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# HEALTHY AGEING

YOGA FOR BACK AND JOINT DISORDERS

STRETCHING YOUR PSOAS

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HEALTH

THE GENTLE APPROACH TO A HEALTHY LIFESTYLE





Whether or not you are a beginner or an accomplished Yoga teacher, the practice of Yoga asks that you continually open and stretch. To reach for a new place within can be a humbling experience. What limits your Yoga practice? Is it a physical injury? A torn ligament? Knee or lumbar pain? A sense of constriction, possibly compression in the hip sockets, or tight, over-developed back muscles and gluteus maximus? Perhaps you may experience feelings of limited breathing and impatience or fear turn you away from being in the moment? As you go deep within, you are by greeted your limitations, armouring and conditioning. Discovering the very core of your structure is not just about facing that which restricts, it is a most uplifting experience. Sensing from the inside

what supports you, serves as a measuring stick for your practice and, more importantly, a guide for opening in new directions. But how to get there from here?

Reaching the core of the human body, entails learning to sense your *psoas* muscle and the bony structure (skeleton) it guides and supports. The *psoas* muscle can enhance or restrict your range of movement, sense of balance, fullness of breath and the functioning of your nerves and organs. Because it is an integral part of the fear-reflex system, it will signal by contracting any fear, anger or hurt you are experiencing. Understanding your *psoas* will enhance your Yoga practice by refining movement, releasing energy and gaining strength. Here are the five most important ideas you need to understand when working with your *psoas* muscle.

**1** The *psoas* muscle supports proper positioning of the pelvis The ilio-*psoas* muscle is located at the very core of your structure. There is a *psoas* on each side of your spine, attaching on the side of the 12th thoracic vertebra (located by the bottom rib) and each of the lumbar vertebrae. The *psoas* moves through the pelvis, without attaching to it and inserts along with the *iliacus* (a fanshaped muscle lining the inside of the pelvis bowl) in a common tendon at the *lesser trochanter* (inside) of the *femur* (leg bone). Together, they are called the *ilio-psoas* muscle group. The *psoas* muscle can contract or release at each joint attachment and thus has the ability to torque and rotate the spine, pelvis and legs.

The pelvis is the foundation of a balanced, bony structure. If the

pelvis is stable and balanced, the spine, rib cage, neck and head have a solid base of support. The legs can sit under a stable, extended pelvis, allowing the knees to transfer weight and the feet to give one a solid footing. Your centre or the sensation of 'being centred' comes from a stable weight-bearing pelvis in combination with a released psoas muscle. It is the psoas which helps determine whether or not the pelvis is stable (parallel with the floor, or tilted), and whether or not it tips forward (flexes) or forms a bowl-like container supporting the organs and viscera (extended). When the psoas is tight, constricted or shortened, it will limit not only the movement of the pelvis (pulling it down and tipping the bowl forward), but it will shorten the space between the crests of the pelvis and the leg. If the psoas is short on only one side, it will not only tip the pelvis

forward but will also twist or torque it sideways. A flexed pelvis limits the legs' ability to move and can compress the femur in the hip socket. Normal rotation, instead of happening in the ball and socket where it is designed to roll, takes place in the lumbar spine and in the knee. The knee joint is a hinge and is designed only to open and close, not rotate. The same is true of the lower back where the spine and pelvis meet. When one does not use the hip socket for rotating the trunk or the leg, an additional stress is placed on an already tenuous junction. It can lead to lower back and sacral pain, a slipped or compressed disc and sciatic nerve pain in the leg. If your lower back has a dominant curve, it is not the weak back muscles which need strengthening but, rather, a tight psoas muscle that needs releasing. Lower back and knee pain are sure signs that the hip sockets are not being engaged. Inappropriate tension in the pelvis will pull on the lumbar spine and can eventually over-stretch hip socket and pelvic ligaments. Stretching in standing and sitting asanas when the pelvis is unstable, only causes more damage and inappropriate stress at the sacrum and I -joints.

**2** The pelvis effects proper functioning of the psoas muscle When your pelvis is not stable and free to bear weight, it is the *psoas* muscle which must stabilise and support the bones. It does this by contracting and limiting your ability to move. A tight *psoas* is stopping you from damaging joints. Lower back pain, hip and knee problems, can all be traced to a constricted *psoas* muscle. It is a signal that something is not balanced. Your body compensates for the limited movement by overdeveloping external leg muscles, the hamstrings, glutes and adductors.

A stable pelvis frees the *psoas* muscle to function properly, ie as a muscle and not as a weight bearing support structure. The bones support the weight and the muscles move the bones of the body.

### 3 The psoas muscle is a guide wire

The *psoas* muscle is like the guide wires of a circus tent. Imagine your spine as the main pole. The *psoas* muscle helps to stabilise the spine in the same way that the guide wires help to stabilise the central pole. Ideally, muscle is not meant to bear weight. When the *psoas* is used to bear weight continually, it shortens and loses its ability to move freely as a muscle. This can happen after injury to the pelvis, or simply from habitual movement patterns. It may be traced to your first steps if you were encouraged to walk before your bones were mature enough to bear weight.

The *psoas* contracts, keeping a pre-toddler from falling. Walking apparatuses such as baby walkers or containers such as play-pens, give a false sense of stability and curtain the time and space for crawling. Early standing and walking (before the bones have become weight bearing), teach a child to rely on the *psoas* muscle for support. Relying on the *psoas* muscle as a skeletal support can have many diverse causes. It may even be traced to wearing improper shoes.

The *psoas* is a very responsive muscle, registering all movement of the spine and the legs. Most leg, knee and foot problems can be associated with the *psoas* muscle's effect on the hip joint. For weight to transfer from the pelvis down each leg, through the knee and ankle, and distribute evenly through the foot, requires an unrestricted hip socket, ie a ball that can roll freely up to 160 degrees in the pelvic socket.

The *psoas* unifies the trunk and the leg for free swing of the leg in walking. Each time the leg goes through a natural pendulum swing, it takes the *psoas* (if unrestricted) through a cycle of release-stretch-release contraction. For the *psoas* to work properly, the trunk (ie the entire body from shoulder to hip socket), must work in harmony. It cannot be segmented into rib cage, waist and hip. The *psoas* can only work holistically when the trunk has unity. It is useful to think of the leg not from where your leg muscles attach to the hip but, rather, how your bones relate one to another. The relationship of your bones is the key to finding the correct position or form in a Yoga asana. Being aware of your bones and sensing them bear weight is also a key to proper of the pelvis. The *psoas* muscle, when released, frees the leg to move as a separate appendage. It creates harmony, volume and balance throughout the trunk and supports diaphragmatic breathing.

### 4 The psoas is both a shelf and pump

As a psoatic shelf, the organs and viscera rest upon the *psoas* muscle. Because the *psoas* is most deeply set at the 12th thoracic (T12) vertebra, moving through the surface at the hip sockets, it can be thought of as a diagonal shelf through the trunk of the body. As such, it supports the organs of the abdominal core. In normal walking, the *psoas* muscle's range of motion massages the spine, organs, arteries, nerves and lymphatic system, stimulating the flow of fluids throughout the body like a hydraulic pump. Full, normal breathing is dependent upon a harmonious *psoas* muscle.

## 5 The *psoas* muscle is part of the fear (fight or flight) reflex system

An instinctual muscle, the *psoas* reveals our 'gut' feeling. It is part of the fight or flight reflex system, so contracts whenever you feel afraid. When you begin to free the *psoas* muscle, you will experience subtle to possibly very obvious feelings and sensations of fear. Staying present in the moment (ie from the quality of the light, the weight of your body, or the sounds around you) will change your conditioned response while maturing your nervous system. You can let go of old fears and embrace a state of quiet.

The *psoas* resides where our deepest fears lie waiting to bereleased and where the *Hara* or centre of our instinctual mind may be lived. As the *psoas* muscle releases at the hip sockets, old fears, anger, frustration and hurt are replaced with a sense of freedom. Feeling balanced and centred, the energy flows through the pelvic floor down through the legs and feet, grounding sexual energy and recharging the whole body with a vital life force. As you work towards releasing the upper *psoas* which resides deep within and behind the diaphragm, the emphasis shifts to one of letting go forceful striving and, possibly, feelings of anxiety, grief, hate and frustration. Feelings of control release and open towards a deep quiet and complete joy.

#### Editor's Comments

Liz Koch is author of the authoritative and acclaimed THE PSOAS BOOK, published by Guinea Pigs Publications, 1226 PO Box, Felton CA 95018, ISBN 0-9657944-0-7. A very comprehensive and helpful manual for Yoga practitioners, dancers and all those involved in body work.



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