# Osteoarthritis

## Established osteoarthritis

# of the lumbar spine

Exercises to maintain joint function



#### exercise 1

## Stretching lower back muscles

Why is this exercise useful?

- Relieves muscle tension.
- Stretches the muscles of the lower back.

#### How do you do the exercise correctly?

- Lying on a firm bed or sofa, use your hands to bring one knee and then the other up to your chest.
- Stretching is done by bending your elbows and ends with the extension of your arms.
- Do this exercise several times in a row without putting your feet on the ground (between 5 to 10 times).

#### • TIP

Remember to breathe out and pull in your tummy during the exercise.



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## exercise 3

# Strengthening the abdominals

# Why is this exercise useful?

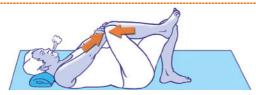
· Works the abdominal muscles.

## How do you do the exercise correctly?

- Place yourself in a lying position, knees bent, feet on the floor.
- Raise one knee to your chest while pushing it back with one or both hands.
- Remember to breathe in on raising your knee and do not arch your back.

#### • TIP

This exercise can be done in a sitting position, your back firmly supported by the back of the chair, your feet slightly raised (telephone directories, footstool, books, etc.) to keep your back straight.



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#### **DURATION OF EXERCISES**

**Stretching movements**: you can hold the position for several seconds (6-10), stopping if it becomes too painful.

 $\textbf{Strengthening movements}: \ \mathsf{you} \ \mathsf{can} \ \mathsf{perform} \ \mathsf{sets}$ 

of five movements with a longer rest

(about twice as long as the duration of the movement). We also recommend that you change position between exercises (from one foot to the other, for example) in order to relax the muscles that have just been working.

## exercise 2

# Relaxing the pelvis

Why is this exercise useful?

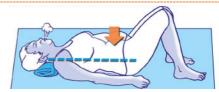
Mobilises the pelvis.

#### How do you do the exercise correctly?

- Place yourself in a lying position, knees bent, feet on the floor.
- Breathing out, pull in your tummy and push your lower back into the floor; release on breathing out.

#### • TIP

Swell your tummy on breathing in and do not arch your back.



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## exercise 4

# Strengthening lower back muscles

## Why is this exercise useful?

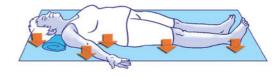
• Ensures working the spinal muscles of the back.

## How do you do the exercise correctly?

- Place yourself in a lying position on a firm bed or sofa, arms slightly away from the body and palms facing upwards.
- Push your whole body into the bed starting with your head, then shoulders, arms, back, legs and feet.
- Hold for 6 seconds.

# • TIP

Bend both your legs if you feel any pain and do not arch your back.



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# SOME SIMPLE RULES TO FOLLOW DURING THESE EXERCISES

- Work at your own pace, calmly and steadily.
- Breathe during the exercises.
- Do not force it and follow the pause time.
- Gradually increase the number of sets.

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