

## The Effect of the Addition of Hip Strengthening Exercises to a Lumbopelvic Exercise Programme for the Treatment of Non-Specific Low Back Pain

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### Setting the Scene:

The objective here was to **compare the efficacy of two exercise programmes** in reducing pain and disability for individuals with non-specific low back pain and to examine the underlying mechanical factors related to pain and disability for individuals with NSLBP.

### What did they do?

**Eighty participants** were recruited from eleven community-based general medical practices and randomized into two groups completing either a **lumbopelvic motor control** or a combined lumbopelvic motor control and progressive **hip strengthening** exercise therapy programme. All participants received an **education session**, 6 rehabilitation sessions including real time **ultrasound training**, and a home based exercise programme manual and log book.

The primary outcomes were **pain** (0–100 mm visual analogue scale), and **disability** (Oswestry Disability Index V2). The secondary outcomes were **hip strength** (N/kg) and **two-dimensional frontal plane biomechanics** (.) measure during the static Trendelenburg test and while walking. There was **no statistical difference** in the change in pain or disability between groups. Within group comparisons revealed clinically meaningful reductions in pain for both Group One and Group Two.

### Takeaway home message:

The addition of hip strengthening exercises to a lumbopelvic motor control exercise programme **did not significantly improve** the outcomes of pain and disability. It appears that individuals with NSLBP **will respond similarly to exercise regardless of the type**. Future research should consider evaluating changes in mechanics during increasingly more challenging functional movement tasks and use outcome measures such as the variability of movement which may better reflect individual movement compensations as a result of chronic pain.