

# The Wellness Express™

Jump on the train to good health

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## How to Avoid Lifting Injuries to Your Back

Presented by:

### How dangerous is lifting for your lower back?

Low back pain accounts for the majority of work-related visits to the medical doctor. In fact, up to 31 million Americans experience lower back pain at any given time.<sup>1</sup> Statistics Canada reports the lower back as one of the most common areas injured at work, second only to the hand.<sup>2</sup> According to the Center for Disease Control, back pain is the leading cause of disability among people between the ages of 19-45.<sup>3</sup>

### Why do so many people injure their back?

According to the National Institute for Occupational Safety and Health, there are a number of factors that contribute to the incidence of musculoskeletal injuries at work. In reviewing all the literature and available research on this topic, the institute concluded that only *work-related lifting, forceful movements*, and the exposure to *whole body vibration* were considered the most likely to be associated with incidences of lower back pain.<sup>4</sup> In a report published by Statistics Canada, overexertion or strenuous movement is the main cause for work-related injuries requiring medical attention.<sup>2</sup>

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### Why is lifting a problem?

Like many other areas of the body, the lower back is comprised of bone, muscle, nerve tissue and connective tissue. Each one of these structures has a limit to its ability to withstand a physical load. When this limit is surpassed, strain is the result. Since the tissues mentioned above are packed with nerves, any damage to their physical components can result in a lot of pain.

By lifting properly and observing correct posture and biomechanics, you can minimize the risk of strains and sprains. Your spine has a natural shock-absorbing curvature that should be maintained while increasing the workload. In addition, you should use the larger muscles of the legs to accomplish most of the work. This helps alleviate the stress on your back.



### Exercise of the Week

Oblique Twist in a Reverse Bridge Position

**Start:** Lie on your back on the ball in the Reverse Bridge position as shown. Hands are directly over the chest, palms together, arms straight.

**Exercise:** Twist the upper body to one side, so that arms finish parallel to the floor, and your upper body is resting on one shoulder. Try to keep your hips as stable as possible. Pause, then return to starting position. Repeat 8-10 times per side, alternating with each repetition.



## What incorrect lifting patterns cause the most injuries?

1. Bending at your waist is one of the greatest reasons for strain that affects the lower back, as opposed to bending your knees to reach for an object that is on the ground.

2. Any twisting of the torso while returning to an upright position creates the greatest risk for disc herniation. This is a debilitating and painful condition that can lead to inflammation, dysfunction of the lumbar nerves, numbness and weakness of the lower extremities.

## Top 5 Tips for Correct Lifting

1. Think ahead. Plan the maneuver before you attempt to lift anything awkward or heavy.

2. Lift mostly with your arms and legs. Take full advantage of the big muscles in your legs when lifting a heavy object. Bend your knees, not your back! Also maintain a slight inward curve in your lower back when lifting the object. This is the natural, biomechanically-stronger position of the spine.

3. Keep the object close to your body. The stress and strain on your lower back increases significantly the further the object is away from your core.

4. If the object looks too heavy for you to lift, it probably is! Get help to lift the object.

5. Keep your nose between your toes. This is a great little phrase to keep in mind when lifting or moving something heavy. If your nose stays between your toes, then your spine will not experience any twisting/shear loads. You reduce the risk of disc injuries.



## What if I hurt my back while lifting?

Your first step is to stop what you are doing and call for help. If help is not available, assess your injuries before you try to move. Sometimes physical injuries can get worse with sudden movements. Once you feel it is safe to travel, see your chiropractor. Chiropractors are musculoskeletal specialists. They will be able to give you a good idea about the extent of your injuries, and get you on the road to recovery right away!

According to the Agency for Health Care Policy and Research, of all the forms of lower back treatment, only spinal adjustment is recommended as a safe and effective form of professional assistance for acute lower back pain.<sup>5</sup> So, you are in good hands – chiropractic is the right choice for low back pain due to acute lifting injuries.

## Quote to Inspire

*"The needle of our conscience is as good a compass as any."*  
- Ruth Wolff

## References and sources:

1. Jensen M, Brant-Zawadzki M, Obuchowski N, et al. Magnetic Resonance Imaging of the Lumbar Spine in People Without Back Pain - *N Engl J Med* 1994; 331: 69-116.

2. Wilkins K & Mackenzie SG. Work Injuries - *Health Reports* 2007 Aug; 18(3): 1-18. Source: [www.statcan.gc.ca](http://www.statcan.gc.ca)

3. Prevalence and Most Common Causes of Disability Among Adults - United States, 2005 - *MMWR Weekly*; May 1, 2009 / 58(16); 421-426.

4. National Institute for Occupational Safety and Health. A Critical Review of Epidemiologic Evidence for Work-Related Musculoskeletal Disorders of the Neck, Upper Extremity and Low Back - *DHHS (NIOSH) Publication Number 97-141*, July 1997.

5. Bigos S, Bowyer O, Braen G, et al. Acute Low Back Problems in Adults - Clinical Practice Guideline No.14. AHCPR Publication No. 95-0642. Rockville, MD: *Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services*, December, 1994.

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