



NEWSLETTER

January 2010 #10

Neutral Spine

Neutral spine is the natural position of the spine when all 3 curves of the spine -- cervical (neck), thoracic (middle) and lumbar (lower) -- are present and in good alignment. The neutral spine position can also be thought of as the alignment in which a spine tolerates back discomfort the best. The position can vary from person to person and, in some cases, can vary over time depending on changes in the spine and the surrounding structures.

Neutral Spine Position

Although many individuals have a "tolerance range", that is, variances from absolute neutral position for the least spine discomfort, depending on the nature of the spinal stress, there is generally a limited range of lumbar motion in which the patient may safely move. Patients need to become skilled at placing their lumbar spine in a single position when there are significant forces on the spine. Significant forces are:

- Prolonged positioning (e.g. sitting, standing, lying)
- Major movements of the body (e.g. getting out of bed, getting down and up from the floor)
- Movements requiring force (e.g. lifting, reaching, pushing)

The amount of muscle effort needed to maintain neutral spine depends upon the amount of force acting on that spine. Maintaining neutral spine position while standing or walking at an easy pace may take very little effort. When properly placed sitting in neutral need not require any active abdominal contraction. Heavy work, lifting, contact sports may, at times, require maximal abdominal contraction to brace the spine. In order for neutral spine positioning in daily activities to be practical and efficient individuals must learn to use only the amount of muscle effort needed in a given situation. Lack of flexibility in the hip, hamstring, leg and back muscles may make maintenance of the neutral spine difficult or impossible.

Neutral Spine Safety

Do Not:

Lift while reaching or stretching	Lift from an uncomfortable posture
Fight to recover a dropped object (let it go!)	Twist and lift
Lift with one hand (unbalanced)	Lift loads across obstacles

Neutral Spine – Proper Lifting / Lowering Techniques

Take a wide stance	Use your stomach muscles
Use smooth, even motions when lifting	Keep load close to your body
Use your legs to push up and lift the load	Do not use your upper body or back to lift!
Continue to lift the load close to your body and straighten your legs.	
Stand up straight before walking with the load	Move your feet instead of twisting your body
Lower the load to the ground by bending your knees, not your back	
Keep the load close to your body	Never bend your upper body or back
Keep your hands and feet clear	

To learn more on how we can help you with Neutral Spine Safety and Lifting Techniques for you or a family member , please give our office a call and ask for one of our Physical Therapist. Steve Coppola and Donna Devitte are available at our Concord office, Kristine, “KK” Helling at our NEW Tilton office and Steve Gordon at our Candia location.

For additional information about our locations and services, please visit our updated web site:

www.coppolapt.com

TWO CONVENIENT LOCATIONS:

PHYSICAL THERAPY	PHYSICAL THERAPY & FITNESS GYM	PHYSICAL THERAPY
171 Pleasant St	143 Raymond Road Unit 8	614 Laconia Rd., Unit #2
Concord, NH 03301	Candia, NH 03034	Tilton, NH 03276
(603) 228-7500	(603) 483-3355	(603) 717-7010
Email: kk@coppolapt.co	steve.gordon79@yahoo.com	steve@coppolapt.com