

# **Comparison of Female Geriatric Lumbar Extension Strength: Asymptomatic Versus Chronic Low Back pain Patients and Their Response to Active rehabilitation**

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## **Abstract**

We compared lumbar-extension strength between healthy asymptomatic geriatric females (HEAL) and symptomatic geriatric females (INJ) seeking medical attention for chronic low back pain. The INJ group used the MedX lumbar-extension machine to perform isotonic exercises two times per week and were eventually reduced to one time per week. Range of motion (ROM) and strength were significantly different between groups before beginning the program. After the program, ROM and strength improved significantly and were not different from those of the HEAL group. The average length of treatment was 97 days and 20 visits. Subjective pain ratings were significantly reduced (60%) and exercise weights significantly increased (71%). This confirms the notion that many back pain sufferers have weaker lumbar-extension strength and that some symptomatic geriatric women can increase strength with progressive resistance exercise, which leads to a decrease in low back pain. (Key words: Geriatric Lumbar-extension, Strength, MedX)