

CHIROPRACTIC & HEALTH

A Natural Connection

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Traditional "Safe Lifting Technique" Increases Risk of Back Pain

Saraceni et al. (2021) Exploring lumbar and lower limb kinematics and kinetics for evidence that lifting technique is associated with LBP. PLoS One 16(7):e0254241.

QUOTE BOARD:

"Low back pain (LBP) is the world's most disabling condition and leading cause of work absenteeism. Attempts to reduce the risk of LBP related to lifting in the workplace have included both task redesign and worker training in safe lifting techniques."

"The guiding principles of these interventions aim to reduce lumbar forces and exposure to lumbar flexion, especially when they are combined. These lifting risk reduction strategies have been largely extrapolated from historical cadaveric studies which identified porcine spinal segments to be less tolerant to compression when in a more flexed position."

"Based on these assumptions, manual handling training commonly advocates squat lifting and warns against stoop lifting to reduce the risk of LBP." [the 'safe lifting' movement was based on pig cadavers!]."

In contrast to popular belief, the review concluded that people with LBP lifted with a more vertical thorax and deeper knee bend (more a squat-like lift), as well as slower and **with less spinal range of movement (ROM)**, compared to pain-free people who lifted with a faster and more stoop-style lift.

Conclusions: "Common assumptions that LBP is associated with lumbar kinematics or kinetics such as greater lumbar flexion or greater forces were not observed in this study, raising questions about the current paradigm around 'safe lifting'."

Key Concepts:

Safe lifting is not about avoiding bending or "stooping" your spine or avoiding lifting heavy objects; humans are designed to bend and lift and perform all kinds of heavy physical work.

Back pain is not caused by "overdoing it", or from "not lifting with proper technique", back pain is caused by chronically "underdoing it" causing lack of spinal mobility and fitness so that when you do need to lift something you are physically unfit and unprepared.

Back pain is as common among white collar desk workers who do not lifting as it is amongst physical laborers who do intermittent lifting. The physical laborers who do regular lifting, and thus develop and maintain spinal fitness, are less likely to suffer from back pain.

Key Take Home Points:

It is lack of mobility (spinal range of motion) and lack of spinal fitness that causes back pain.

This is exactly why the scientific literature clearly indicates that the most effective care for the resolution and prevention of back pain is chiropractic adjustments/manipulation to restore and maintain mobility combined with regular spinal fitness exercises.