



New Life News

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Functional Medicine.....The Return to Life!



Return to normal function requires a true functional rehabilitation approach. Functional medicine, a revolutionary concept used by New Life's physical therapists, provides for this true functional therapy. Functional medicine has limitless areas to discuss; in this letter functional stretching shall be discussed. Other areas that will be discussed in subsequent letters are functional strengthening, positive rehabilitation, and threshold testing.

To understand functional stretching one must be able to conceptualize that the human body moves in 3-dimensions. For example, walking appears to be primarily a sagittal plane activity. However, walking is dominated by the transverse plane. After heel contact, the talus, tibia, and femur internally rotates as the foot flattens, a term coined pronation. As the foot starts to become rigid for push off (in midstance), the talus externally rotates as do the tibia and femur, a term called supination. Transverse plane movement is also readily observed by watching a person's hips and shoulders as they walk. Along with the transverse plane motions, there are also the frontal plane motions which are subtle but crucial for proper gait. Therefore, since bone and joint motion is triplanar, the muscles need to control triplanar motion. Stretching should be performed in all three planes consistent with muscle design.

As an example, let's take a look at the calf stretch, where one places the ball of their foot on a step and lets their heel lower down. This is a good stretch if you only are concerned about the sagittal plane muscle fibers. However, the majority of calf muscle fibers do not transcend or function in a pure sagittal plane, but in a multi-planar pattern. Therefore, to stretch and rehabilitate properly, one must incorporate a stretch not only in the sagittal plane but also the transverse and frontal plane.

Functional therapy is one of the newest tools added to the therapist tool box at New Life Physical Therapy, allowing the therapist to rehabilitate the whole body to assist the patient in returning to their life quickly.

Sources:

1. LaStayou P., Woolf J., Lewek M., Eccentric Muscle Contractions: Their Contributions to Injury, Prevention, Rehabilitation, and Sport. *J Ortho Sports Phys Ther.* 2003;10:557-571.
2. Grey G. *Total Body Functional Profile.* Copyright 2001 by Gary W. Gray.



Matthew J. VanderKooi PT, MS, OCS, COMT

Congratulations Matt! Matt has recently been recognized as a board certified Orthopedic Clinical Specialist by the American Physical Therapy Association. Matt is the proud owner of New Life Physical Therapy Services, LLC. He has been working with inpatients and outpatients of the Portage area for the last eight years. His certifications as an orthopedic clinical specialist and as an orthopedic manipulative therapist grant Matt the ability to obtain maximum patient benefit from a minimum investment of time and resources.

Brian M. Doolan, MPT, CSCS

In December 2002, Brian graduated from the UW-Madison with his Master of Physical Therapy degree. During his time at UW-Madison, Brian also received his *Certified Strength and Conditioning Specialist* certificate (CSCS). This allows Brian to assist his patients, young and old, to return to full function via a complete whole body exercise program.

In addition to his CSCS certificate, Brian has started down the road to becoming a Certified Orthopedic Manipulative Physical Therapist. Brian looks forward to using his knowledge to help your patients return to their normal lives.