



# GOT BACK PAIN?

WELCOME TO THE CLUB. 80% OF YOUR  
FELLOW AMERICANS ARE MEMBERS TOO.

# It's As Easy as 1-2-3...What Research Says are the 3 Best Strategies for Dealing with Back Pain.

Low back pain is a health care issue of epic proportions. It is well documented that low back pain affects millions of people every year and costs individuals and businesses billions of dollars in medical expenses and lost time. It is estimated that 80% of people of all ages will experience an episode of back pain in their lifetime.

However, despite these incredibly high numbers, it is still unclear how best to manage acute (0-4 weeks), subacute (4-12 weeks) and chronic (over 12 weeks) episodes of low back pain. The good news is that the movement toward evidence-based health care practice is helping to tease out which treatments are the most effective in dealing with an attack of low back pain. This resource (or article/brochure) will focus on three strategies for managing low back pain that are emerging as front runners.

## 1. TRY SELF-MANAGEMENT BEFORE HEADING TO THE DOCTOR FOR A PRESCRIPTION

In 2020, the American College of Physicians published revised clinical guidelines for treating low back pain. Their recommendations surprised many health care providers. One of the most unexpected guidelines focuses on the concept that the majority of back pain sufferers will not benefit from prescription medications such as opioid pain relievers or muscle relaxers.

Instead, after reviewing the evidence, the ACP recommends that low back sufferers should try over the counter medications such as ibuprofen or topical NSAIDs in addition to treatments such as heat, massage, acupuncture and/or spinal manipulation (provided by physical therapists or chiropractors) as their **first line of defense**. The common element linking these treatments is that they all help to increase circulation, thereby improving blood flow and oxygen supply to injured tissues and jumpstarting the body's own systems for healing and decreasing pain.

## 2. KEEP MOVING!

This strategy is also key in increasing circulation to help the body heal itself. It also represents a departure from old school approaches to dealing with back pain. In the past, oft-repeated advice was to take to the bed or the couch to rest and/or protect sore backs. Back pain sufferers were encouraged to avoid movements that might cause any twinge of pain.



However, newer research on the benefits of exercise, especially aerobic exercise, have shown that moving and continuing daily activities to the best of one's ability, help to increase circulation to tissues, decrease nerve pain, improve sleep quality, improve mood, decrease depression and get people back to work and leisure activities in a timely manner. This new advice is reflected by healthcare giants such as the Mayo Clinic whose website information on back pain states: 'Don't avoid activity out of a fear of pain.'<sup>2</sup> What does this mean for back pain sufferers? Move as much as possible within a pain free range of motion and walk, walk, walk.

## 3. UNDERSTAND THE BIOLOGY OF PAIN

Mayo's statement above raises a big concern for those dealing with back issues, namely the fear of pain and the fear of exacerbating any injury. The good news is that research is showing that when a person experiencing back pain is taught how pain works and how the brain processes pain, their condition improves more completely and more quickly.<sup>3</sup> The field of pain research is a growing area that is adding to our understanding of why and how pain occurs and the effects that it has on the body both short and long term.

For example, one crucial finding from these researchers is that a person's pain level is not always an 'accurate measure of tissue damage'. Greg Lehman, a physical therapist and chiropractor explains it this way: 'Pain occurs when the brain perceives damage or the threat of damage to the body and wants action.' He goes on to explain that pain should be seen as an alarm, rather than a direct indicator of harm: "pain is pretty good at telling us that there is a problem, but pain is poor at telling us how bad the problem is." He uses the example of a fire alarm. A ringing fire alarm tells us that something is happening that needs our attention, but in itself it does not indicate severity. Is the alarm sounding because a bag of popcorn was left in a microwave too long or is it telling us that we have a raging inferno on our hands? Either way, the alarm sounds the same.

Research has also shown that when a person experiences low back pain, there are biological changes in body tissues as well as changes in the brain that increase our sensitivity to and experience of pain. In addition to these physical changes, our feelings of pain are shaped by our beliefs of what pain means for our lives now and in the future. As important as it is to support physical healing by increasing circulation and moving, it is also crucial that those with back pain learn to calm down their nervous systems by addressing their fears and expectations through knowledge of the pain process.



Therapists can help desensitize pain levels using techniques such as graded motor imagery, manual therapy and general exercise recommendations. However, studies have shown that just teaching people about the nature of pain and the many things that affect how the brain interprets signals from the nerves can help them to move better by breaking the link between difficult movements and sensitivity to pain. Interested in learning more about this topic? Check out the resources tab for more information.

## SO, WHAT DOES THIS MEAN FOR SAFETY DIRECTORS, HUMAN RESOURCE PERSONNEL AND OTHERS WHO DEAL WITH WORKERS IMPACTED BY BACK PAIN?

- **First, education is key.** Teaching employees about these three strategies will not only help them feel better faster but help them heal more completely.
- **Second, understanding that a worker's perception of pain is not always related to tissue damage can help open a conversation regarding any fears or anxiety they may be experiencing which are making a return to work more difficult.** As discussed above, helping employees to understand that the neurobiological aspects of back pain often make pain feel more threatening than it really is, can help calm their fears that a return to work/activity will be detrimental to their health now and in the future.
- **Finally, get your workers moving.** Many studies have indicated that the more quickly a worker can get back to work in some capacity, the better their long-term prognosis is. When considering light duty or work restrictions, an understanding of the benefits of 'moving to tolerance' for employees with back pain increases the importance of finding work activities that will get employees off the couch and back to the workplace.

So, now that you know the top 3 evidence-based strategies for dealing with low back pain, do you know how to pass this information on to your workforce? If not, we can help. Our team of experienced, highly trained physical therapists specialize in creating and implementing injury prevention and management programs for companies that want to take proactive steps to keep their employees healthy and keep their healthcare dollar spend low.

Why physical therapists? According to the Mayo Clinic, “physical therapy is the cornerstone of back pain treatment”. Physical therapists are in a unique position to provide treatments, educate on pain management or, if needed, refer those with back pain to other healthcare professionals such as massage therapists, acupuncturists or chiropractors. Physical therapists also are trained to recognize signs and symptoms that require attention from a medical doctor. Contact us today for more information on how we can help set up a program for your company.

## References and Resources:

(1) <https://www.acponline.org/acp-newsroom/acp-aafp-release-new-guideline-for-treatment-of-non-low-back-pain-from-musculoskeletal-injuries-in> (accessed 1/12/2023)

(2) <http://www.mayoclinic.org/diseases-conditions/back-pain/basics/treatment/con20020797> (accessed 1/12/2023)

(3) <https://www.health.harvard.edu/blog/back-pain-will-treatment-for-the-mind-body-or-both-help-202206162763> (accessed 1/12/2023)

Pain Science and Recovery Handbook by Pain Specialist Greg Lehman (FREE Resource): <https://www.greglehman.ca/pain-science-workbooks>

Harvard Special Health Report on Back Pain (Requires Payment)  
<https://www.health.harvard.edu/pain/back-pain-finding-solutions-for-your-aching-back>

Healthline Low Back Stretches for Low Back Pain:  
<https://www.healthline.com/health/lower-back-stretches#takeaway>

*Author Lisa Marais is a Doctor of Physical Therapy who specializes in working with companies of all shapes and sizes to improve the health and wellness of their employees. As a product of the movement toward evidence based practice in physical therapy, she enjoys sharing information that is not only useful but that has a research foundation. For more information, references or comments, please email her at [lmaraais@onsitesolutionspt.com](mailto:lmaraais@onsitesolutionspt.com).*