

# Physiotherapists often use the term 'joint mobilisation'.

## What does it really mean?

The old saying 'use it or lose it' could not be more true in relation to the human body. The musculoskeletal system thrives on stress and movement, adversely reacting to excessive immobilisation and bed rest. Current biological evidence shows that joint movement is essential in maintaining the integrity of the joint surface (hyaline cartilage), and the ligamentous and muscular structures.

Joint mobilisation techniques, also known as manual therapy, utilise movement by gently stressing painful, stiff, or inflamed tissue. In the spine, these tissues include:

- zygapophyseal (facet) joints
- ligaments
- intervertebral discs
- spinal nerves

Applying gentle and measured stress or pressure to the joint allows the physiological movement of the joint to be restored. This is crucial in decreasing stiffness of the joint. In the peripheral joints, the relevant tissues include:

- joint surface (hyaline cartilage)
- ligaments
- surrounding capsules
- nerves



### Methods of Joint Mobilisation

There are many methods and types of joint mobilisation. At our clinic, we use a mix of manual joint mobilisation techniques to achieve the best recovery results for patients, such as:

- 1 The Maitland Method
- 2 The McKenzie Method
- 3 The Mulligan Method

**At 360 Physio Revesby, we know that early diagnosis and treatment is a game changer so patients can have this resolved as soon as possible, enabling them to return to their daily activities without pain.**

## How Does Joint Mobilisation Work?

During joint mobilisation, small rhythmic movements are applied to the joint to decrease pain and increase the range of motion. The amount of pressure used (or grade of mobilisation) is dependent on the level of pain and stiffness of the joint surface.

To improve the range of motion, joint mobilisation targets mechanoreceptors within the tissue that respond specifically to direct pressure. The applied pressure:



**Stretches the joint structures to achieve greater flexibility**



**Improves blood supply to the joint**



**Decreases muscle spasms and overactivity around the joint**

Joint mobilisation reduces a patient's pain by causing neurotransmitters such as substance P and histamine, both chemicals that cause an inflammatory reaction, to dissipate from the injured or inflamed area.

In addition, the threshold that stimulates pain-sensitive nociceptors is raised when the movement acting on the central neural system via afferent pathways desensitises the painful joint.



Contact us to find out more about how we can help your patients reach their potential.

**(02) 9774 2530**



## Is Joint Mobilisation Safe?

Joint mobilisation techniques are extremely safe, using small amplitude movements (accessory movements) within the normal limits of a patient's physiological range of motion.

## Joint Mobilisation vs Joint Manipulation

When a joint is manipulated, the rate of joint displacement and force does not allow the physiotherapist to fully control the movement. This means there can be some dangers associated with joint manipulation.

In contrast, joint mobilisation involves cyclic, rhythmic, low-velocity (non-thrust) passive motion that can be controlled by the physiotherapist. This makes joint mobilisation a safer technique than joint manipulation. For this reason, physiotherapists at our clinic will only perform joint mobilisation.

## Patient Outcomes

At **360 Physio**, our treatment philosophy is to Remove, Restore and Redefine. Our team of experienced physiotherapists will use highly researched, safe, and effective joint mobilisation techniques and methods to assist in your patients' recovery. An individualised treatment program will resolve joint stiffness, inflammation, and other painful musculoskeletal conditions, guiding your patients to long-term health and function.

## References

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- The immediate effects of passive joint mobilisation on local muscle function. A systematic review of the literature Musculoskeletal Science and Practice Volume 45, February 2020, 102106
- Effects of joint mobilisation on clinical manifestations of sympathetic nervous system activity: a systematic review and meta-analysis Physiotherapy Volume 107, June 2020, Pages 118-132 Authors J. Navarro-Santana a, Guido F. Gómez-Chiguano b, Mihai D. Somkereki i, César Fernández-de-las-Peñas c, Joshua A. Cleland d e f, Gustavo Plaza-Manzano g h