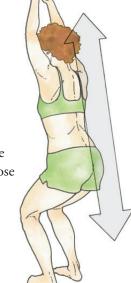




Strengthen the muscles in the back of the body in *Utkatasana* (Chair Pose)

With the feet flat and the back inclined

This pose requires you to send your body in two different directions: the lower limbs descend in triple flexion (the hips, knees, and ankles), and the trunk and arms rise up and forward as much as possible. Practicing the pose develops strength in the posterior muscles as well as in the quadriceps, both essential for keeping the body vertical. We can detail each relevant area with some exercises that work them partially.

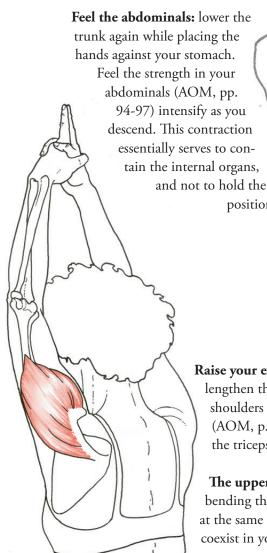


Crouch slowly: starting from a standing position with feet parallel, go down in slow motion while bending the knees.

As you descend, these three "giant" muscles will work more and more, and in a position that is increasingly stretched. Feel how the gluteus maximus (AOM, p. 249) contracts in order to hold the pelvis, the quadriceps and triceps (AOM, pp. 238 and 292) and to support the knees and ankles.

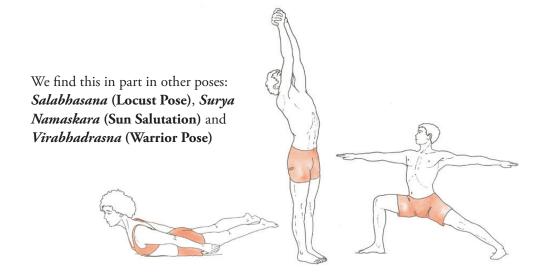
Slowly lower the trunk: start again from a standing position with the feet parallel, now lean the trunk forward in slow motion without bending it, starting at the hips.

If you place your fingers in the middle of your back, you will feel the back muscles (AOM, p. 78) contract more and more — and increasingly widely — as you go down. The contraction spreads upwards to the whole back of your neck.



Raise your extended arms: still in the same position, now lengthen the arms, elbows extended. In the back of your shoulders you now feel the posterior deltoid muscles (AOM, p. 132), and in the back of the arms you can feel the triceps muscles extending the elbows.

The upper and lower body together: now practice bending the knees, tilting the trunk, and raising the arms at the same time. All the muscular actions discussed above coexist in your body. This is a powerful cladding.







Strengthen the muscles of the lower limbs in

Utkatasana (Chair Pose)

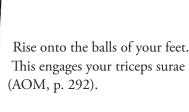
On the balls of your feet.

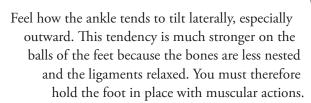
This pose involves balancing while simultaneously bending the knees and ankles. It requires strength in the main joints of the lower limbs.

Practicing it will provide you with stable ankles and knees in many other poses. The details can be discovered through some preparatory exercises.

Rise onto the balls of your feet: place yourself in a standing position, near a stable object that you can hold onto.









Stabilize the ankles: first allow the foot to move laterally. This changes the support of the foot, which is now found on the outer part of your forefoot while the big toe and fleshy area behind it barely rest on the ground. Now try to bring the support back to this latter area. To do so, feel the action on the outside of the leg, along the fibula. These are the peroneus muscles (AOM, p. 288), which complement the powerful action of the triceps surae in the calf, as well as that of many small muscles in the foot itself.

Bend and stabilize the knee: while standing, bend the knees a little. This position relaxes the knee ligaments, which are less stable than when they are stretched. Then move to one knee.

Stay balanced, moving your arms or the other leg: this requires the action of all your knee muscles, particularly the quadriceps (AOM, p. 238) and the hamstring muscles (AOM, p. 242).

Knees and ankles together: now practice bending your knees and rising onto the balls of your feet at the same time. For the four joints, you need a muscular action. But in addition, you have to balance the hips, and for this you engage the gluteus muscles (medius and maximus).

Utkatasana also strengthens, but with less intensity, the anterior deltoid muscles (for lifting the arms), the tricep muscles (for extending the elbows), the extensor muscles of the wrists and fingers, and for holding the trunk, the dorsal and abdominal muscles.

We find this partly in other poses: Anjaneyasana (Crescent Lunge on the Knee), Virabhadrasna (Warrior Pose), and the standing balancing poses, particularly those on one foot.



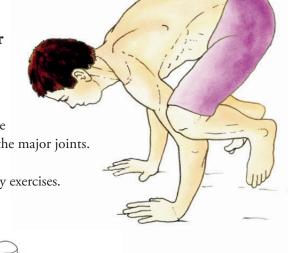




Strengthen the muscles of the upper limbs in *Bakasana* (Crow Pose)

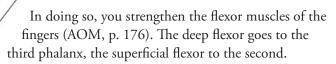
This pose involves bringing the body to the forearms and hands. It is mainly balanced on the supporting arms, whose muscles must stabilize the major joints.

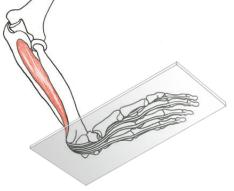
We can discover them through some preliminary exercises.



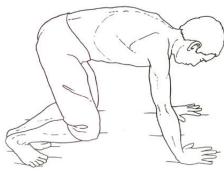


On all fours, push against the ground with your fingertips: spread out your hands by spreading the fingers. Put your weight into each finger, one after the other. In particular, explore how to push against the ground with the third or fourth phalanx.



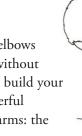


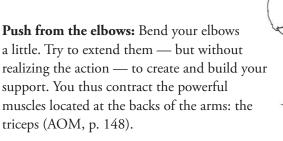
Note: the two drawings show a simplified model of these muscles and not the detailed anatomy of the tendons.

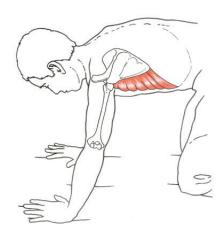


Push against the ground with your

full hand: now support yourself using the palms of your hands. In doing so, you strengthen the flexor muscle of the wrist (AOM, p. 172).







triceps (AOM, p. 148).

Push from the shoulder: now try to spread your scapulae. This makes them slide towards the front of the thorax — or, since you are on all fours, towards the ground.

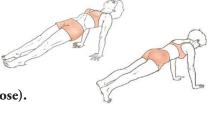
Act as if the pressure in your hands came directly from your scapulae. You are strengthening a powerful muscle situated on the side of the thorax: the serratus anterior muscle (AOM, p. 120).

Now take the pose by bringing your bent knees as high as possible on the backs of your arms. Bring your weight onto your hands, repelling the ground by combining all the actions discussed above.

Then, lift your feet up one at a time.

We find this in part in other poses:

Bhujangasana (Cobra Pose), Kumbhakasana (Plank Pose), Purvottanasana (Upward Plank Pose).



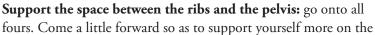




Strengthen the anterior musculature in

Kumbhakasana (Plank Pose)

This pose orients the body towards the ground. To properly align it requires strength in the front of the trunk. Here too, we can practice it partially.

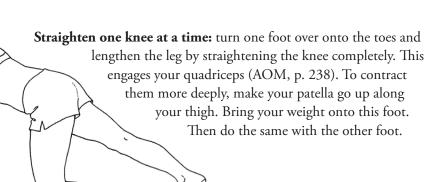


hands than the knees. Then, conversely, come back a little so as to

support yourself more on the knees than the hands.

Repeat this weight transfer several times. Throughout the movement, feel how between your sternum and pelvis your trunk remains stable. To that end, contract the abdominals (AOM, p. 97) and the dorsal muscles, which synergistically hold the ribcage-pelvis distance, and support the internal organs

like a hammock.



Straighten both knees: turn both feet over onto the toes, knees straight.



Now feel the serratus anterior muscles engage on the sides of the thorax (AOM, p. 120).

Keep the scapula well glued to the body and in front of the shoulder in order to direct the arm towards the ground (the pectoralis major, AOM, p. 130, and the anterior deltoid, AOM, p. 132).

All these muscles work vigorously to prevent the trunk from lowering to the ground. Added to this is the contraction of the triceps, at the back of the arms, to extend the elbows.



If your elbows can hyperextend, avoid placing yourself in hyperextension because then there will be no more action of the triceps.

Balance the pelvis: your pelvis tends to fall towards the ground. To prevent this, you must contract your hip flexors (AOM, p. 252). But if these muscles act too strongly, they will bring your pelvis up so that you are no longer in rectilinear head-feet alignment.



Place the pelvis in extension: contract either your abdominals (AOM, p. 97) or your gluteus maximus (AOM, p. 249) to place your pelvis in extension. Note that this action goes in the opposite direction of the previous one. You now forcefully contract the muscles in front of and behind your pelvis.

Hold the internal organs: you still have to keep the internal organs from falling by using the abdominals, which act like a hammock.

We find this in part in other poses: Vasisthasana (Side Plank Pose), Ardha Pincha Mayurasana (Dolphin Pose), and Marjaryasana (Cat Pose).







Strengthen the anterior and posterior musculature in

Navasana (Boat Pose)

or in Supta Konasana (Reclining Angle Pose)

This pose requires some of the most muscle strength. It can be gradually mastered by recognizing the action of each engaged muscle.

We will begin here with the variant without straightened knees. For the variant with straightened knees, see p. 158.



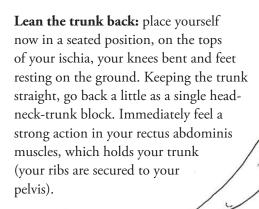
Flex the thighs: lie on your back or rest on your elbows. Bring one thigh into flexion, letting the knee bend.

Identify the action of the hip flexors: the psoas, whose action can be felt deep in the bottom of the trunk, and the iliacus, whose action is felt from inside the pelvis (AOM, p. 234).

Also the tensor fasciae latae (AOM, p. 248), the gluteus minimus (AOM, p. 236), the sartorius muscle (AOM, p. 241), whose contractions can be felt under the anterior superior iliac spine.

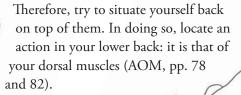
Identify flexion of the pelvis and stabilize the pelvis: lift the thighs simultaneously. Feel how the actions of the muscles noted above cause the pelvis to tilt further towards the coccyx, as it flexes.

Stabilize the pelvis: to keep the pelvis in place, engage the rectus abdominis muscle of the abdomen.





also feel how this strong abdominal action tends to roll your pelvis back behind your ischia.



Now take the full *Navasana* (**Boat Pose**) and feel the cumulative and powerful action of all the muscles detailed on this page. To these are added the anterior deltoid muscles (for raising the arms) and the triceps muscles (for extending the elbows).



For an even more intense pose, see p. 158 for the version with straight knees.

We find this in part in other poses: *Purvottanasana* (Upward Plank Pose).



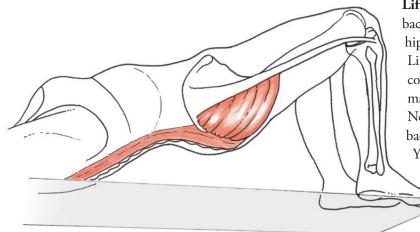




Simultaneously strengthen the anterior and posterior muscles in *Purvottanasana* (Upward Plank Pose)

This pose places the body in balance between the hands and the feet, facing upward.

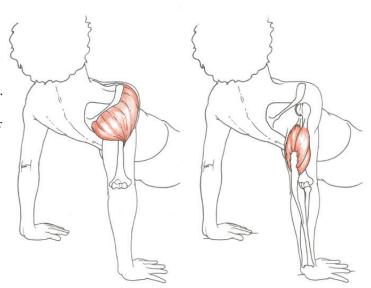
It powerfully strengthens the posterior muscles, and in particular the backward movement of the shoulders. Here we find several of the muscles seen in previous poses.



Lift the pelvis: lie on your back. Bend your knees and hips, feet flat on the floor.
Lift the pelvis by strongly contracting the gluteus maximus (AOM, p. 249).
Next try to lift the whole back, up to the scapulae.
You bring the back muscles into play "from below" (AOM, p. 78).

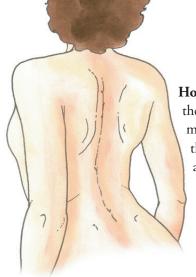
Support yourself on your

arms: Sit down and place your hands a little behind your pelvis. Support yourself on your hands and let them carry the weight of your trunk. Try to push against the ground (find all the steps for this support on p. 52).



Copyright © 2020 Eastland Press

Bring the shoulders back: try to bring the scapulae together, as they tend to move apart. For this, you contract the rhomboid muscles (AOM, p. 123).



Hollow your back: extend the shoulder-squeezing movement by engaging the dorsal muscles "from above."



Next take the full Purvottanasana (Upward Plank

Pose), aiming for rectilinear alignment starting from the feet. For this you add a contraction of the abdominal muscles that maintain the distance between the ribcage and the pelvis. You also contract the muscles that prevent the head and neck from going back: the sternocleidomastoid muscle (AOM, p. 88) and the suprahyoid and infrahyoid muscles (AOM, p. 87).*

*The suprahyoid and infrahyoid muscles, groups of several small muscles found at the front of the neck, are described in detail in my book *Anatomy of Voice*, pp. 180-184.

We find this in part in other poses: *Ustrasana* (Camel Pose) and *Navasana* (Boat Pose).



