# Lower Back Strengthening Exercises

The body's core region consists of the head, neck and torso (or trunk), although there are some differences in the muscles identified as constituting them. The major muscles involved in core stability, i.e. core muscles, include the pelvic floor muscles, transversus abdominis, multifidus, internal and external obliques, rectus abdominis, erector spinae (sacrospinalis) especially the longissimus thoracis, and the diaphragm. Notably, breathing, including the action of the diaphragm, can significantly influence the posture and movement of the core; this is especially apparent in regard to extreme ranges of... d60c7b0a3d Anterior pelvic tilt (APT) is a postural pattern in which the front of the pelvis drops in relationship to the back of the pelvis. For example, this results from the hip flexors shortening and the hip extensors lengthening. It is also called lumbar hyperlordosis, which is characterized by an exaggerated curve in the lower back. d60c7b0a3d Back pain is common; approximately nine of ten adults experience it at some point in their lives, and five in ten working... d60c7b0a3d

Core stability Thus, if a person has greater core stability, they have a greater level of control over the position and movement of this area of their body. Stability, in this context, should be considered as an ability to control the tone, position and movement of the core. from happening, increasing intra-abdominal pressure and strengthening the musculature in the back, along with keeping a neutral spine, can minimize injuries In kinesiology, core stability is a person's ability to stabilize their core (all parts of the body that are not limbs). The body's core is frequently involved in aiding other movements of the body, such as running; thus, it is known that improving core stability also improves a person's ability to perform these other movements d60c7b0a3d

== Forms == d60c7b0a3d Anterior pelvic tilt and posterior pelvic tilt are very common abnormalities in regard to the orientation of the pelvis. d60c7b0a3d

Row (weight-lifting) In all cases, the abdominal and lower back muscles must In strength training, rowing (or a row, usually preceded by a qualifying adjective — for instance a cable seated row, barbell upright row, dumbbell bent-over row, T-bar rows, et cetera) is an exercise where the purpose is to strengthen the muscles that draw the rower's arms toward the body (latissimus dorsi) as well as those that retract the scapulae (trapezius and rhomboids) and those that support the spine (erector spinae). rowing also exercises muscles that extend and support the legs (quadriceps and thigh muscles). In all cases, the abdominal and lower back muscles must be used in order to support the body and prevent back injury. When done on a rowing machine, rowing also exercises muscles that extend and support the legs (quadriceps and thigh muscles) d60c7b0a3d

The majority of back pain is nonspecific and idiopathic. Common underlying mechanisms include degenerative or traumatic changes to the discs and facet joints, which can then cause secondary pain in the muscles and nerves and referred pain to the bones, joints and extremities. Diseases and inflammation of the gallbladder, pancreas, aorta and kidneys may also cause referred pain in the back. Tumors of the vertebrae, neural tissues and adjacent structures can also manifest as back pain. d60c7b0a3d

Williams Flexion Exercises Williams. Paul C. The system was first devised in 1937 by Dallas orthopedic surgeon Dr. Williams said: "The exercises outlined will

accomplish a proper balance Williams flexion exercises (WFE) – also called Williams lumbar flexion exercises – are a set of related physical exercises intended to enhance lumbar flexion, avoid lumbar extension, and strengthen the abdominal and gluteal musculature in an effort to manage low back pain non-surgically. passively stretching the hip flexors and lower back (sacrospinalis) muscles d60c7b0a3d

Abdominal exercise crunch-based exercises can lead to injuries and less optimal function by placing undue stress on the lower back. During the execution of abdominal training, understanding the functions, effects, and variations in exercise, along with considering the suitability, and safety in relation to current physical condition is crucial, as overtraining can lead to severe injury. Alternative exercises, such as dead-bugs Abdominal exercises are strength exercise affecting the abdominal muscles (colloquially known as the stomach muscles or "abs"). The human abdominal muscular set consists of four: the rectus abdominis, internal oblique, external oblique, and transversus abdominis d60c7b0a3d

It has been highly disputed whether or not abdominal exercises have any reducing effect on abdominal fat. The aforementioned 2011 study found that abdominal exercise does not reduce abdominal fat; to achieve that, a deficit in energy expenditure and caloric intake must be created—abdominal exercises alone are not enough to reduce abdominal... d60c7b0a3d Abdominal exercises are useful for building abdominal muscles. This is useful for improving performance with certain sports, back pain, and for withstanding abdominal impacts (e.g., taking punches). According to a 2011 study, abdominal muscle exercises are known to increase the strength and endurance of the abdominal muscles. d60c7b0a3d

Back pain Discomfort can radiate to the arms and hands as well as the legs or feet, and may include numbness or weakness in the legs and arms. The pain may be characterized as a dull ache, shooting or piercing pain or a burning sensation. An episode of back pain may be acute, subacute or chronic depending on the duration. It may be classified as neck pain (cervical), middle back pain (thoracic), lower back pain (lumbar) Back pain (Latin: dorsalgia) is pain felt in the back. Back pain (Latin: dorsalgia) is pain felt in the back. The lumbar region is the most commonly affected area. It may be classified as neck pain (cervical), middle back pain (thoracic), lower back pain (lumbar) or coccydynia (tailbone or sacral pain) based on the segment affected d60c7b0a3d

Low back pain Pain can vary from a dull constant ache to a sudden sharp feeling. Low back pain may be classified by duration as acute (pain lasting less than 6 weeks), sub-acute (6 to 12 weeks), or chronic (more than 12 weeks). back pain or lumbago is a common disorder involving the muscles, nerves, and bones of the back, in between the lower edge of the ribs and the lower fold Low back pain or lumbago is a common disorder involving the muscles, nerves, and bones of the back, in between the lower edge of the ribs and the lower fold of the buttocks. The symptoms of low back pain usually improve within a few weeks from the time they start, with 40–90% of people recovered by six weeks d60c7b0a3d

Pelvic tilt Exercises like back extensions Pelvic tilt is the orientation of the pelvis in respect to the thighbones and the rest of the body. PPT, strengthening the lower back and hip extensors is crucial, along with stretching the hip flexors and abdominal muscles. The pelvis can tilt towards the front, back, or either side of the body d60c7b0a3d

== Effects == d60c7b0a3d == Hyperextension explained == d60c7b0a3d The WFEs were developed out of the Regen exercise (also called "squat exercise"), advocated in

the 1930s by Eugene M. Regen, a Tennessee orthopedic surgeon, and which consist in squatting and emphasizing the convexity of the lumbar area. (The Regen exercise was originally publicized in a film by the Veterans Administration.) Williams first published his own modified exercise... d60c7b0a3d

List of weight training exercises and the exercises used to work and strengthen that muscle. The squat is performed by squatting down with a weight held across the upper back (below the This is a partial list of weight training exercises organized by muscle groups d60c7b0a3d

== Overview == d60c7b0a3d Lumbar hyperlordosis is excessive extension of the lumbar region, and is commonly called hollow back or saddle back (after a similar condition that affects some horses). Sway back is a different condition with a different cause, that at... d60c7b0a3d WFEs have been a cornerstone in the management of lower back pain for many years for treating a wide variety of back problems, regardless of diagnosis or chief complaint. In many cases they are used when the disorder's cause or characteristics were not fully understood by the physician, athletic trainer or physical therapist. Also, physical therapists and athletic trainers often teach these exercises with their own modifications. d60c7b0a3d Posterior pelvic tilt (PPT) is the opposite: the front of the pelvis rises and the back of the pelvis drops. For example, this happens when the hip flexors lengthen and the hip extensors shorten, particularly the gluteus maximus which is the primary extensor of the hip. d60c7b0a3d == History == d60c7b0a3d Many other weight-assisted gym exercises mimic the movement of rowing, such as the deadlift, high pull and the bent-over row. An effective off-season training programme combines both erg pieces and weight-assisted movements similar to rowing, with an emphasis on improving endurance under high tension rather than maximum strength. d60c7b0a3d

Hyperextension (exercise) There are two erector spinae, one on either side of the spine, that run along its length. A hyperextension or back extension is an exercise that works the lower back as well as the mid and upper back, specifically the erector spinae muscles A hyperextension or back extension is an exercise that works the lower back as well as the mid and upper back, specifically the erector spinae muscles. These are formed of three smaller muscles – spinalis, longissimus, and iliocostalis d60c7b0a3d

Lordosis in the human spine makes it easier for humans to bring the bulk of their mass over the pelvis. This allows for a much more efficient walking gait than that of other primates, whose inflexible spines cause them to resort to an inefficient forward-leaning "bent-knee, bent-waist" gait. As such, lordosis in the human spine is considered one of the primary physiological adaptations of the human skeleton that allows for human gait to be as energetically efficient as it is. d60c7b0a3d The human body can be broken down into different muscles and muscle groups that can be worked and strengthened through exercise. This table shows the major muscles and the exercises used to work and strengthen that muscle. d60c7b0a3d == Gallery == d60c7b0a3d In most episodes of low back pain a specific underlying cause is not identified or even looked for: the pain is believed to be due to mechanical problems such as muscle or joint strain. If the pain does not go away with conservative treatment or if it is accompanied by "red flag" symptoms such as unexplained weight loss, fever, or significant problems with feeling or movement, further testing may be needed to look for a serious underlying problem. In most cases, imaging tools such as CT scans are not useful or recommended for low back pain that lasts less than 6 weeks (with no red flags) and carry their own risks. Some low back pain is caused by damaged intervertebral... d60c7b0a3d

Lordosis [citation needed] Strengthening the gluteal Lordosis is historically defined as an abnormal inward curvature of the lumbar spine. However, the terms lordosis and lordotic are also used to refer to the normal inward curvature of the lumbar and cervical regions of the human spine. stretching the lower back, hip-flexors, quads and

strengthening the abdominal muscles, hamstrings, and glutes. Similarly, kyphosis historically refers to abnormal convex curvature of the spine. The term comes from Greek lordos 'bent backward'. The normal outward (convex) curvature in the thoracic and sacral regions is also termed kyphosis or kyphotic d60c7b0a3d

Lateral pelvic tilt (LPT) describes tilting toward either right or left and is associated with scoliosis or people who have legs of different length. It can also happen when one leg is bent while the other remains straight, in that case the bent side's hip can follow the femur as knee lowers... d60c7b0a3d