. *Journal of bodywork and movement therapies* 14.1: 84-98.

The Feasibility of Isolating the Transverse Abdominus Muscle

Kavcic, Natasa, Sylvain Grenier, and Stuart M. McGill. 2004. "Determining the stabilizing role of individual torso muscles during rehabilitation exercises." *Spine* 29.11: 1254-1265.

McGill, Stuart M., et al. 2003. "Coordination of muscle activity to assure stability of the lumbar spine." *Journal of electromyography and kinesiology* 13.4: 353-359.

Reabsorption of Intervertebral Disc Herniations

Cvetanovich, Gregory L., et al. 2014. "Spontaneous resorption of a large cervical herniated nucleus pulposus." *Am J Orthop (Belle Mead NJ)* 43.7: E140.

Autio, Reijo A., et al. 2006. "Determinants of spontaneous resorption of intervertebral disc herniations." *Spine* 31.11: 1247-1252.

"Correct" Lifting Technique: Squat vs. Stoop

Straker, Leon. 2003. "Evidence to support using squat, semi-squat and stoop techniques to lift low-lying objects." *International Journal of Industrial Ergonomics* 31.3: 149-160.

van Dieën, Jaap H., Marco JM Hoozemans, and Huub M. Toussaint. 1999. "Stoop or squat: a review of biomechanical studies on lifting technique." *Clinical Biomechanics* 14.10: 685-696.



Keeping Your Yoga Teaching Current

References & Research Studies

General Pain Science Recommendations for Further Reading

E-Book: Recovery Strategies: Your Pain Guidebook by Greg Lehman: <http://www.greglehman.ca>

Book: A Guide to Better Movement: The Science and Practice of Moving With More Skill And Less Pain by Todd Hargrove (also explore his blog at www.bettermovement.com)

Lederman, Eyal. 2011. "The fall of the postural-structural-biomechanical model in manual and physical therapies: exemplified by lower back pain." *Journal of bodywork and movement therapies* 15.2: 131-138.

Body in Mind - Research Into the Role of the Brain & Mind in Chronic Pain: <http://www.bodyinmind.org> (Lorimer Moseley)

NOI Group (David Butler): www.noigroup.com