



# Physical Therapy for the Treatment of Chronic Back Pain

Presented By  
**Louann Kuntz, PT, DPT, MEd, ATC**  
Doctor of Physical Therapy



Albany Medical Center

# Statistics



- 80% of all adults will experience back pain sometime during their life.
- In the US, 24% of all work related injuries and illness involving days away from work are due to back disorders.<sup>1</sup>
- LBP has been cited as the second most frequent reason to visit a physician for a chronic condition.<sup>2,3,4,5</sup>

1. National Institute of Occupational Safety and Health's (NIOSH)

2. Anderssen GBJ, Frymoyer JW (ed.). The epidemiology of spinal disorders, in *The Adult Spine: Principles and Practice*. New York: Raven Press; 1997:93-141.

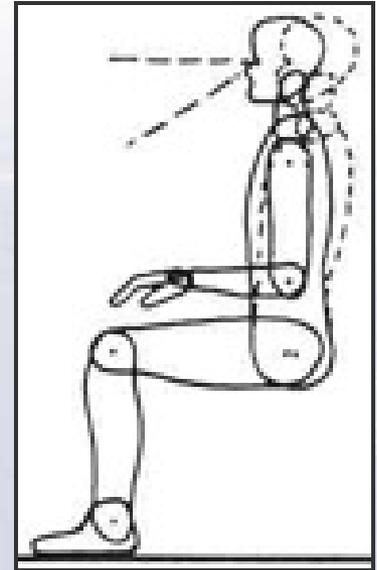
3. Cunningham LS, Kelsey JL. Epidemiology of musculoskeletal impairments and associated disability. *Am J Public Health*. Jun 1984;74(6):574-9. [[Medline](#)].

4. National Center for Health Statistics (1977):. Limitations of activity due to chronic conditions, United States. Series 10, No.111. 1974..

5. National Center for Health Statistics (1975):. Physician visits, volume and interval since last visit, United States. 1971. Series 10, No.97.

# We Are Our Own Worst Enemy!

- Awkward and improper lifting
- Poor postures and bad body mechanics
- Long period of time in same position. (Sitting, Standing etc.)
- Excessive reaches
- Forceful exertions
- Environmental issue



# Why We Hurt Ourselves

- We do things that are physically demanding and require lifting, climbing, pushing, pulling and twisting.



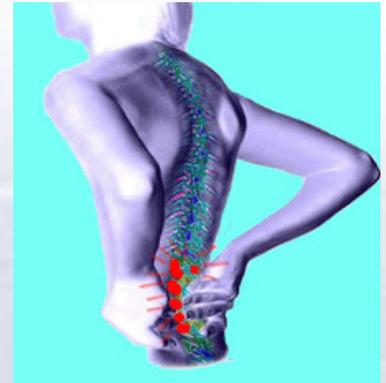
# Why People Develop Chronic Pain

They :

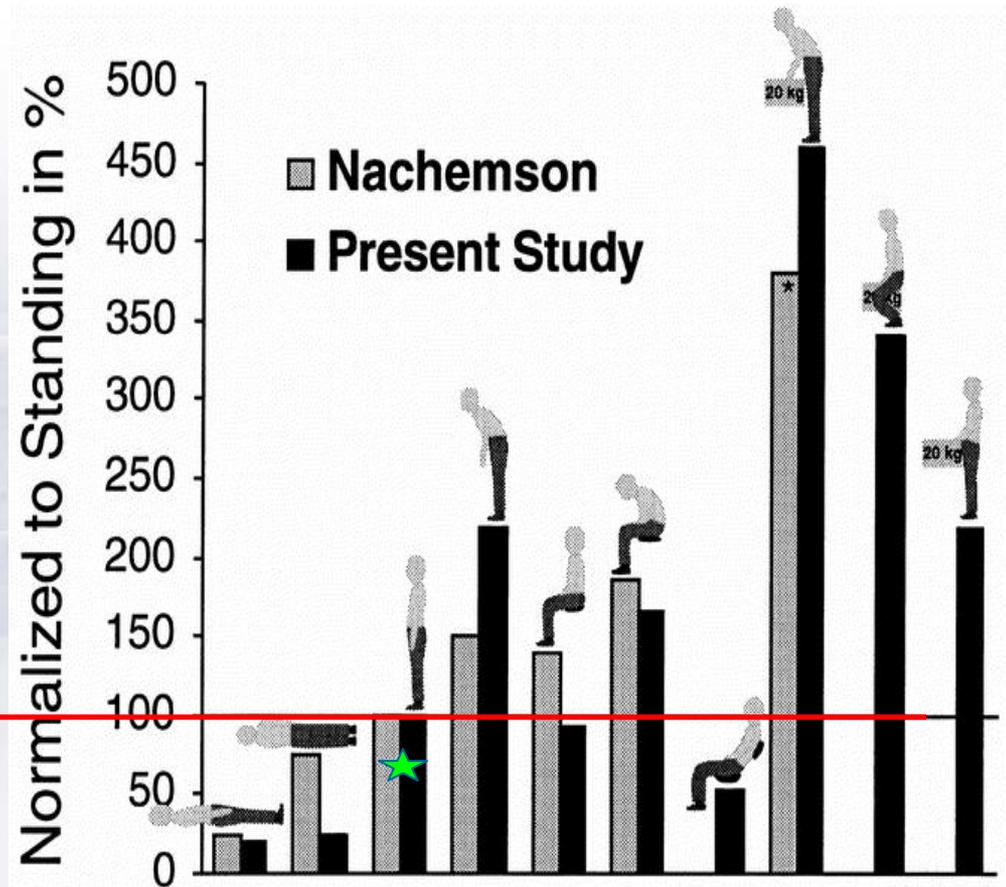
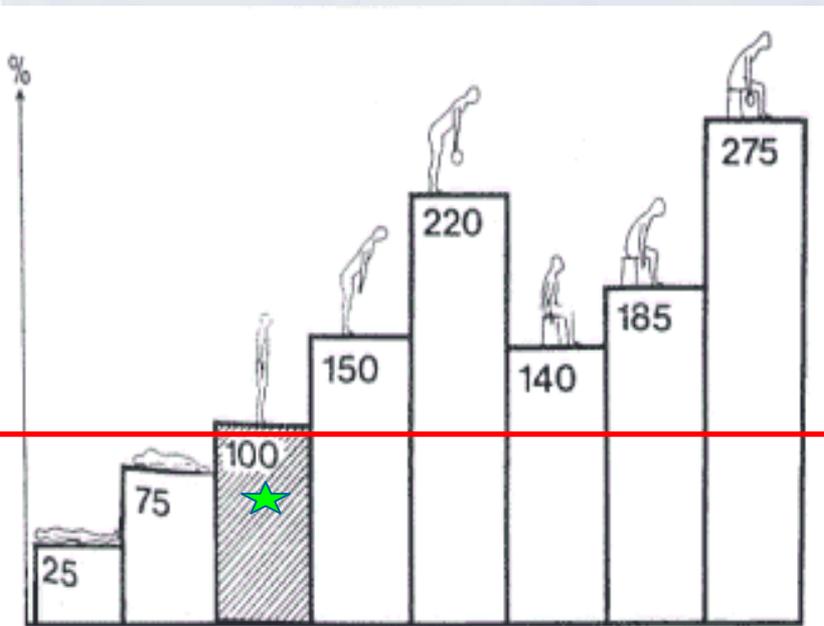
- believe back pain is harmful or potentially severely disabling
- have an attitude of fear and avoidance of activity or movement
- have a subdued mood and withdrawal from social interaction
- have expectations or beliefs that passive treatment rather than active participation will help.
- don't change bad habits and how they move.

# How Is Back Pain Treated?

- Manage pain and stay active
  - Stretch and strengthen
- Physical Therapy
  - Active and Passive Care
- Gradually return to normal activity
- Monitor patient progress to ensure normal recovery
- Encourage good postural awareness, balance, & quality movements
  - Need a good frame to work from



# Postures And Disc Pressure



1. Nachemson AL. **Disc Pressure Measurements.** Spine (Phila Pa 1976). 1981 Jan-Feb;6(1):93-7.
2. Wilke HJ, Neef P, Caimi M, Hoogland T, Claes. **New in vivo measurements of pressures in the intervertebral disc in daily life.** Spine (Phila Pa 1976). 1999 Apr 15;24(8):755-62.

# Bed Rest versus Exercise?

Mayer and colleagues recently reported “the best available evidence currently suggests that the management of chronic LBP should focus on patient education, self-care, common analgesics, and back exercises.”

Mayer JM, Haldeman S, Tricco AC, Dagenais S. Management of chronic low back pain in active individuals. *Current Sports Medicine Report*. 2010 Jan-Feb;9(1):60-6.

# What Doesn't Help

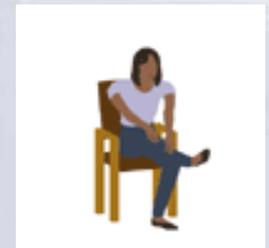
- Long Term Bed Rest
- Fear and Avoidance
- Inactivity
- Bad Posture
- Negative attitude
- Overweight
- Smoking



Mark W. Werneke PT, MS, Dennis L. Hart PT, PhD, Steven Z. George PT, PhD, Paul W. Stratford PT, MS, James W. Matheson PT, DPT and Adrian Reyes PT. Clinical Outcomes for Patients Classified by Fear-Avoidance Beliefs and Centralization Phenomenon. Arch Phys Med Rehabil. 2009 May;90(5):768-77.

# The Secret Is Activity

- Any intervention requires active participation to be effective.
- Exercise, movement, and stretching
- Patient education
- Postural awareness and balance
- Cognitive Behavioral Therapy or CBT
  - Positive thinking
- Consistency
- Biomechanics and proper technique



Krein, SL, et al., Veterans walk to beat back pain: study rationale, design and protocol of a randomized trial of a pedometer-based Internet mediated intervention for patients with chronic low back pain. *BMC Musculoskelet Disord.* 2010 Sep 13;11(1):205. [Epub ahead of print]

# What's the next step?

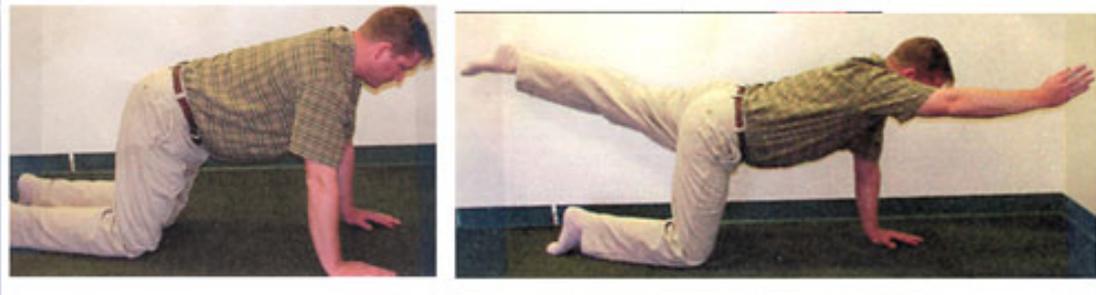
- Daily active participation in activities
- Focus on posture, alignment, & balance
- Learn the right way to perform an exercise
- Manage your pain (Use Heat and Ice)
- **Stay positive**
- Eat well
- Stop Smoking

# Finding A Physical Therapist

- **What to look for when choosing a PT:**
  - 15 to 20 min. of individual instruction each visit
  - Gives you using visual, verbal, & manual cues during activities
  - Teaches posture, alignment, and balance not just strengthening and stretching
  - Instructs you in activities to do at home
  - Teaches you how to safely use ice & heat

# Get Professional Help

- Patient are often given a picture of an exercise and told to do the exercises at home.



- That sounds great! RIGHT?
- Here is an example of what happens.

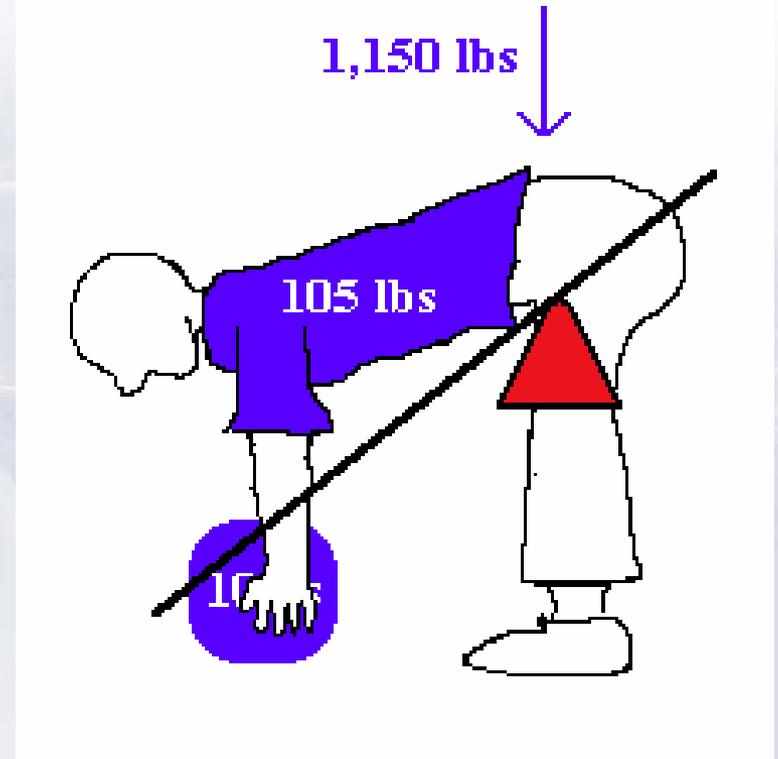
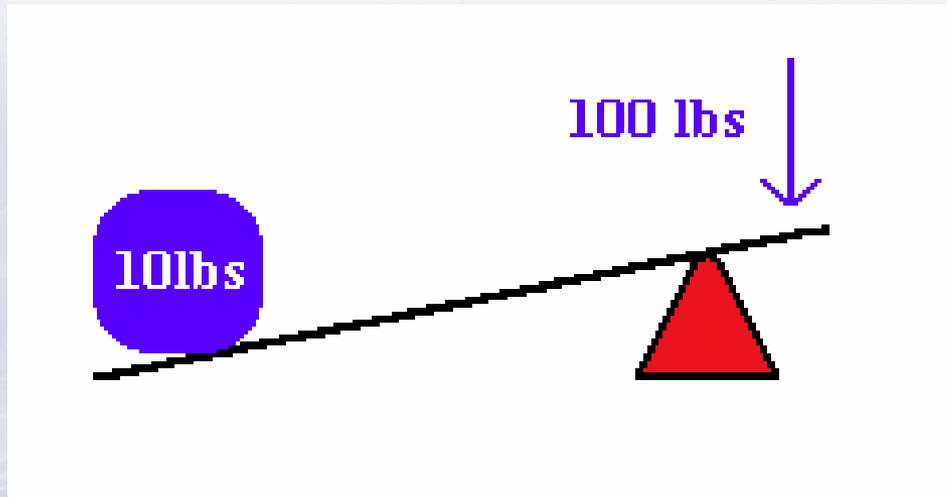
# What's Wrong With This Picture?



# What Has Changed?

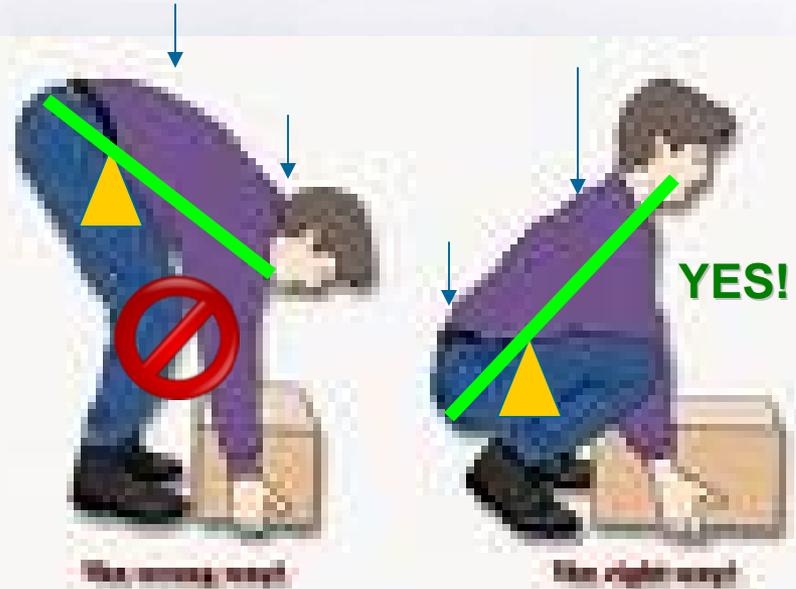


# How Most People Lift

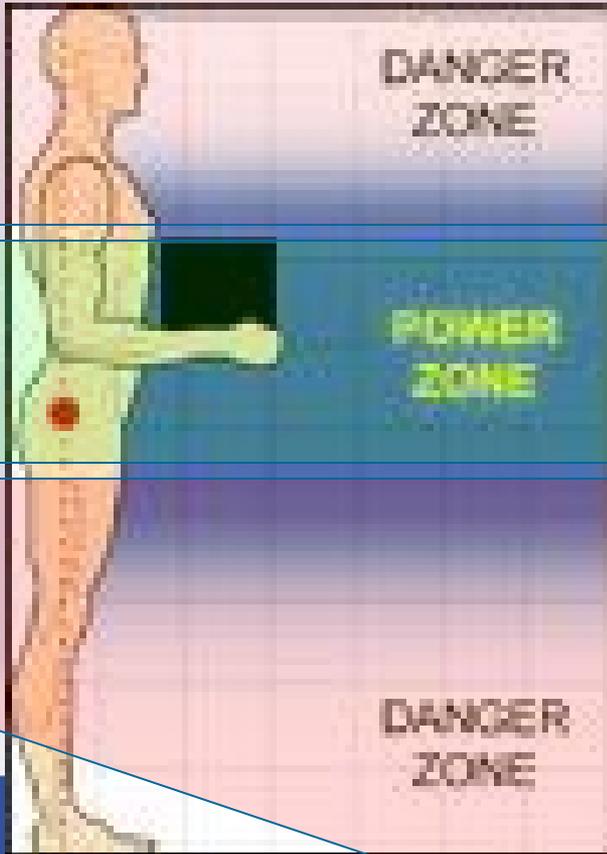


# Proper Lifting Techniques

- Bend knees and hips, not your back
- Tighten your stomach muscles
- Come up, using your legs
- Keep object close to body.
- NEVER twist, instead lift and turn feet
- If lifting with someone, talk and plan lift

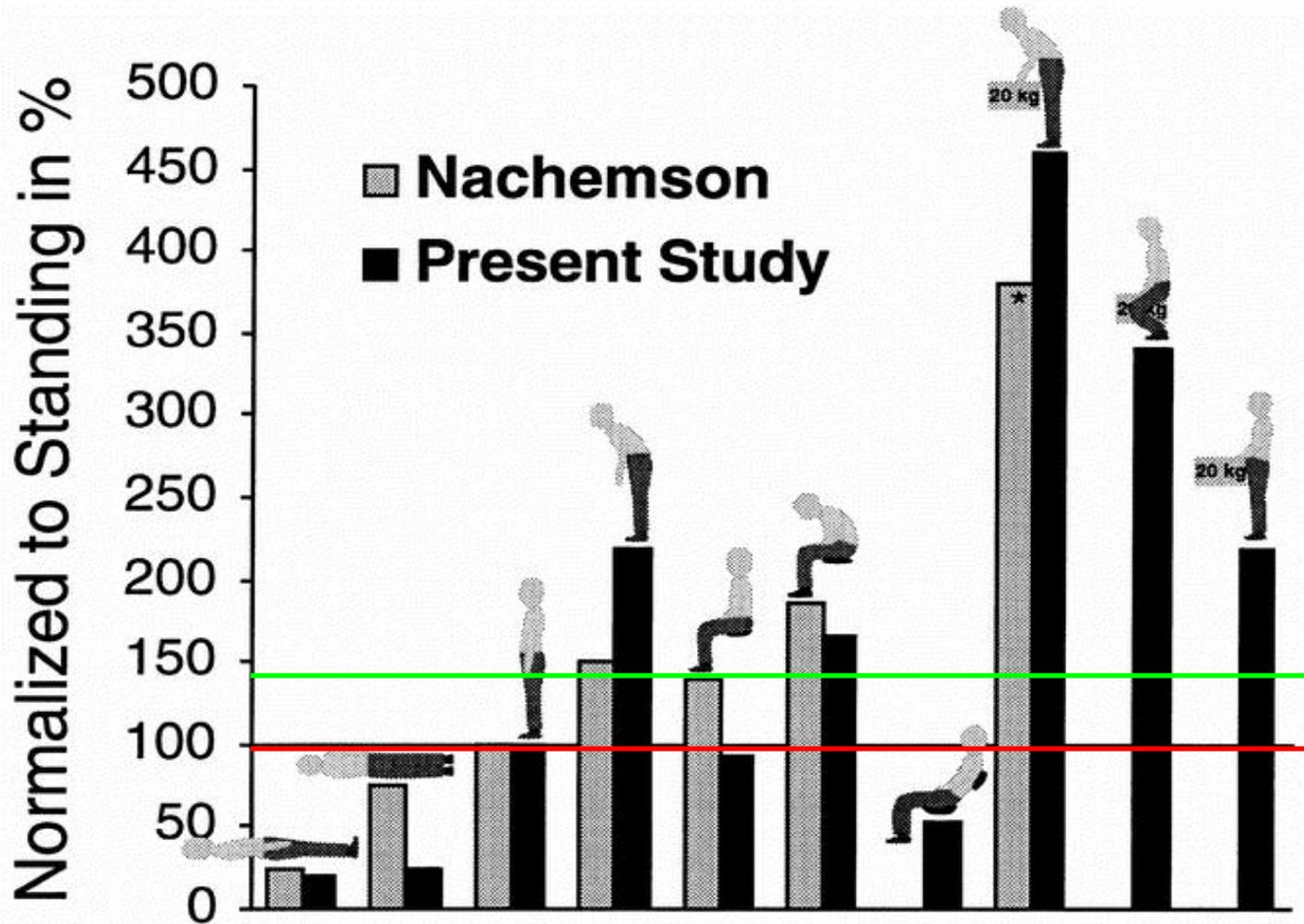


# Preventing Chronic Back Pain

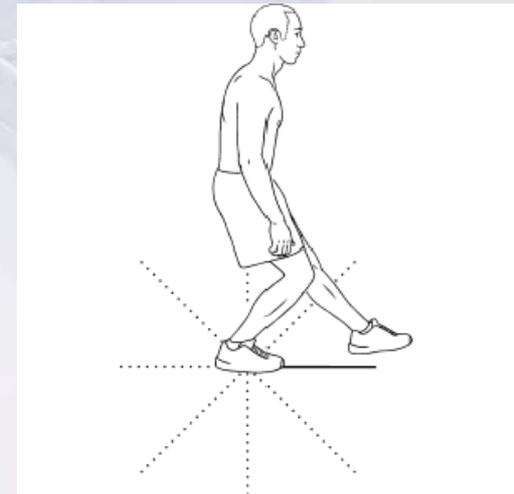
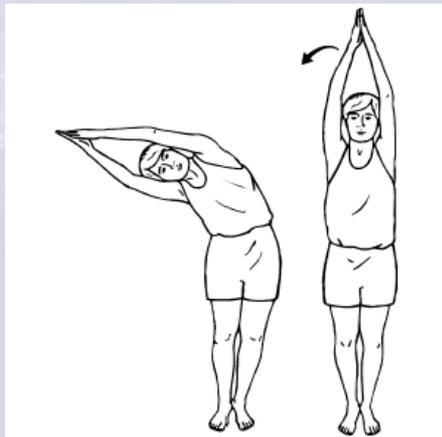


**Power  
Zone**

# Remember Posture & Pressure



# Simple Activities To Start



# In Closing

- Stay active, don't fear movement!
- Gradually return to normal activity
- Use good posture, balance, & quality movements
- Stretch and strengthen
- Seek help early
- Think before you do
- Lift properly

# Thank You!

## QUESTIONS?

