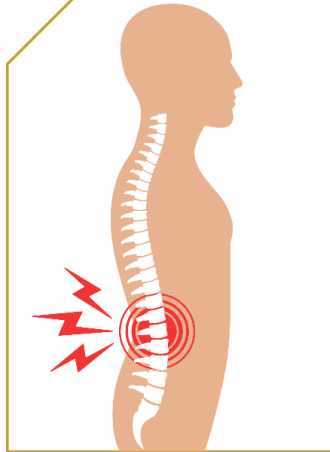




جامعة الإمام عبد الرحمن بن فيصل
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Lower Back Pain



What are lower back pain types?

Lower back pain can be divided into various categories:

✚ By duration:

- Acute back pain: pain lasting \leq four weeks.
- Subacute back pain: pain lasts for 4 –12 weeks.
- Chronic back pain: is defined as recurrent or chronic back pain that lasts longer than 12 weeks.



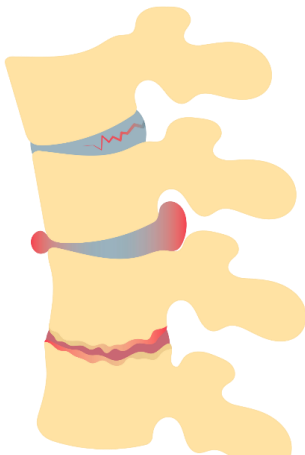
What are lower back pain types?

✚ By Causes:

Discs, muscles, ligaments, tendons, nerve compression, and mechanical or structural issues with the spine can all result in back pain.

Musculoskeletal

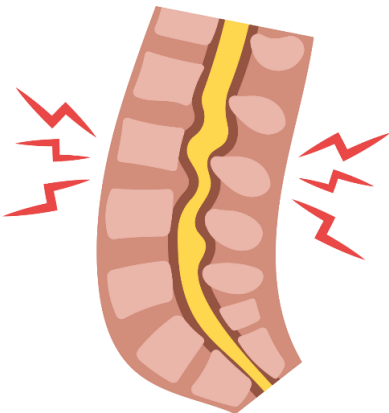
- A strain is an injury to the ligaments that hold the spine together and link the various bones; it usually results from incorrect lifting or twisting.
- Strain: a muscular or tendon injury.



What are lower back pain types?

By Causes:

- Degenerative disc disease occurs when the discs between vertebrae degenerate due to age. It is associated with other degenerative changes in the spine like spinal stenosis or arthritis.
- Herniated or ruptured discs: a condition in which a disc compresses and irritates nerves in the vicinity. Although it can also occur in the cervical spine, this usually happens at the lumbar level.
- Spondylolisthesis: this condition occurs when a vertebra in the spine progressively shifts or falls out of position.



What are lower back pain types?

✚ By Causes:

- Vertebral fractures.
- Congenital changes to the spine, such as scoliosis.
- Myofascial pain: pain and tightness in the muscles that support the spine as a result of either muscle injury or nerve signals from the spine to the muscles.
- ✚ Spinal stenosis: • Spinal stenosis: this condition causes the spinal canal to narrow, which puts pressure on the nerves and spinal cord.

✚ Inflammatory Conditions

- Ankylosing spondylitis, a particular kind of spine arthritis.
- Additional forms of inflammatory spine arthritis, such as psoriatic arthritis.

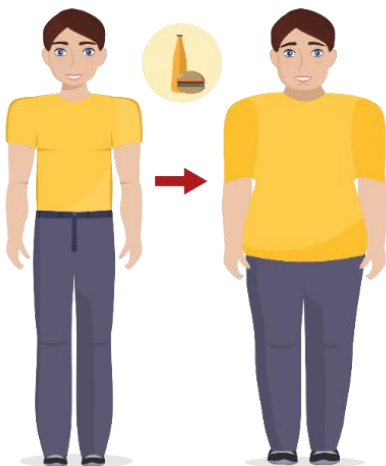
What are lower back pain types?

Other Medical Conditions:

- Rarely, tumors of the spine or other back regions, such as the kidney or pancreas, can be developed.
- Osteoporosis, which can result in severe vertebral fractures.
- Fibromyalgia, a disorder that causes exhaustion and extensive muscle discomfort.
- Kidney stones or infections.
- Endometriosis, a condition in which uterine tissue accumulates outside this organ.
- Back pain may result from infections affecting the spine's bones or the discs that separate them.
- Pregnancy.

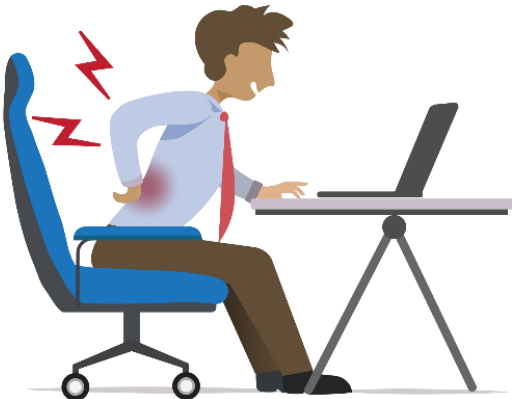
What are lower back pain risk factors?

- ✚ **Fitness level:** Back pain is more common in individuals who are not physically active. Weak back and abdominal muscles fail to adequately support the spine, increasing the risk. Strenuous exercise after periods of inactivity can also lead to back pain.
- ✚ **Weight gain:** An inactive lifestyle combined with a high-calorie, high-fat diet may lead to obesity, placing additional strain on the back.



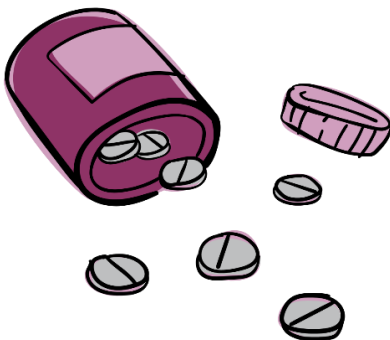
What are lower back pain risk factors?

- ✚ **Job-related risk factors:** Occupations involving heavy lifting, pushing, pulling, or twisting movements can cause back injuries. Sedentary desk jobs may also contribute to back pain, especially with poor posture or the use of an uncomfortable chair.
- ✚ **Stress level:** Chronic poor sleep, anxiety, or depression can worsen the frequency and intensity of back pain.
- ✚ **Age:** The likelihood of back pain increases with age, particularly after 45.
- ✚ **Heredity:** Genetic factors can contribute to certain conditions that lead to back pain.



What tips should be followed to prevent lower back pain?

- ✓ Stay active and maintain your usual daily routines.
- ✓ Use anti-inflammatory medications such as ibuprofen (paracetamol alone is not recommended but can be used alongside other pain relievers).
- ✓ Apply a cold pack (or frozen peas wrapped in a towel) to reduce pain and swelling.
- ✓ Use heat packs (or hot water bottles) wrapped in a towel to alleviate stiffness or muscle spasms.
- ✓ Incorporate exercises and stretches specifically designed for back pain.
- ✓ Avoid prolonged bed rest.



How can lower back pain be treated?

Physical Therapy and Home Exercise Program: Physical therapy for chronic back pain may include:

- ✓ Core-strengthening exercises.
- ✓ Stretching and flexibility routines.
- ✓ Posture correction.
- ✓ Pain tolerance improvement.
- ✓ Low-impact aerobic exercises.



Mindfulness and Meditation: These practices can help manage pain and stress

Diet Change:

- Reduce inflammatory foods like trans fats, refined sugars, and processed products.

How can lower back pain be treated?

+ Diet Change:

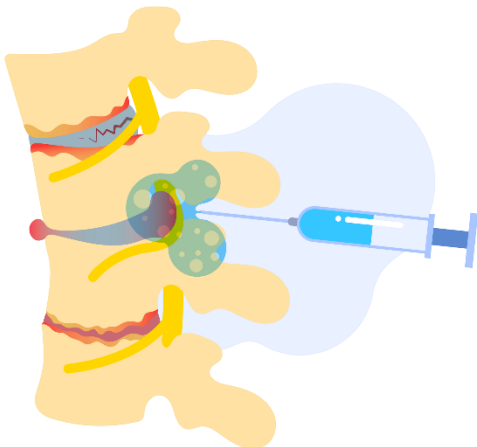
- Consult a doctor to determine if dietary adjustments may help alleviate your back pain.
- Maintain a healthy weight to reduce spinal pressure.
- Consider consulting a nutritionist for tailored advice.

+ Lifestyle Modifications:

- Take regular breaks during physically demanding tasks to avoid overexertion.
- Use assistance or divide heavy loads to prevent strain.
- Avoid smoking, as it can worsen pain and slow healing.

How can lower back pain be treated?

- ✚ **Injection-based Treatments:** Procedures such as trigger point injections, epidural steroid injections, nerve blocks, and nerve ablations can help manage pain and enable participation in daily activities.
- ✚ **Alternative Treatments:** Options like acupuncture, massage, biofeedback, laser therapy, or electrical nerve stimulation may provide relief.
- ✚ **Medications:** These include anti-inflammatory drugs, muscle relaxants, nerve pain treatments, and antidepressants.



How can lower back pain be treated?

- ✚ **Surgical Intervention:** Surgery may be necessary for certain cases, such as severe nerve damage, progressive neurological issues, or when chronic pain significantly impacts quality of life, and other treatments have failed.





Notes:



Sources and References:

National Institute of Arthritis and Musculoskeletal and Skin Diseases,
NHS, Johns Hopkins Medicine, Houston Methodist.

All illustrative images from [canva.com](https://www.canva.com)

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