

# Prevention and Treatment of Low Back

## Part Two Appeared Oct. '97 Handball

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The back of an ant is strong enough to enable it to lift and carry more than 50 times its body weight. However, as many handballers realize as they age, the human back is often not durable enough to withstand the physical abuse it is subjected to when hitting around a ball weighing no more than two ounces.

The technological advances of the 20th century have resulted in most Americans having sedentary lives. The deterioration of the body in the absence of physical stress at work has contributed to serious medical problems such as reduced resistance to disease and a tendency to suffer low-back pain. Most competitive handballers have a regular stretching and strengthening routine for the arms and legs, but no area of the body is neglected as consistently as the back and abdominal regions when it comes to training. If trunk conditioning is ignored, handball players are prime candidates for chronic low-back pain. The best advice to handballers dealing with nagging back pain is to think of the spine as a traffic light with green, yellow and red signals. On green-light days when the back feels good, it is all right to engage in activities that stress the back, such as handball. On yellow-light days, when your back feels moderately tender, common sense dictates to proceed with caution toward activities that might aggravate recurring pain. On days when you feel your back is in the red danger zone, do not play handball and curtail other stressful activities. This is particularly important not only for athletes on the handball court but also for "industrial athletes" in the workplace who regularly encounter physical or emotional stress.

The spinal column consists of 33 vertebrae stacked like blocks on top of each other. From top to bottom these include seven cervical, 12 thoracic, five lumbar, five sacral and four coccygeal. The last two groups are generally viewed as individual units because they are almost always fused, thus giving you 26 active vertebral units. Disks between the vertebrae normally function as shock absorbers but can become excessively compressed due to the influence of gravity, dehydration, and lifting, twisting or long-term inactivity such as prolonged sitting. Compression of these disks actually enables a person to shrink up to one inch by the end of the day. Try comparing your height immediately upon awakening in the morning and then again in the evening.

Back pain can be caused by: muscles that are weak or tight; nerves that are pinched when muscles spasm in an attempt to protect the spine and pelvic area from misalignment; as well as a variety of disk-related problems. As to conditioning, it is scientifically correct that "if you don't use it, you will lose it." But it is not true that there is "no gain without pain." Here are ways to prevent and treat chronic back problems by increasing trunk flexibility and strength.

**Pneu-Back Chair:** This chair is revolutionizing the back rehabilitation industry by enabling effective strengthening of specific muscles within the lumbar, thoracic and cervical spine by eliminating movement of other muscles that tend to dominate during other commonly performed back exercises. By stabilizing the pelvis and eliminating contraction of the buttocks and hamstring muscles, weak paraspinal muscles such as the erector spinae can be isolated and conditioned. The Pneu-Back also enables postural problems to be precisely identified, which is critical because chronic back

Problems are often tied to abnormal curvature leading to a forward lean. People complaining of back pain often exhibit a forward lean as the patient seeks relief by

relying on ligament support rather than the preferred paraspinal muscle support. Overall muscles that are the weakest link in the chain often limit back health, and identifying and training them with this product has given relief to many an ailing back. Contact Pneumex at 800-447-5792.

**December, 1997**