

NEW
SERIES

yoga perspectives part 1

stiff shoulders

by Mia Forbes Pirie

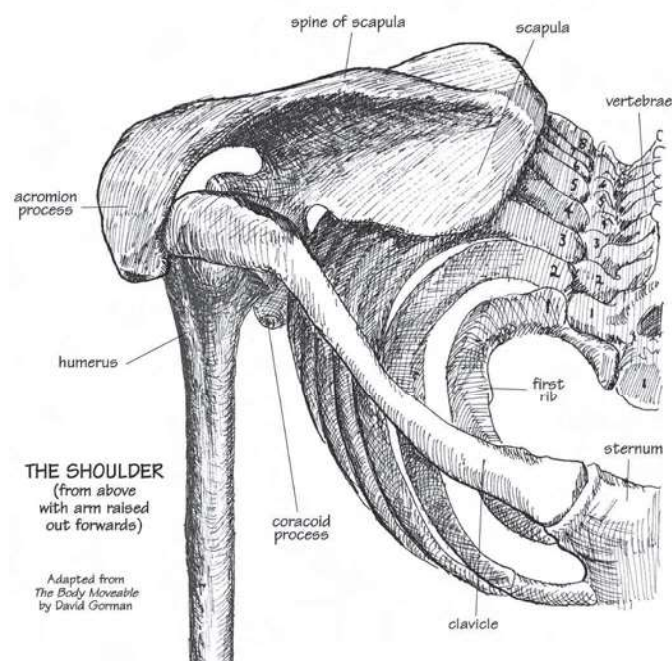


Senior Karuna teacher Ruth White (Tel: 01993 831032) and Mia Forbes Pirie in Handstand.

Like Atlas, we 'hold the weight of the world on our shoulders', so say both Ruth White and Kino MacGregor, world class teachers from different traditions and generations. Most of us hold stress and tension in our joints, particularly our shoulders. Practised correctly, Yoga helps us to release these tensions and bring us back into balance. Performed without awareness, however, it can compound the problem and even cause injury.

The shoulders, along with the knees and the lower back, are very prone to injuries whatever activity you engage in. This is because the shoulder joint is highly mobile and, therefore, inherently unstable. Common shoulder ailments include: dislocated shoulders, fractured shoulders, torn rotator cuffs, general instability, tendonitis, bursitis. In addition, tension held in the neck, shoulders and surrounding areas can lead to head-aches and migraines.

Senior Yoga teacher Chuck Miller emphasises that we need to learn to protect our shoulders and work to create joint health. Aadil Palkhivala, asks whether the shoulder should be 'opened', referring to the importance of strengthening the shoulder and the fact that we do not want to de-stabilise the shoulder joint but open the shoulder blade. Shoulders are a good example of how strength and flexibility can be so deeply intertwined. In order to gain flexibility in the shoulders without damaging them, we need to understand and strengthen them from within.



How to use the shoulder in Yoga

The shoulder is much more mobile than the hips. Kino MacGregor, Asthanga Yoga expert, says that we should stop thinking about the shoulder in isolation and become more aware of its relation to the whole system: down to the lower ribs and even the pelvis; up through the neck to the head; and down the arms to the elbows, wrists and hands.

Flexibility in the shoulders comes not only from softening the stiff areas, emphasises Chuck Miller, but, more importantly, from strengthening the weak areas that can support the extension and range of motion. Aadil Palkhivala explains that when we talk of 'opening the shoulder', we are trying to open the shoulder blade and not the shoulder joint. The shoulder joint, in fact, needs to be strengthened. It is essential to develop strength in the right places to support and increase flexibility. Managing to raise our arms above our heads is less important than protecting the health of our joints.

As Chuck Miller says: "Making range of motion less important is contra-intuitive – but that is ultimately what gives us greater range of motion. If we just allow ourselves to go to our maximum range of motion in a gross, superficial way we are relying on our existing strength and our existing weakness. We are letting the weaknesses get weaker and the strong parts get stronger and are moving away from balance into a greater state of imbalance. In order to create that balance, there has to be an intelligent, appropriate use of restraint." This restraint is required to distribute forces evenly throughout the shoulder and avoid hinging at one weak point. "Do not hurry, this practice take time, the more you try to rush it, the more you will miss what it is actually about. Everything has its own time." says Guruji's daughter, Saraswati. David Gorman adds to this saying that we have a wonderful co-ordinating system that we need to trust. If we cannot go further without losing our wholeness and centred support ... we will get very good at straining, trying and chasing goals – not opening, finding balance and achieving them.

Two types of muscle fibres can be developed, "white fast-twitch fibres" and "red slow-twitch fibres", explains Gorman. The "white fast-twitch fibres" are extremely fast and powerful, but they fatigue relatively quickly (think sprinting). The "red slow-twitch fibres" are slower, less powerful but can operate almost indefinitely without tiring (think of being able to stay in a pose for a while without fatigue or the "shakes"). In Yoga, we may need power and strength from the white fast-twitch fibres, eg for Vinyasas. We will definitely need more non-fatiguing strength from the red slow-twitch fibres. These adaptations happen slowly and gradually. We must exercise patience to develop the kind of muscles that will support us effortlessly.



Ruth White and Mia Forbes Pirie demonstrate different stages of backbending

Acceptance, discovery and backbending

Paul Grilley, Yin Yoga master and Anatomy expert, helps practitioners foster acceptance and patience by being aware of their natural limitations and when they should hold back. He cautions bone on bone compression which can occur when raising the arm as the humerus (upper arm bone) hits the acromion process. If bone on bone compression has occurred, we have reached our limit. When that happens, the coracoid process may be painful in *Chaturanga* (plank pose).

Grilley also explains how shoulders are very important in all backbends as the thoracic spine has only a small range of movement. It is important to open our shoulders safely in order to be able to back arch effectively.

When we talk of opening the chest, we are really increasing the range of movement of the shoulder blades towards each other, says Grilley. Gorman also explains that for a lot of people, the opening of the shoulders, and therefore the chest will "have a big effect on their breathing, not to mention the potential release of the abdominal muscles too". Ruth White, recommends opening the heart by using a specially made back-arch. This draws the shoulder blades together as well as releasing the muscles at the front of the body which restrict the shoulder.

For a thorough shoulder workout, focusing on flexibility and extension to open shoulders in a safe way, I suggest the following series which I have drawn together from a combination of Ruth White's teachings and recommendations from Suzie Shapaizer, a senior Karuna Yoga teacher.

Simple stretch

Stand with your feet on the ground in such a way that you have an even distribution front to back and side to side and feel centred. Look straight ahead. Interlock your hands behind your back and pull them down away from your shoulders. Allow your chest to raise up toward the ceiling, opening your heart.

Back-arch

Lie over a back-arch with pelvic muscles active, shoulders open and drawn down, the back and legs strongly pushing away from you. Feel fully supported by the arch and the ground beneath it. Allow the shoulders to roll back, the weight of the head helping to extend the spine. If there is any strain in your neck, place a cushion or a block underneath.

If you do not have a back-arch, Ruth White suggests lying on a bed with the shoulder blades on its edge, the head hanging back. If this is too much strain for your neck, interlock the fingers behind the head and cradle your head in your hands.



Ruth White demonstrates the targeted shoulder stretch.

Shoulder stretches

Lie on your side with a block under your head. Stretch your lower arm out behind you as far and as high as you comfortably can. (See pic above). Use your upper arm for balance. To work on the supporting muscles, make sure you gently extend the arm behind you. Remain in the posture for 2 to 5 minutes and then turn and repeat on the other side for the same amount of time. If you feel your shoulder can comfortably stretch further, raise the top leg and place the foot on the ground behind the outstretched leg. Go carefully and take your time. Remember that Yoga is a lifelong practice and there is always tomorrow ...

Helpful facts about the shoulder complex

David Gorman, Alexander Technique and Anatomy expert, explains how the shoulder is unique in several ways:

- It is a complex joint made up of three bones (scapula, clavicle and humerus) which need to co-ordinate to ensure our arm movements function with strength and safety.
- The arm has an amazing range of motion at the shoulder. Unlike the hip, its ligaments and connective tissues must be quite loose to allow that range.
- It is connected to the skeleton by one small joint, where the clavicle meets the sternum at the bottom of the neck.
- The nerves and blood vessels pass into and out of the arm through quite cramped quarters at the shoulder especially in some of the more extreme positions.

With such structural instability, protection is afforded by a huge number of muscles that cover most of the torso. Looking at a chart

Stretch against a wall

Stand with the arms against a wall and walk the hands as high up the wall as you comfortably can. Sink your chest as you do so and look up to a point between your hands or just above. Extend the arms and shoulders as you do this to avoid collapsing your weight on to the weakest point in your shoulders.



Ruth White demonstrates the stretch. Mia demonstrates the correction.

Preparation for arm raising and back-bending

Find a surface about hip height or use blocks to raise it to the right level. With your legs straight and strong and parallel to your support, rest your elbows on your support, hands in prayer position. Lengthen through your shoulders, moving your elbows forwards. Sink your chest deeply between your shoulders. Draw in the abdominal muscles and stretch back through the waist, extending the whole of your upper body.

of the muscles of the back, almost every muscle we see from the head to the sacrum relates to the arms. In the same way, the major muscles of the chest (with the exception of the abdominal muscles) are also arm muscles.

This has big implications for Yoga, since there are many asanas where the arm and shoulder are taken into extreme ranges or where the arm and shoulder need to bear substantial forces in support of movement. This cannot be done safely if the muscular network has been released (ie turned off by 'relaxation') and thus no longer is part of the web of support. Equally we cannot get the full range, nor get it with safety, if we are using excess muscular force.

Next month we will explore how the shoulder is opened and strengthened in Ashanga Yoga, Iyengar-based traditions, and Yin Yoga. We will also examine how emotions are stored in the shoulders and how to release them.

Further details on page 39

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