

Low Back Pain

A New Strategy for Reducing Healthcare Costs

Chapel Hill / Carrboro
(919) 942-0240

Durham
(919) 806-2398

New Lymphatic Management Program

Manual Lymphatic Drainage
Complete Decongestive Therapy
Compression Therapy
Remedial Exercises
Lifestyle Fitness Training

www.BalancedPT.com

Therapy Services Including

Orthopaedic Rehabilitation
Back Pain
Neck Pain
Stroke Recovery
Fall Prevention
Arthritis Improvement
Vestibular Rehabilitation
Fibromyalgia Improvement
Carpal Tunnel Symptoms
Tendonitis Rehab
Headaches
Sport-Specific Training
and much more

Balanced Movement Studio

Health Oriented Classes &
Personal Training

Feldenkrais
Pilates
Restorative Yoga
Meditation
Yoga
Qigong
Tai Chi
Capoeira

Our Therapy Team

Brian Beatty, PT, CSCS, CFP
Rob Schneider, MS, PT, ATC
Valerie Collins, PT, CLT
Catherine Duncan, PT, ATC
Robert Mitchener, MPT, CFP
Courtney Neupert, DPT
Anne Marie Schneider, OT CHT
Rob Wiese, PT, CSCS

Low back pain (LBP) ranks as the number two leading cause of disability among North Carolinian adults. Despite increased attention to the problem over the past two decades, annual healthcare costs related to LBP continue to rise at rates exceeding inflation. Research has shown some cost-effective approaches for prevention of low back pain and LBP disability, and these approaches are available to you through Balanced Physical Therapy.

Acute vs. Chronic Model: It is commonly held that 90% of individuals suffering from non-emergent low back pain will feel better in 90 days. For this reason, many authors in the 1980's recommended that physicians withhold restorative treatment for 2 to 3 months when emergent causes could be ruled out. After 3 months, the low back pain becomes chronic, and restorative treatment can be considered. Authors base this approach on the understanding that low back pain results from an injury and that the body employs a natural capacity for self-healing.¹

A Promising Alternative: One alternative model holds that many cases of acute low back pain can be considered injuries no more than one could consider a heart attack to be an injury. Instead, this model suggests that acute low back pain announces a disease process sometimes called "Deconditioning Syndrome."² Consider that patients often report LBP to begin with actions as innocuous as picking up a sheet of paper. The deconditioning model holds that many cases of acute low back pain result from repetitive, small insults to the structures of the low back over time. In the course of normal daily activities, these insults briefly overcome the body's capacity to heal and result in an episode of acute low back pain. The deconditioning model asserts that practitioners must address the factors leading up to the LBP event if future and possibly worse LBP events are to be avoided. The deconditioning model justifies exercise intervention during acute and subacute phases of LBP.

Minimize Healthcare Reutilization: Under the deconditioning model, the goal is not a singular report of pain free living as with the older acute-vs-chronic model. **The majority of healthcare costs associated with LBP can be credited to reuse of the healthcare system.**² The deconditioning model bases success on significantly reducing reuse of the system. Several studies have shown professionally guided exercise to be successful at reducing pain, putting patients back to work, preventing future LBP, and/or minimizing reuse.³⁻⁹

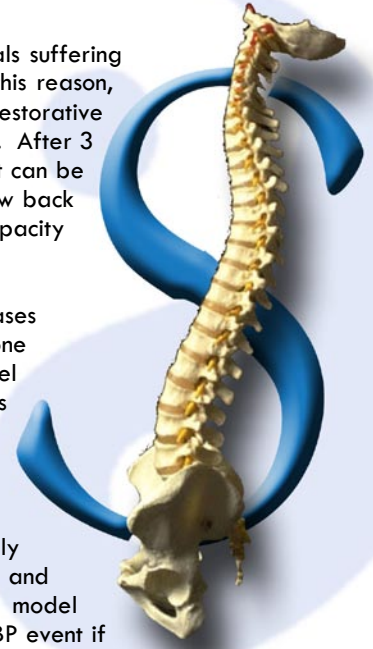
In one study, Gundewall enrolled nurses and nurse aides in a back conditioning program. During the 13-month course of the study, average missed work days were reduced by 79% among those in the training group.⁴ In a Montana coal mining strip, a back strengthening program reduced back injuries by more than 50% among its participants.⁵ Nelson, et al, studied 895 chronic low back pain patients treated in a physical therapy setting and found that reutilization rates among workers' compensation patients dropped by 67%.⁷ More and more studies are showing dynamic exercise programs to be effective at treating low back pain and reducing recurrences. Older studies that failed to show good results with exercise often focused on aerobic capacity and/or abdominal strengthening.¹¹⁻¹³ Among the modern studies that have shown positive results, common elements tend to be: extensor strength was improved, ROM was addressed, patients were encouraged to work through their pain, and rigorous exercise continued to failure.



Two locations: Carrboro (pictured above) and Durham.

With their scientifically based, proactive LBP protocol, you will find Balanced Physical Therapy to be well prepared to help all your chronic low back pain patients. When your cases of acute low back pain seem to fit the deconditioning model, please consider a referral to Balanced Physical Therapy as well.

Please tell your patients about
Balanced Physical Therapy



REFERENCES

1. Nelson Brian W.: A Rational Approach to the Treatment of Low Back Pain. *The Journal of Musculoskeletal Medicine* 1993; May: 67-82.
2. Carpenter David M, Brian W Nelson: Low back strengthening for the prevention and treatment of low back pain. *Medicine & Science in Sports & Exercise* 1999 Vol 1 No 31; pp 18-24.
3. Pope, M., G. Andersson, J. Frymorey, and B. Chaffin. *Occupational Low Back Pain: Assessment, Treatment, and Prevention*. St. Louis: Mosby, 1993. pp. 263-284.
4. Gundewall, B., M. Liljeqvist, and T. Hansson. Primary prevention of back symptoms and absence from work: a prospective randomized study among hospital employees. *Spine* 18: 587-594, 1993.
5. Mooney, V., M Kron, P. Rummerfield, and B. Holmes. The effect of workplace based strengthening on low back injury rates: as case study in the strip mining industry. *J. Occup. Rehab.* 5: 157-167, 1995.
6. Nelson, B, E. D. Thomas, et al: Can Spinal Surgery Be Prevented by Aggressive Strengthening Exercise? A Prospective Study of Cervical and Lumbar Patients. *Arch Phys Med Rehab.* 1999 Vol 80; No 1: pp. 20-25.
7. Nelson, B., E. O'Reilly, et al. The Clinical Effects of Intensive, Specific Exercise on Chronic Low Back Pain: A Controlled Study of 895 Consecutive Patients with 1-Year Follow-Up. *Orthopedics.* October 1995; 18 (10): 971-981.
8. Legget, S., Mooney, V. Matheson, L.N., Nelson, B. Dreisinger, T., Van Zytveld, J., Vie, L. (1999). Restorative exercise for clinical low back pain. A prospective two-center study with 1-year follow-up. *Spine* 24 (9): 889-898.
9. Lonn, J.H., Glomsrod, B., Soukup, M.G., Bo, K., Larsen, S. Active back school: Prophylactic management for low back pain. A randomized, controlled, 1-year follow-up study. *Spine* (1999) 24 (9): 865-871.
10. Kankaanpaa, M. Taimela, S. et al. The efficacy of active rehabilitation in chronic low back pain. Effect on pain intensity, self-experienced disability, and lumbar fatigability. *Spine* (1999) 24 (10): 1034-1042.
11. Faas, A., J. Th. M. va Eijck, et al. A randomized trial of exercise therapy in patients with acute low back pain. Efficacy on sickness absence. *Spine* (1995) 20 (8): 941-947.
12. Battie, M., S Bigos, L. Fisher, et al. A prospective study on the role of cardiovascular risk factors and fitness in industrial back pain complaints. *Spine* 14:141-147, 1989.
13. Cady, I., D Bischoff, E. O'Connell, P. Thomas, and J. Allen. Strength and Fitness and subsequent back injuries in firefighters. *J. Occup. Med.* 21: 269-272, 1979.