# Yoga for Strength

## Lower Body

By **Sally Parkes** Photos: **Ali Wardle** **www.aliwardlephotography.co.uk**
Clothing: **www.urbanlucy.com**

Whether you are a recreational exerciser or serious fitness enthusiast, there are many benefits of a well-balanced strength training programme and it is an essential element towards reaching your optimum health. Here **Sally Parkes** provides you with a great yoga routine that will strengthen, tone and stretch your legs.

### Benefits of Strength Training Muscle Growth

The most common benefit we tend to think of with regards to strength training is increased lean tissue caused by hypertrophy of the muscles fibres that are being trained. As we know, this leads to an improved metabolic rate which in turn leads to increased overall calorie expenditure. Whilst these metabolic changes are happening there many other positive physiological adaptations occurring. These include:

### Increased bone density

When weight is applied to the body the bones begin to manufacture protein molecules that are deposited in the spaces between the bone cells. This leads to the creation of a bone matrix which ultimately becomes mineralised as calcium phosphate crystals, resulting in the bone acquiring its rigid structure. This new bone formation occurs mainly on the outer surface of the bone. It is particularly useful to opt for strength exercises that put load through the pelvis and the spine (the axial skeleton), as these are the more traumatic bones of the skeleton to fracture. Therefore yoga asana that are compound movements are useful as they predominately involve the hips and back. Examples of this include Crescent Lunge, Warrior Two and Chair Pose.
**NB:** The most effective way to increase bone density is to cross train. Use impact sports, weights and yoga for a balanced approach and to avoid injury from overuse.

### Tendons and Ligaments become stronger.

Whilst tendons and ligaments cannot increase in size in the same way our skeletal muscles do, our tendons and ligaments do still gain strength and resilience from progressive resistance training. This gives us more stability in and around the joints allowing us to progressively increase the load applied to the joint more safely. Furthermore, strength training can also improve the range of movement of a joint, giving the tendons and ligaments more flexibility and resilience.

### Improved glucose metabolism

As our metabolism improves, so does the way we control our glucose levels. A study carried out on men who regularly strength train showed a favorable alteration in glucose tolerance and insulin sensitivity (Stone et al, 1991). This in turn reduces insulin release helping to either protect us from Diabetes or help us control Diabetes (Type 1 and 2) and on more general level our sugar levels are more regulated and so our energy levels are more even.

### Integrating Yoga for Strength into you fitness regime

Often regular yoga practitioners will do the same asana (yoga postures) daily. Whilst there is something to be said for repetition in that it gives you a marker for your progress, to get the best recovery and therefore strength gains it is advisable to rotate muscles groups as you would do with any weight training programme. Or more simply rotate upper body training with lower body training.

The following yoga asana sequence focuses on the lower body. Ensure you are warmed up before doing the routine. Begin in a standing position on a non-slip mat.

## Utkatasana (Chair Pose)

Exhale and bend the knees so you are in a squat position with the feet together. At the same time sweep the arms upwards so they are in-line with the ears. The hands are shoulder width distance apart. Press the thighs together and lengthen the spine by keeping the chest lifted and the chin parallel to the ground and aim for even weight distribution through the feet. Now activate the abdominal muscles to help support the spine. Draw the shoulders downwards, away from the ears and really try to elongate the spine so you feel the contraction of the extensors surrounding especially the thoracic spine. Hold for five to ten breaths.

## Runners Lunge

From Chair pose, fold forwards and place the hands on the ground before stepping the left leg to the back of the mat, so the left leg is straight and strong with the toes tucked under and the right leg is bent at a right angle with the knee directly over the ankle. The right foot is in-between the hands with the toes pointing forwards. Press the heel of the back foot away from you to energise the back leg and lengthen all the way through the spine so the spine feels extended and to allow space to breathe. Contract the abdomen to support the spine. Hold for five to ten breaths.

## Downward Dog (Adho Mukha Svanasana)

From the lunge position, press firmly into the hands as the right foot is stepped back in-line with the left foot. Align the feet so they are at least hip-width apart or wider if you have tight hamstrings and hips. Ensure the middle finger is pointing forwards and the hands are fully stretched out to minimise any strain in the wrists. As you exhale, press firmly into the hands and extend the legs so the hips move towards the sky. Allow the heels to drop towards the floor and the neck to relax. Take five to ten deep breaths here.

## Crescent Lunge (Anjaneyasana)

From Downward Dog lift the right foot away from the ground and stretch the right leg upwards until you feel a stretch through the hips. Now lunge the right leg forwards so the right foot is again in-between the hands. Reach the arms upwards so they are in line with the ears and the hands are shoulder-width apart. Keep the left leg as straight as possible to increase the stretch in the hip flexors and strongly contract the quadriceps, keeping the heel off the ground. Ensure the right knee is directly over the ankle and the right thigh is parallel to the floor. Now draw the abdomen in towards the spine to help support the lower back. Breathe so you feel the rib cage expand and retract. Take five to ten deep breaths here.

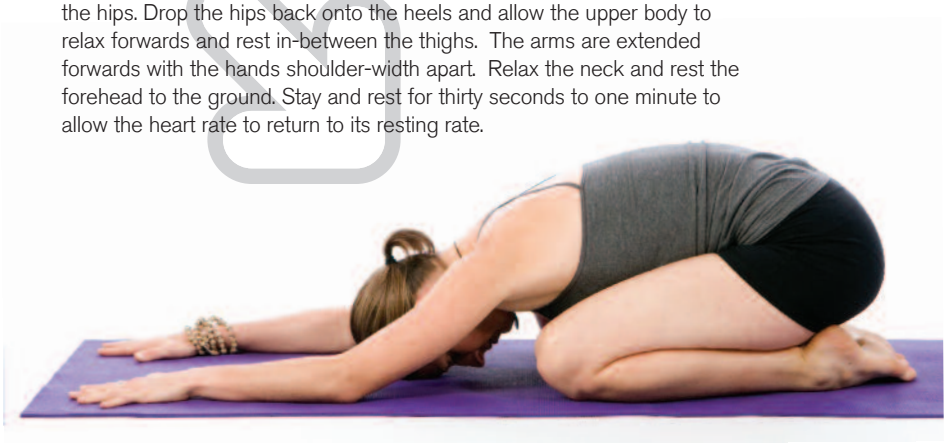
## Warrior Two (Virabhadrasana Two)

Now slowly bring your back heel to the ground by turning the foot out forty-five degrees and press down firmly through the heel. At the same time reach forwards with your right arm and backward with your left arm so they are parallel to the floor. The feet should be aligned directly under the hands and align the left heel with the right heel. The right knee is bent as in Crescent Lunge. Contract the left leg and press the outer left foot firmly into the floor. Keep the sides of the torso equally long and the shoulders directly over the pelvis and draw the shoulders downwards. Take five to ten deep breaths here.

Now return to Crescent Lunge by sweeping the arm upwards and lifting the back heel from the ground, so the hips and chest are again facing forwards. Push firmly off the left foot and keeping the right leg bent (to increase fatigue in the quadriceps), step the left foot forwards to meet the right foot and return to Chair Pose for five breaths. Now repeat the above sequence on the left side. Start by lunging back the right leg.

## Final asana for relaxation: Childs Pose (Balasana)

Step back into Downward Dog and drop the knees to the ground, bring your big toes to touch one another and take the knees a little wider than the hips. Drop the hips back onto the heels and allow the upper body to relax forwards and rest in-between the thighs. The arms are extended forwards with the hands shoulder-width apart. Relax the neck and rest the forehead to the ground. Stay and rest for thirty seconds to one minute to allow the heart rate to return to its resting rate.



To find out more about Sally go to: **www.sallyparkesyoga.com**

**References:** Stone, M. H., Fleck, S. J., Triplett, N. T., & Kramer, W. J. (1991). Health- and performance-related potential of resistance training. Sports Medicine, 11, 210-231.