Asanas for a healthy back and good posture

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The spine carries the whole body, and yoga teaches it to be strong and free. Here is how to look after your back, neck and posture, part by part.



Note. Yoga complements health care. Anyone with long-lasting pain, a spinal deformity, a herniated disc or a recent injury or operation practises with professional guidance and adapts the exercises.

When we stretch in yoga postures, the tension we carry in the body gradually eases, and with it, in many people, the discomfort. The decision to look after our back with yoga means practising over the long term, discovering our own body and caring for ourselves. Love for ourselves and balance in life matter for recovery too. Medicines and operations have their place, and yoga is a way to do something for ourselves every day.

The structure and role of the spine

The spine keeps the body upright. It carries the weight of the upper body, gives support to the muscles and makes movement possible. This is the **musculoskeletal system** at work: between the vertebrae are the discs, elastic cushions that absorb the load, and the muscles take part of the weight, so the pressure on the discs is not too great [1]. The spinal canal also holds the spinal cord, part of the **nervous system**, so the spine is also the road by which nerves lead to the whole body [1].

The spine has a static role (it carries the weight of the body and passes it to the pelvis and legs), a dynamic role (the mobility of the vertebrae) and a protective role (the spinal canal protects the spinal cord). To bear load better, it is not completely straight but has natural curves. It consists of the cervical, thoracic, lumbar, sacral and coccygeal parts [1].

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The cervical spine

The cervical spine is the most mobile and holds the head. The mobility of the head is gained at the expense of stability, so this part is sensitive. Long sitting with the head in the same position, hours of looking at a screen and poor sleep load it every day.

Many people have problems in the cervical spine, especially those who sit for long or look at screens, and they can last for months. Pain, muscle spasms, limited movement, headache, dizziness and loss of concentration can have different causes, not only the spine, so complaints that last call for a professional examination. Yoga is not a cure for degenerative changes, but it can be part of an exercise plan.

Yoga helps: controlled stretching relieves the joints, relaxes the muscles of the neck and shoulders, and awareness of posture improves. A review of three trials (188 people with long-lasting neck pain) showed that yoga reduces pain and disability compared with usual care, with no serious adverse events [2].

The thoracic spine

The thoracic spine is the least mobile, because the ribs and the breastbone hold it. The most common complaint is increased kyphosis (a rounded back), which arises from weak muscles, long sitting or standing and stress. By regularly stretching and strengthening the back muscles we improve posture and reduce tension in this part of the back. Many practitioners describe that their disc problems receded with long and devoted practice; such a path takes effort and consistency, and the exercises are adapted to each person.

The lumbar spine

The lumbar spine allows almost all bending and straightening of the trunk and is the support for the movements of the body. The size of the lumbar curve matters for the neck too, because the tilt of the pelvis determines posture. When bending forward, the back muscles lengthen to the limit set by the ligaments of the spine. This is the “critical point”, the limit of comfort in conscious stretching in yoga postures.

Crossing that limit can cause pain or injury. Injuries happen with uncoordinated movement and when we expose the spine to loads it is not ready for. Sensible, gradual practice can strengthen the muscles that keep us upright and make safe movement possible.

The spine is supported by a large group of muscles, from the small deep muscles between the vertebrae to the large muscles of the back and abdomen; there are several dozen in all. If their work is not balanced, that is, if they are not even in length and strength, a sudden turn of the trunk or a sharp movement can cause tension, a painful spasm or disc problems. Poor posture is one of the common causes of pain in the small of the back.

A life with a lot of sitting is often accompanied by excess or insufficient body weight and contributes to spine problems. If we hold poor posture for long, the body is loaded unevenly and the natural curves can change. Regular exercise, including yoga, helps to keep balance.

The lumbar spine is the most sensitive, especially in people who stay in the same position for long. Pain in the lower back can be very strong, disturbs sleep and mood and reduces function. Yoga is gentle on the body, but it needs gradual progress. A review of 10 controlled studies (967 participants) showed that in long-lasting lower back pain yoga reduces pain and disability, with no serious adverse events [3]. A more recent Cochrane review (12 trials, 1080 participants) finds a benefit for back function compared with no exercise [4]. Breathing and attention to sensations in the body help to release tension, which often shows itself as spasms of the back muscles.

Yoga and scoliosis

Scoliosis is a lateral, twisted curve of the spine. It can arise from deformed vertebrae, cartilage, or weak ligaments and muscles. It develops gradually: a primary curve forms, and then a secondary one by which the body keeps the head, trunk and pelvis upright. In some people the deformity affects the ribs, shoulders and hips, and in more severe cases the work of the heart and lungs [5].

Scoliosis can be structural or functional. Structural scoliosis is more serious and is the result of uneven growth of the vertebrae; it usually appears in adolescence, and the causes are often unknown. Functional scoliosis affects the muscles and does not change the structure of the spine; it most often comes from poor posture or unbalanced activities, is often less pronounced and can be corrected. In more severe forms of structural scoliosis a brace or an operation is recommended, and yoga complements them. A case series is not a controlled trial.

A simple check with the help of another person: while you bend forward towards the thighs, they watch your back. If the curve disappears, it is probably functional scoliosis; if it stays visible and the ribs are prominent, it may be structural. If you notice a curve, it is good to have it examined by a professional, and in children and adolescents as soon as possible.

According to the sources [5] and [6], practising with professional guidance develops awareness of posture, strengthens the muscles and eases difficulties. A case series of 25 patients with scoliosis reports a reduction of the curve with the daily holding of one position (the side plank) on one side [7].

Practising on our own gives the most when we understand how the body works. Yoga positions lead us to think about the position of the body, to discover imperfections in posture and gradually to bring the body into symmetry. The aim is not “straightening the back” but accepting ourselves and understanding our own body: not denying that the problem exists, not judging ourselves and treating ourselves with attention and patience.

Tips for good posture

Good posture is the best prevention of spine problems, whether or not we have health problems.

- **Support on both feet.** While standing or walking, load both feet evenly. Strong legs and a sense of support let the spine be free and lengthen.
- **Lengthening the spine.** In every position in which we stretch, attention is on lengthening the spine.
- **Lumbar muscles.** They affect posture in sitting and standing. When we keep them active, the legs line up with the upper body and the spine is relieved.
- **Upper back.** To prevent stooping, we lower the shoulder blades down and back, lengthen the neck and lift the crown of the head.
- **Stomach muscles.** Strong stomach muscles relieve the back. The oblique stomach muscles help the spine to turn evenly in twisting, so the vertebrae do not injure the disc [6].
- **Breathing.** Most people breathe shallowly. Deep, even breathing stretches the intercostal muscles, increases the mobility of the chest and helps relaxation.
- **Twisting the spine.** Twists are an important part of yoga: we do them slowly, with breath and support.
- **Inverted positions.** They temporarily relieve the spine and increase circulation.

With spine problems, twists are done with professional guidance, because every position has contraindications. Inverted positions are not for everyone: with high blood pressure, glaucoma, neck problems, pregnancy and menstruation, and in people with spine problems, extra caution is needed.

About the module

The spine module is an eight-class course; it is currently paused, and the exercises can also be followed on the YouTube channel of Yoga Loznica (https://www.youtube.com/@yogaloznica). Each class is a complete whole: stretching, strengthening and relaxation of the whole body, with complete yoga breathing and attention to the sensations in the spine. Changes in body and awareness happen gradually. The first effect is usually a reduction of tension caused by poor posture. The classes are a good complement to health care and to the prevention of spine problems.

Photograph

Photograph: Yoga Loznica.

Sources

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