# SCOLIOSIS UNDONE

BACK PAIN RELIEF WITH YOGA



Kathryn Kusyszyn in her book, **Scoliosis Undone** provides inspiration, resources and support to novices and students of yoga with scoliosis to embrace the practice of yoga not only on the yoga mat but also into their daily lives. She integrates alignment and postural awareness of the body from the feet up and invites the reader to self-reflect and journal to integrate their awareness into each moment of their lives. With inspirational quotes and personal insights into her own journey with yoga healing her scoliosis, Kathryn invites the reader to embrace yoga on a deep spiritual level.

- Elise Miller, Senior Certified Iyengar Instructor specializing in scoliosis

This well-written, informative manual is an excellent tool for teaching yoga. It's put together in a reflective, meditative way with thought provoking questions for students to ponder so they can experience their own inner growth.

- Sister Eileen Curteis, Retired Elementary Teacher and Reiki Master

#### **Scoliosis Undone**

Published by: Kusyszyn Consulting Services, Inc. Victoria, BC November 2015 ISBN: 978-0-9949330-0-3



## **DEDICATION**

I humbly thank my family, my teachers, my students, my colleagues and the Divine Spirit for infusing my lived experience and inspiring me to share.

Namasté



**Disclaimer:** This manual is intended as a companion for people working with spinal curvatures. It is not a substitute for working with a qualified instructor. The information contained in this manual is strictly for education purposes and is not a substitute for medical advice.

## **TABLE OF CONTENTS**

PREFACE - MY SCOLIOSIS STORY	5
INTRODUCTION	7
CHAPTER 1 - EARTH: FEET AND LEGS	12
THE YOGA PRACTICE AND POSES	18
CHAPTER 2 - WATER: THE PELVIS	27
THE YOGA PRACTICE AND POSES	31
CHAPTER 3 - CORE STRENGTH AND SUPPORT: FIRE ELEMENT. NAVEL	52
THE YOGA PRACTICE AND POSES	57
CHAPTER 4 - HEART AND LUNGS: AIR ELEMENT. COMPASSION IN ACTION	76
The Yoga Practice and Poses	79
CHAPTER 5 - THROAT: SOUND VIBRATION. SPACE ELEMENT. SELF-EXPRESSION	86
THE YOGA PRACTICE AND POSES	91
CHAPTER 6 - INSIGHT AND INTUITION: THE THIRD EYE	96
THE YOGA PRACTICE AND POSES	100
CHAPTER 7 - GRACE AND TRUST: SPIRITUAL CONNECTION	104
CREATING A SUSTAINABLE HOME PRACTICE	109
HOME PRACTICE SEQUENCES	111
GLOSSARY	112
BIBLIOGRAPHY	113
CREDITS	114
RESOURCES	115
APPENDIX: FOOT MASSAGE ROUTINE	116
POSTURE AND PRACTICE INDEX	117
ABOUT THE AUTHOR	118



## **PREFACE - My Scoliosis Story**

Chiropractor: You've got scoliosis.

Me: What's that?

**Chiropractor:** It's a curvature of the spine.

Me: Huh?

**Chiropractor:** It's quite common. Don't worry, yours is quite small.

Me: Huh?



This is how, in 1989 at 18 years of age, I found out I had scoliosis. I visited a chiropractor after hurting my neck in a trampoline accident. After the treatment, my neck felt better, but I was very confused about this scoliosis. What was it exactly? Could it explain my chronic lower back pain?

Soon afterwards, I discovered hatha yoga classes, and while I found the teacher's philosophical leanings odd, I enjoyed the stretching and especially the relaxation at the end. During university, with all the intellectual stimulation and new people I was meeting, I forgot about yoga and rarely exercised except for riding my bike and some water aerobics in the pool for stress relief during exams. Upon graduation, I travelled and worked abroad for nearly four years and certainly gave my body a few challenges.

Fortunately, I wound up working down the road from an Ashtanga Vinyasa (Ashtanga means eight-limbed and Vinyasa means Flow) yoga studio in Sydney, Australia, and it became my home away from home. Improved posture, core strength, confidence, new friends, encouragement from a wise teacher and learning to breathe all increased my energy levels and lifted my dark moods. My pain became much more manageable as did my desk job. Visiting chiropractors and massage therapists also helped a great deal.

Returning to Toronto in 1999, I found another desk job, another chiropractor and wonderful massage therapists. The company I worked for had lunchtime yoga classes and I took advantage of them twice a week. The more I practiced, the more I learned to listen to my body and take care of it.

Lifestyle and dietary changes soon followed, and I became a regular student when a new yoga studio opened across the street. It was around this time that I found the work of veteran lyengar teacher Elise Browning Miller online and a basic sequence for scoliosis — at last designed for people like me! It felt great. I experimented with attending lyengar classes and explored other styles at my local studio where I became a teaching assistant and thoroughly hooked. I had never felt so strong, in both body and mind, and was very aware that I hadn't known how to breathe fully or stand tall before then. Soon it was time to deepen my practice and I enrolled in a six-month, 350-hour yoga teacher training program. Little did I know the transformation that would occur during this Introduction to the Eight Limbs of Yoga. I haven't looked back. Yoga is my go-to, my salve, my quiet and peaceful inner time.

In October 2009, Elise Miller conducted a twenty hour long Yoga for Scoliosis workshop in Toronto and I jumped at the chance to work with her. Afterwards, I conducted two four-month case studies working intensively with two individuals whose scoliosis patterns differed from mine. I also completed a written assignment and submitted these materials to Elise. Now I am certified by her as a Yoga for Scoliosis specialist. Since then I have repeated the first ten hours of this workshop training four times and am now in my third year of teaching yoga for scoliosis to others. With careful attention to my body during practice, and liberal amounts of massage and self-care, I have a vastly improved quality of life and body experience. It is a lifelong journey and continual process of learning. Every day I am grateful for the tools and the teachings. It is my joy to share what I've learned with others so that they, too, may benefit.







## INTRODUCTION

A healthy spine is a container for important nerves and fluids and has natural undulating curves to absorb shocks to the body. These natural curves can be viewed from the side of the body when looking at an X-ray or skeleton. It is also the basis for the bones of the rib cage, which protect vital organs.

Scoliosis is a lateral (sideways) and/or rotational curvature of the spine beyond its natural shape. When the spine curves laterally to the left or right side of the body, the vertebrae (central bones of the spine) are pulled away from the centre line. Viewed from behind, the spine with scoliosis will appear to be in a C shape in the case of one large curve or an S shape with two or three curves. (There are images of these patterns in the next section of the book.) When the spine is rotated, the vertebrae are shifted out of their natural plane into a spiral. If the spine is both curved to the side and rotated, which is usually the case in scoliosis, the spine and ribs may resemble an uneven spiral. The rib cage follows this curve pattern and the muscles in between the ribs are affected. Compression of the internal organs and nerves, chronic pain, an uneven pelvis and postural misalignment are some possible effects of scoliosis.

For example, one shoulder may be higher than the other with one shoulder blade protruding. Or one hip may be higher than the other, resulting in an uneven waist. The head may not be centred over the body and the body may be leaning to one side or forward. Pain and discomfort are common, although many people have spinal curvatures and are not aware of them. A person without scoliosis will generally have level shoulders and shoulder blades, an even pelvis and equal spaces between corresponding ribs on each side of the body.

## **Types of Scoliosis: Structural and Functional**

**Structural scoliosis** is a curve that is "fixed". The cause could be unequal growth of the vertebrae, disease, injury, infection or birth defect. The definitive cause of this condition is not well understood and it is therefore known as "idiopathic".



**Functional (non-structural) scoliosis** generally only affects the muscles, and this condition does not alter the body permanently. It can result from poor posture or unbalanced activities. Unbalanced activities include playing certain sports or instruments because one side of the body or set of muscles is used very differently than the other. This form of scoliosis is common, especially in seniors. It is typically less noticeable and less severe than structural scoliosis and can usually be reversed. Some functional curvatures, if unaddressed and reinforced, can become structural or more permanent over time.

This is only one perspective on the two basic types of scoliosis. Some therapists do not make this distinction and many therapists differ in their approach, assessment and treatment of this condition.

#### The Four Most Common Patterns of Scoliosis

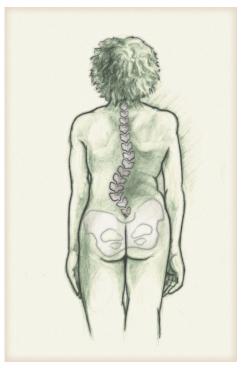
There are four major curve patterns in scoliosis. These four classifications are simply for ease of reference; there are as many unique expressions of the body as there are people. The first image below, a right thoracic convex scoliosis, shows the major spinal curve in the thoracic or midsection of the spine going to the right. Sometimes the major curve can go to the left in this region; however, it is usually the right. The term convex refers to the direction in which the curve is going and the term concave refers to the opposite side, where typically there is a concavity, i.e., a depression or hollow.

The second image, a left lumbar convex scoliosis, shows the major curve going to the left in the lumbar or lower back region. Occasionally the major curve in this region goes to the right. The third image is a right thoracolumbar convex scoliosis, which means the major curve is in both the thoracic and lumbar regions going to the right. There are cases of left thoracolumbar convex curves; however, they are in the minority. The fourth image is a right thoracic-left lumbar scoliosis or "S" curve. This means the curves in the right thoracic and left lumbar region are roughly the same size. Again, there can be the mirror image scenario, where the curves go to the left in the thoracic region and to the right in the lumbar region, but this is in the minority of cases. What can't be shown as clearly in a drawing is that there are likely compensating smaller curves in the neck region and possibly other areas of the spine, depending on the individual's posture and movement patterns.

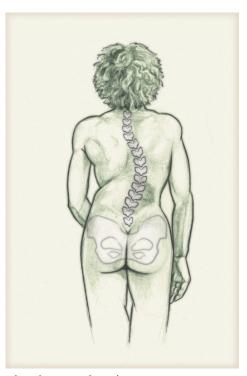




Right thoracic convex scoliosis



Left lumbar convex scoliosis



Right thoracolumbar convex C-curve



Right thoracic-left lumbar convex S-curve





## A Yogic Approach to Scoliosis

Yoga is a bag of tricks. —Baba Hari Dass

In this manual, we will look at some of the contributing and aggravating factors of scoliosis, focusing on their effects on the body and psychology. The intention is to foster greater self-awareness and acceptance of one's curvature by using yogic techniques and philosophy, combined with self-reflection and journaling. Knowledge is power, and inner wisdom is Divine. Taking charge of one's health and seeking resources (both internal and external) leads to growth, learning, acceptance and healing.

The goal of yoga practice should not be to straighten out our backs; we must learn to accept them as they are, not deny them or judge them. Instead, we must work to understand our backs and to relate to them with sensitivity and awareness. Healing is much more than straightening a scoliosis or curing a disease. It is learning to love and nurture ourselves and trust our inner knowing to guide us to a vibrant state of being. —Elise Browning Miller

Using hatha yoga, we stretch and breathe into the tight areas, release tension with awareness and breath, strengthen the weak muscles and focus on finding alignment from the inside, physically, emotionally, psychologically and spiritually.

#### **How to Use This Manual**

I've designed this manual so you can read and implement it chapter by chapter. There is a natural progression of ideas and information that build upon the previous material. Chapter 1 starts with our foundation, the feet and the legs. You may find that some of the suggestions in each chapter resonate with you more than others. If so, be selective and check out what feels right to you and then move on to the next chapter. Overall, growth and change are not linear processes, and you may find that you revisit earlier chapters after some time has passed. In fact, I recommend you note your comments and feelings during the first reading, and then reread them a few months later as you track your experiences. You may be pleasantly surprised at the shifts you've made.



Useful props to have: a yoga mat or two, a thick blanket or two in wool or wool/cotton blend, a couple of eight-foot belts with buckles, two chip-foam blocks, two wooden or cork blocks, a cylindrical yoga bolster or two, an eye pillow. You can substitute many of these with materials you have at hand. You may find that the more you play with these yoga "toys", as I call them, the more you will want to acquire. However, many practitioners use few or no props at all.





## **CHAPTER 1 -** Earth: Feet and Legs

For those of us with scoliosis, our body's centre of gravity is typically not in the centre of our physical structure. The majority of our weight is shifted to one side of our body, typically (though not always) the convex side or direction of the largest curve. If you're not sure of the direction of your curve, ask your health professional. This is very important to know so you can then start to work with what you have from an informed place.

If you have a major right thoracic (remember, the thorax is the midsection of the spine) convex scoliosis and your rib cage is moving to the right, the weight of your body will typically (though not always) shift more onto your right leg rather than your left. This can lead to the right leg being more muscularly developed, tighter and/or weaker and these imbalances then perpetuate themselves. It can also lead to a constant feeling of being unsupported, literally, and always tipping to one side. If the legs themselves are uneven lengths, this can potentially cause a scoliosis in the spine, uneven pelvic alignment and a shift in the centre of gravity to one side.

On a personal note, because of my curve pattern, I used to lean forward and to the right. However, I wasn't aware of this until I started practising letting go of the holding pattern that was keeping me relatively upright. An orthopedic specialist showed me the patterns of wear on the soles of my shoes. And for a time I had a bone at the root of one of the toes on my right foot that had dropped out of place, presumably because it was bearing more than its share of weight. After working with yoga for scoliosis, I stopped leaning forward and now lean less to the right. As well, my toes are back in alignment. I feel more balanced on each side and continue to work towards centre.

## **Experiment: Which Way Do I Lean?**

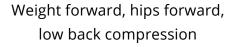
After standing or sitting for some time in one position, we will typically lapse into an unconscious posture. See if you can identify this unconscious position for yourself. You can use a mirror, ask someone you live with to observe you, ask a health professional who assesses posture and/or check in with yourself periodically to increase awareness.



There are often multiple leaning patterns to compensate for the major curve, and this can confuse the issue. It may take some investigation to determine your tendency, so be patient.

Look at the soles of your shoes to find patterns of wear and tear. Are they even on both feet? Notice when you are waiting in line somewhere. Do you shift your weight onto one hip and hang out there? Is it always the same hip?







Weight back, collapsed chest, tight neck/upper back



Chest forward, low back compression

## Here are some ways to address uneven weight distribution:

**Get checked out by a specialist** to determine if your legs are actually different lengths. Sometimes the patterning of muscular and connective tissue or a cervical subluxation (vertebral misalignment) over time creates an *apparent* leg length difference that can be corrected. If one leg *is* physically shorter, then using a lift under the heel or full foot of the shorter leg may assist in evening out the pelvis, thereby reducing strain on the sacral ligaments and the spine. Specific exercises can be performed to even out leg muscles.



Sometimes a pelvic misalignment can pull one hip up or forward and then one leg appears shorter. The body will compensate for this and develop muscles unevenly. Over time, these patterns become self-reinforcing. I asked one chiropractor whether my uneven pelvic position caused imbalanced muscle development in the legs or if an imbalanced use of leg muscles affected my pelvic alignment. He said it's a chicken and egg situation, meaning it's difficult to say which came first. It is worthwhile to persevere and find the root cause. My advice to you in this process is not to settle for just one opinion. During recent research, I asked various health practitioners about my situation. These included one doctor, three chiropractors, one physiotherapist and two registered massage therapists. And guess what? They each used different assessment methods and I got seven different opinions! Their opinions divided roughly into two camps, one camp saying that a leg lift would be useful, either temporarily or permanently, and the other camp saying a leg lift would interfere with my natural balancing pattern establishing itself. This is frustrating because I cannot tell whether the difference in conclusions arises from my body changing between appointments, because of assessment methods, varying perspectives on treatment or other factors. However, I accept that my body changes every day and I am my own science experiment. This is a healing as well as a learning journey of discovery.

**Orthotics**. I find it is worth investing in custom orthotics if needed and updating them every two years or so if you are actively working with your posture. As you shift your weight distribution, gain muscular strength and greater alignment, you will need to change your orthotics as well. These can provide much needed support and pain relief while you focus on balancing and strengthening. Basic orthotics are available in the drugstore and may do in a pinch. However, keep in mind that they will be the same for both feet while you may have different needs for each foot. There are now specialized machines (typically used by chiropractors and physiotherapists) that can assess your weight bearing and how your foot muscles and bones are working. These give a detailed picture of what is out of balance and can create a specific orthotic to correct it. Depending on your circumstances, you may eventually outgrow the need for these. Conversely, if your scoliosis is advanced or there are other structural challenges, you may need them. Different opinions exist about connecting the feet to the earth with or without orthotics. Explore and feel what happens.







Fallen and flattened inner arch

Engaged and lifted inner arch

**Check out your feet**. Much back pain is related to the feet. Do you have high arches? Fallen arches? These can cause pain, misalignment and uneven weight distribution. There also tends to be a proportionally large increase in phenomena as we go up the body, so a small difference at the feet can translate into a large imbalance in the shoulders, for example.

When I began to practise yoga I had fallen arches, a condition whereby the inner arches of the feet collapse due to weak muscle development. My feet tired quickly if I wore sandals or unsupportive footwear. Fallen arches can cause pain in the feet and up the leg into the knees. Creating inner arches reduced the strain and greatly relieved the pain in the centre of my feet.

To create inner arches, practise picking up a washcloth from the floor with your toes or pick up a pencil from a jar and place it in another jar. These will engage the muscles you need for healthy arches in your feet. See the **Resources** section for exercises to strengthen fallen arches.

**Toe spreaders**. These separate the toes and strengthen the muscles of the feet, consequently providing a wider base or platform on which to stand. Wear the toe spreaders for a few minutes and build up to practising yoga with them. Soft ones used for pedicures may be a good way to start and there are some specifically for yoga practice. I found these painful to use for the first few weeks while my muscles were stretching. The more I used them, the easier it became to wear them.





Wear proper shoes with arch and ankle support. Ensure your toes have adequate room. Flip-flops provide no support. High heels tighten the calf muscles and increase the pressure on the roots of the toes and on the lumbar spine (lower back), increasing the lordosis or natural curve to an unhealthy degree. High heels also throw off the body's centre of gravity, increasing strain rather than reducing it. Wearing proper shoes also applies to slippers or indoor shoes. Consider whether you are either reinforcing an unsupportive pattern or shifting into a supportive one. Which do you prefer? Which feels better?

I decided long ago that my quality of life and physical comfort, indeed my ability to walk properly and reduce pain, was much more important than wearing trendy shoes. If I wear inappropriate shoes or boots, I have to sit down a lot, my freedom is limited, I am distracted by the discomfort and I have a lot less fun. I do own some unsupportive footwear, but it rarely gets worn. The pain that results when I wear it for more than a couple of hours is just not worth the fashionable appearance to me. This is an area where you need to decide what works best for you.

**Foot massage**. Reflexology is helpful as is a warm oil foot massage that you can do yourself at home. Before a bath, before bed or upon arising are ideal times. Massage helps deepen sleep and quiet the mind. Warm oil nourishes the skin and bones and helps to ground you when you are anxious or agitated. Practising regular massage on yourself cultivates self-love and nurturing. It also improves the flexibility and mobility of the feet. The heaviness of the oil balances the action or movement of the feet. Our hard-working feet hold up our entire skeleton! Express appreciation and gratitude for your beloved feet as you massage them. They work hard for you and take you where you want to go. Detailed foot massage instructions are in the appendix.

**Equal weight distribution**. Stand in Tadasana Mountain pose (details of this pose below) facing a mirror. Notice the weight distribution in each of your feet and note if your body leans one way or the other. Is one leg much stronger than the other? Does one side feel more solid and connected? Reposition yourself to equalize your weight distribution on both legs.

**Weak ankles**. Do you find that you roll over on one ankle easily? Do you have a history of sprained or broken ankles? If so, you may benefit from strengthening the muscles around the ankle joint. Standing, balancing and some seated yoga postures such as Virasana (details below) can help this area.



## By Kathryn Kusyszyn



It may feel strange and possibly uncomfortable for a while wearing a lift or orthotics. The same goes for toe spreaders and supportive shoes. Be patient with the process of regularly checking your posture and weight distribution in order to find your centre. For a while you may not know which way is up, what feels straight or balanced. You are repatterning your body's weight distribution and this will take *time*. Be patient. Breathe deeply and listen in to the messages from your body. Our posture is a very complex system, and with scoliosis we develop a unique compensating pattern so that our eyes remain level. This means that there may be several curves of different degrees and angles in the body. A sense of discombobulation is common, of walking on shifting sands and feeling uncertain. This is one reason why it is *crucial* to cultivate and allow several types of support into your life, including physical, emotional, psychological and spiritual. This is especially important when you are consciously shifting your patterns. We will delve into these ideas in later chapters. For now, ask yourself: What helps me relax? What puts me at ease? What centres me? When do I feel the most grounded? You can write your responses in the space below or start a separate journal. There will be further self-reflective questions later on.

the spine, thus freeing the spine to lengthen and stretch. Equal support on the feet builds a strong foundation and a firm sense of rootedness or support. With this support comes relief from the constant and sometimes unconscious effort of always straining to remain upright. Large amounts of energy are freed up.	

**Key point of practice**: Strengthening the legs allows them to take the weight of the body off





## The Yoga Practice and Poses

Posture is the key to life. - Mark Twain

## Tadasana/Mountain pose



This is the basic standing pose and the foundation for all other standing postures.

Version 1: Stand with the inner edges of your big toes together, heels slightly apart. In the photo, my big toes are not actually touching, however, I meant for them to be!

Version 2: Stand with the feet outer-hip-width apart. Use this version if you have difficulty with balancing or ankle issues. To align your feet parallel, create a line from the mound of the second toe to the centre of the ankle. Set those lines parallel for both feet. This may feel pigeon-toed (it did for me for a while) if you are used to turning your feet out.

Lift and spread all your toes wide apart. Keep them spread wide as you lower them down to the floor.

Sense the soles of your feet connecting to the floor, as though they are roots of a tree reaching down deep into the earth. Feel the root of your big toe, the baby toe, the inner heel and the outer heel. These are the *four points of connection*. Let them all equally rest on the floor. Lean forward and roll around in a clockwise direction for a few circles, then the other direction for a few circles until you come back to centre. Find where all four points are resting equally. Notice if this is different from your typical centre and if so, how is it different? Write it down, this will shift with practice and awareness.

Keep your legs straight without locking your knees, and hug all the muscles of your legs to your bones. Press your thighs back until your hips align over your heels. Then allow your tailbone to slightly descend and find your natural low back curve. Allow the lower belly to lift in and back slightly. Feel the muscles around the hips engage. Breathe.

Now lift your ribs off the waist, elongating your torso. Keep this elongation and lift your shoulders up to your ears. As you release the shoulders down, be sure to keep your torso long. Allow your shoulder blades to soften and release towards each other and down the back. As you inhale, picture a string lifting from your heels, up your back body, to the back of the crown and into the sky. Stand tall while resting your feet solidly on the ground. Your crown, ears, shoulders, hips and ankles form a plumb line. This is Tadasana/Mountain pose. Stand firm and solidly connected to the earth while reaching up into the sky from the back of the head. Find a sense of steadiness and of ease so you are not straining anywhere. Breathe and feel your body in this position.

**Posture benefits**: Tadasana teaches you how to stand evenly on both feet and on all sides of your feet. It also teaches correct placement of your feet, which will translate into support for the torso: hips contracting, abdomen in, chest lifted. These actions help maintain spinal elasticity, a feeling of lightness in the body and an agile mind.

**Helpful hint:** Practise this posture with your back to the wall. Feel the centre of the back of your skull and shoulder blades on the wall, with your buttocks as even as possible against the wall. Your heels may be slightly away from the wall. Check sideways in a mirror or have someone stand beside you to see if your crown, ears, shoulders, hips and ankles are lined up. Your shoulders may not feel evenly placed against the wall. One may have more contact than the other. Let this exercise inform you about your body in space and where there are differences between the two sides.

**With a buddy:** Have someone take photos of you from each side so you can see what you look like from those angles. Look for the plumb line.



**Going further Option 1:** From Tadasana, inhale your arms overhead (or until the first point of sensation, i.e., a gentle stretch) and breathe five breaths. Reach up through your fingers while keeping your shoulders soft and neck long. Breathe into the spaces between your ribs.

**Going further Option 2:** Inhale, roll up onto the balls of your feet and exhale *slowly* as you roll down. Repeat four times, then hold the balance position for five breaths. This strengthens the ankles.

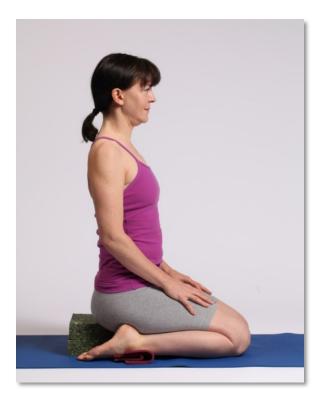


Tadasana going further Option 1



Tadasana going further Option 2

## Supported Virasana/Hero pose



This is my favourite seated pose for meditation because the support naturally places my spine in its correct alignment. Using books, blocks or a bolster, kneel on a mat with a blanket on it. Bring your knees close together and heels outside your hips. Use your thumbs at the back of the knee crease to slide the flesh of the muscles down towards the heels as you lower onto the blocks. Reach under each sitting bone and pull the flesh out sideways so you are sitting as evenly as possible on these bones. Then pull the skin from below the kneecaps slightly up away from the floor to reduce strain. Find neutral pelvis, a state where if the pelvis were a bowl of water, the water would be sitting evenly in the bowl, not spilling out the front or back. Sit up tall, lifting your sacrum in

and up, lift your ribs off your waist, shoulders off your ribs and your crown to the sky. Then soften your skin around this lifting. If you feel any strain in the front of your knee, this means you need more height to decrease the angle of your knee joint. Add height until you can sit comfortably here. I repeat, *add height*, use cushions and blocks, whatever you have. A small rolled up washcloth behind the knee in the knee joint crease is another way to create space. You can allow the knees to separate, but not beyond hip width. This ensures your thigh bones stay parallel, as they would be when you are standing.

You may also want to add a small folded towel or washcloth under the fronts of your ankles for support if the tops of your feet feel overstretched or your ankles are sickling out to the sides. Keep the feet straight, toes pointing back and the front of all the toes spreading and touching the floor.

**Posture benefits**: With regular practice, Virasana helps flat feet by creating arches. It also stretches the ankles, relieves heel pain such as calcaneal spurs and reduces rheumatic pains in the knees.



## Dandasana/Staff pose



Dandasana incorrect



Going further



Dandasana corrected by using a block

# Alternative sitting pose: Dandasana/Staff pose against the wall.

Experiment using a small cushion, or try a foam block if you have one, under your buttocks. While a foam block provides firmness, if your sitz bones are uneven, a cushion will help correct unevenness and be more comfortable. Find the prop and height that allows for the most evenness in your hips and your natural low back curve. Sit with your upper back supported against the wall and your legs straight out in front of you. Pull the flesh away from your buttocks to sit evenly on the sitting bones. If your spine rounds and it is uncomfortable to sit with your shoulders over your hips, add height under your sitting bones. If you have tight hamstrings, bend the knees slightly.

If your spine is still rounding back, you may find it is better to bend the knees more. Be on the front edges of your sitz bones, do not roll back. Spread your toes and engage your feet as though they were pressing into a wall, evenly reaching through all four corners of the feet. Lift your kneecaps towards your hips by engaging your thigh muscles and if your legs are straight, press the back thighs down towards the floor. Lift your sacrum in and up and lengthen your entire spine up through the crown. Relax your muscles around the lift you have created. Roll and tuck your shoulders underneath you so you can feel as evenly supported against the wall as possible. Rest and breathe here.

**Going further**: Using your back and arm muscles more than your shoulder muscles, lift your arms overhead by your ears or to the first point of sensation while keeping your shoulders relaxed. Breathe five breaths here.

**With a buddy**: Have someone check your feet to see if your heels line up. If one protrudes ahead of the other, investigate what could be causing this. Check your pelvic alignment and then recheck the feet. If still uneven, consider getting a specialist assessment.

**Posture benefits:** Dandasana strengthens the back muscles, stretches shoulders and chest, improves posture and relieves sciatica.





## Savasana/Corpse pose



Eye pillows relax the facial muscles, support under concave area and using multiple supports makes the pose more restful.

**Savasana/Corpse pose**. This is the final resting pose. Typically done at the end of a practice, one suggestion for how long to spend here is a third of the total practice time. Not to be morbid, but it is said that we are practising for our death in this pose. Specifically, we release all tension and holding in our body when we rest in this pose. Our bodies know how to rest much more deeply than our busy minds will typically allow. Rest is when the rejuvenation and replenishing happens. The deeper the relaxation, the more profound the healing that takes place.

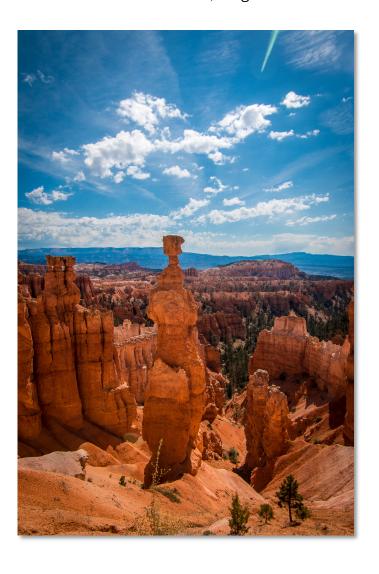
Have a padded or layered mat beneath you and lie down face up. Have a pillow for your head if that's comfortable. One option is to bend your knees, place your feet on the floor and allow the knees to fall together or place a bolster under your knees or lower thighs for support. Take a few slow, conscious breaths and allow yourself to settle into the support of the floor. Let your lumbar spine express its natural curve so that you can slide your hand underneath the space between your back and the floor. If you have flat-back syndrome (in which the lower back has lost its natural curve), it may be comfortable to have a lumbar pad or rolled-up towel under the lumbar area to create support and curve. Roll and tuck your shoulder blades back and down the spine one at a time. Scan your back body starting at the root of the pelvis, noticing which areas are in contact with the floor and which are not. Compare the right and left sides of your back torso. Place rolled-up washcloths or hand towels in the gaps or caves, allowing for both sides of your torso to be evenly supported.



For example, if you have a space under your upper right shoulder blade, place a rolled-up washcloth there, adjusting the height and size of it until your rib cage and shoulder blades feel even. You may also need one under the left lumbar spine, perhaps at a different height.

Rest here for 5-10 minutes, allowing your body to rest on the supports. Notice that as your body releases, you may need different support. Feel fully what it's like to be supported. Can you accept this support, trust, rest and let go of doing anything?

**Posture benefits**: Savasana "removes the fatigue caused by the other asanas and induces calmness of mind" according to the *Hatha Yoga Pradipika*, a classic yoga text written in the 15<sup>th</sup> century. This pose calms the brain, helps relieve stress and mild depression, relaxes the body, helps lower blood pressure and reduces headache, fatigue and insomnia.





## By Kathryn Kusyszyr

# Scoliosis *Undone*

**Journaling**: When do you feel most connected to the Earth? What grounds you? Where in your life do you feel supported? When you are centred in yourself, what qualities do you notice? What does balanced or even mean to you?

Write your responses here:	





## **CHAPTER 2 - Water: The Pelvis**

Would you like to move with the grace of a dancer? As smoothly as the strokes of a synchronized swimmer? Now that you are practising standing steady and tall, let's allow softness to come in. In yoga, this softness is referred to as sweetness or ease, *sukha* in Sanskrit. Together with steadiness, translated as *sthira*, these two qualities develop strength balanced with flexibility. We look for a place of firmness while remaining relaxed. In each pose, the idea is to be able to 'sit'. In fact, asana, the root word in all yoga posture names, means "seat" in Sanskrit. Many people get into Mountain pose and hold themselves as stiff as a board, restricting their breath and getting very tired very fast. We are not soldiers; we are spiritual warriors. Relax around the holding of the posture. Find the balance between being as strong as a tree trunk firmly rooted in the earth, while remaining malleable enough to have branches that bend in the wind. This malleability comes from the water soaked up through the roots of the tree. Without water, the tree would wither, crack and die. The same goes for us.

Effort without tension, relaxation without dullness. - a wise yogi

Think of the fluidity of a dancer whose body movements flow like a river. The more water we have in our muscles and joints, the greater the fluidity and mobility. The pelvis is the centre of sexual fluids and of preparing waste products to leave the body. Congestion, tightness and discomfort in this area can disrupt the vital processes of elimination, creation and passion. Similarly, on a psychological level, if we are rigid in our opinions and beliefs, a quality of hardness develops in our minds. This kind of thinking inhibits our growth and expansion. Many people resist yoga asana practice thinking that they need to have flexible bodies. It is more important to have a flexible mind; the flexible body will come later as a side benefit of yoga asana practice. Being open to deepening our relationship with our bodies, minds and spirits reaps rich rewards in terms of quality and enrichment of life experience.

During our practice, what is known as "muscle memory" is activated and repressed emotions are released or rise to the surface of awareness. Joy, grief, sadness, anger, tears, nausea and many other types of responses can happen. This occurs because unprocessed or unintegrated experiences can become trapped in our cellular memories.



There may be a tendency to avoid, deny or project these feelings onto outside forces or people — especially your teacher! This is where the real practice begins and *it's internal*. Pause, breathe and watch. Feel your body. Listen to what your body is telling you. Is there an unresolved argument? An old injury? A forgotten loss? Breathe some more. What do you need around this? In your heart, your deep knowing underneath the regular chatter, what do you need? Sometimes a simple acknowledgement of an unmet need can propel a shift in attitude or awareness. What is the emotion involved? Allowing the flow of feelings to move through us like waves, without reacting from old habit patterns, is a pivotal aspect of the practice. Expect emotional release with this practice, and welcome it. It is a sign that the practice is working!

For people with scoliosis (and in many people without scoliosis as well), the pelvis is often uneven. One side may be lifted up, or tilted forward or both. A lifted hip tends to cause compression in the lumbar spine thus shortening the waist on that side. This leads to pain, restriction, strained sacral ligaments, tightness of the psoas muscle (which joins the spine to the thigh bone), and of the tensor fasciae latae (soft tissue on the outside of the hip) and so on. Each of these patterns has ripple effects throughout the whole body. For example, continuously strained sacral ligaments may cause destabilization of the sacrum. The sacrum is the inverted triangular bone at the root of the spine. If it is not held in place by balanced soft tissues, it can go out of alignment. This can cause great strain on the attached muscles (such as the piriformis) and an inability to find spinal alignment. The way I describe the misalignment is a pulling, tearing and irritated sensation. Conversely, the sacrum can be out of alignment without causing any pain.

In my body, my right hip tends to lift up and tilt forward, causing more of my weight to go forward onto my right leg, thus making my right leg stronger than my left. This tends to compress my right waist and cause the muscles between the back right rib cage and top of the pelvis to be chronically tight. Unless I stretch this area out regularly, there will be pain, which is a great motivator for my yoga practice! Massage also relieves the discomfort.

Pressure and pain from strained ligaments on the right side of the sacroiliac joint was a frequent experience before I began yoga. I found out this was likely because my sacrum was out of alignment. Sometimes I had no pain in that area, yet I would go to the chiropractor and get an adjustment to put it back into alignment. This made it challenging to tell whether I was aligned or not. During yoga practice, a clunking sound and sensation when I entered backbends told me my sacrum was going back into place.



Recently I found out from a massage therapist instructor that my sacrum alignment was actually NOT aligned, that in fact the right side of my sacrum was pushed back out of place into a non-physiological position. This resulted in strain and pain in the ligaments. It felt like a knotted golf ball was underneath that bone. A sense of being stuck was my normal state of being in that area. Unbeknownst to me, this incorrect position of my sacrum was a major contributing factor to my spinal curvature muscle pattern and it inhibited certain movements. I was literally stuck. Now that the sacrum is in proper alignment, I feel as if I have a new body to explore and a greater range of movement.

**Exploring pelvic alignment while standing:** Facing a mirror, find Tadasana in the legs with equal balance between the front and back, right and left, and inner and outer soles of your feet. In other words, all four corners of your feet are rooting down into the earth. Soften your knees and place your hands on your hips. Rotate your pelvis all the way around in a circle three times in both directions. Then gently tip it forward and back until you find a place where it feels even. Relax your buttocks. Think of your pelvis as a bowl of water. Neutral pelvis is the place where the water would be sitting evenly in the bowl, tipping neither forward nor backward. Notice if one hip tends to be forward or higher than the other. Feel the tops of your hip bones all the way around with your hands. Are both sides of your waist even, or does one look or feel shorter? Another way to check this out is to place your thumbs on the bottom ribs and fingers on the tops of the outside of the hip bones. See picture 2 below. Do both sides of the waist feel even? If not, what happens if you shift your hips to a more even place? Remember to breathe, especially focusing on opening up areas that feel tight or constricted. You can also use a tape measure or yoga belt from front hip bone to hip bone with your thumbs on the top of the belt where it meets your hip bones to check if they are level. See picture 1 below.





Checking alignment with a belt



Checking alignment with hands



Sitz bone experiment

**Sitz bone experiment**: Another way to feel pelvic alignment is to squat with your sitting bones against the wall, knees bent, slightly leaning forward. Does one sitting bone feel lighter against the wall? This indicates unevenness in the pelvis. Small differences can add up to large grief over time. Sometimes the way a skirt or shorts falls over the hipbones will reveal imbalance.

**Exploring pelvic alignment while sitting on the floor:** Pull the buttock flesh out from under you and towards the sides of the room to sit more evenly on the sitting bones at the bottom of the pelvis. Notice the weight distribution on each side. If you have a pelvic misalignment such as the back of one hip being lifted, experiment with drawing the buttock flesh of that hip from the back to the front a few times in a sweeping motion from where the top of a back pocket would be to the bottom of the pelvis. Sense if this makes you feel more level and grounded. Is there any noticeable difference from the way you were sitting before? Also experiment with drawing the flesh of the lower (i.e. other) hip out to the side. You can even use a small book or other item to lift that lower side of the buttocks and sense if it provides relief. I have one student who plays her cello with a book of music under one sitting bone. This keeps her level and comfortable while she plays. See if that works and be prepared to adjust the height as you gain more evenness with time.



## The Yoga Practice and Poses

Fundamental to stabilizing the pelvis is toning the pelvic floor. As the feet are the foundation for the body, the pelvic floor is the foundation for the torso. Kegel exercises are popular and recommended to pregnant women to prepare for birth. They are just as valuable to everyone else and especially to people with scoliosis as they provide a sense of internal strength and containment. Here are some examples with which to experiment.

**The quickies**: Lift the pelvic floor in and up in a series of short contractive movements. Be sure to release the muscles slowly as this will develop more even tone. Think of squeezing a sponge and slowly letting it release. The muscles you are contracting are the muscles you would use to stop a stream of urine in mid-flow. Build up sets of these quickies as you gain tone in that area. These can be done anywhere, anytime.

**With breath coordination 1**: Close your eyes and focus on the pelvic floor. Consciously draw the pelvic floor in and up as you exhale. Inhale and relax the muscles fully. Repeat for several breaths.

**With breath coordination 2**: Close your eyes and focus on the pelvic floor. Inhale, contract and lift the pelvic floor muscles. Exhale and release them entirely. Repeat several times. As you gain control, try to hold the muscles up for a few cycles of breath. Then release the muscles completely on an exhalation.

The elevator exercise (advanced): Close your eyes to visualize an elevator at the pelvic floor. Completely relax and open the pelvic floor muscles as you exhale, imagining you are at the basement of a four-storey building. As you inhale, engage the pelvic floor muscles and lift to the first floor. Continue to inhale lifting to the second floor, the third floor and all the way to the fourth floor. Pause, feeling fully engaged deep within. Exhale and release with control floor by floor all the way down to the basement when the muscles are totally relaxed and open. Repeat for several minutes. As control improves, use your imagination to move up and down randomly. For example, try going from the fourth to the third to the second and back up to the third, fourth, etc. inhaling when you go up and exhaling when you go down.



Continue to practise Tadasana, Virasana and Dandasana with the following additions:

**Tadasana**. Face a mirror and "levelize" (sic) your pelvis, meaning adjust it until the water is sitting evenly in the bowl, not spilling forward or backward. Notice any ripple effects, i.e., on your legs. Does one knee have to bend more than the other for your pelvis to balance? Does one leg step forward or one foot turn out to the side? Adjust for balance and evenness.

**Virasana.** Check for level hips. If one is higher at the back of your pelvis, scoop the flesh of your higher hips' buttock down underneath the buttock a few times. It's as if you were putting your hand in a back pocket and smoothing the flesh downward. Scoop the flesh of the other buttock out to the side. Another option may be to place a folded washcloth or piece of yoga mat underneath the lower side.

**Dandasana.** Sit with your back against the wall for support. Scoop your buttock flesh to even out the pelvis as in Virasana above.

**Going further in Virasana or Dandasana**: Lift your arms overhead to the first point of sensation, then stretch and breathe five deep breaths. Keep your shoulders relaxed down, away from your ears.



Tabletop or Hands and Knees position





Puppy starting position



Puppy starting position front view



Puppy second position: hands to the side for right thoracic convex curves



Puppy final position with engaged and contained right ribcage



**Puppy pose.** This is a preparation for Downward Facing Dog and also helps address the lateral curve in the thoracic region. Start on hands and knees in Tabletop position. A blanket under the knees is helpful. Turn the toes under to open the soles of the feet and engage the leg muscles. Then walk your hands forward one hand span and draw your hips back very slightly. To deepen the back and side stretch, walk hands more forward while being aware of keeping the upper arms in the shoulder sockets. Be aware of the bottom front ribs drawing in using a gentle contraction of the abdominal muscles. Reaching forward with the arms and drawing back from the hips creates dynamic tension and feels great. To deepen the internal practice, at the end of the exhale, draw the pelvic floor up and keep it there during the inhale. Release it on the exhale. Take 5-7 breaths here.

**Puppy to the side:** For a major right thoracic or right thoracolumbar curve, walk the hands to the right slightly and consciously draw in the right shoulder blade and right upper ribs to reduce the lateral curve. Take 5-7 breaths here into the left ribcage. Maintain the containment of the right ribcage and shoulder blade and walk the hands back to the centre for another 5-7 breaths. Then take a rest. For major lumbar curves, remain in the centre.

**Posture benefits:** Lengthens the spine and encourages breath into concave areas.







## Adho Mukha Svanasana / Downward Facing Dog





Gentle Version

**Adho Mukha Svanasana/ Downward Facing Dog. Entry option 1.** Start standing in Tadasana. Fold forward from the hips, place your hands on the floor and step back into Downward Dog.

**Entry option 2.** (More challenging) Start in Puppy pose. Press the hands down into the floor, then using leg and core strength, exhale to lift the buttocks towards the place where the wall meets the ceiling behind you. Keep the upper arms in the shoulder sockets and release your head so your ears line up with your upper arms. Feet are hip-width apart and heels are slightly lifted to allow for leg stretching.

**Gentle version:** If your hamstrings and shoulders are tight, step your feet to the outside of the mat and forward until they are resting flat on the floor. Your knees may bend slightly. Then work on drawing your legs straight and your hips back to lengthen the spine. Breathe 5-7 breaths, continually lifting the buttocks up and back behind you.

**Posture benefits:** Relieves pain and stiffness in the heels. Softens calcaneal spurs. Strengthens the ankles, reduces shoulder stiffness and shoulder arthritis. Strengthens abdominal muscles, slows the heart rate. Rejuvenates brain cells, relieves fatigue.



## Prasarita Padottanasana/Wide-Legged Forward Bend with blocks



Prasarita Padottanasana/Wide-Legged Forward Bend: Set up two blocks on their highest height, shoulder-width apart, a foot or so beside the long edge of your mat. Begin in Tadasana. Step back one leg length and turn your whole body 90 degrees towards the blocks. Line up the heels with the edge of your mat. Ensure the toes are pointing straight ahead. Place your hands on your hips and ensure they are even. Engage the legs as if you are pressing a piece of wood between them. Inhale, expand the collarbones wide, look up and exhale, draw the chin in and fold from the hips. Release the hands out to the blocks and press into them as if they were on the floor. Line up the ears with the upper arms. Gaze down the tip of the nose. Breathe 5-7 breaths. To exit the pose, release the fingertips or palms to the floor. Inhale, lengthen the spine, exhale, and place the hands on the hips, drawing the shoulder blades together. Inhale, rise up with the head, neck and spine as one unit. Knees can be slightly bent.

Using blocks allows for greater length in the torso and shoulder opening. This pose develops the hamstring and adductor muscles, increases blood to the head and is a beneficial inversion. Digestive function is improved.

**Going further:** Reduce the height of the blocks.





### Surya Churya/Sunbird







Surya Churya/Sunbird Step 1 and leg only



Surya Churya/Sunbird aka Birddog

#### Surya Churya/Sunbird

**Step 1.** Start in Tabletop position. Inhale and extend the left leg straight back, keeping it at hip height or lower, but no higher. You may wish to remain here in Step 1 for 5-7 breaths.

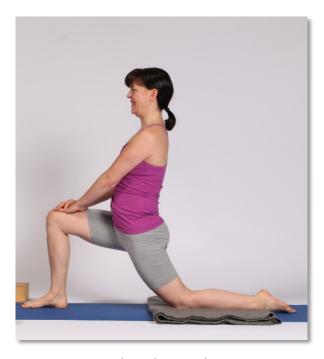
**Step 2.** Inhale and extend the right arm forward in line with the shoulder. Keep it at shoulder height, no higher, and with the arm in the shoulder socket so the neck remains long. Take 5-7 breaths, then switch sides.

**Posture benefits:** Strengthens the back, abdomen, legs and arms. Supports the spine. Opens the front of the body.



**Note:** can also be done with the back foot pointed for the effect of opening the front of the leg. A gentle version of this option could be done with the back foot planted on the wall.

### Virabhadrasana / Warrior A Lunge Series



Low Lunge 1



Anjaneyasana/Low Lunge



High Lunge

**Low lunge/Preparatory lunge 1**: Face a mirror. Start from hands and knees, perhaps with a folded blanket under the knees for cushioning. Engage your core muscles to bring the right foot forward between the hands. Keep the front knee over your ankle, *not* forward of it.



Release your tailbone down, lift the sacrum in and up and lengthen your torso as one unit. Place your shoulders over your hips and lunge forward. Keep the front knee directly over the ankle. You may need to bring the back leg back further to experience a gentle stretch in the lunge while keeping the front knee over the ankle. A few breaths of shifting slightly forward and back can help to warm and soften hip muscles here. The lunging action takes place in the hips, so keep your shoulders overtop of the hips. Keeping your tailbone descending downwards helps draw the lower belly in, engage the core and protect the lumbar spine. Overdoing this action is possible and that could result in a flattening of the lumbar curve over time, so be sure to keep the natural lumbar curve. This action of descending the tailbone deepens the stretch in the front of the back/left hip. If you do not feel much stretch in the front of your left hip and you are performing all these actions, try shifting your back leg back a bit. Allow your pelvis to sink down while lifting your waist and everything above it up towards the sky. Hands can be on your hips to check that they are level since the back hip tends to drop forward in this asymmetrical position. Keep the hips as even as possible front to back and up and down. Alternatively, press your hands down flat on solid blocks directly under the shoulder line. The blocks need to be high enough that the front of your chest is open and your spine is long, not rounded.

If you feel a lot of pressure on your back knee, you can a) press the top of the back foot firmly down into the floor, b) turn the back toes under, c) add more cushioning underneath the knee or d) lift that knee slightly. After five breaths switch and do the other side.

**Anjaneyasana:** After five breaths, lift your arms overhead by your ears or to the first point of sensation. Keep your shoulders soft, down and away from the ears. Find the sweetness of the pose, particularly in the upper body. Stay here for five breaths.

**High lunge/Preparatory lunge 2:** Release your hands down to either side of your front foot and lift your back knee off the ground. If you feel your chest or shoulders rounding here, place your hands on blocks to add height. Be in one long line from the crown of your head through your shoulders down to your back heel. Press away through your back heel. Keep your tailbone lengthening down and your lower belly drawing in. Notice if your front ribs are dropping down. Do both sides. If one psoas (deep hip flexor) muscle is tighter, then repeat that side.



**Standing preparatory pose**: From Tadasana, place your hands on your hips to find their position, engage your pelvic floor and core muscles, then step back onto the ball of the left foot. Find neutral pelvis and a comfortable lunge without letting the front knee go past the ankle. Your tailbone is descending and the sacrum is lifting in and up. Inhale, lifting your waist off your hips, then your ribs off your waist and your shoulders off your ribs. Relax around this lift. Find the sweetness of the pose. Hands can be on your hips or, if you feel strong, steady and at ease, lift your arms up by your ears. Keep your shoulders over your hips and be sure you are facing forward. Gaze straight ahead or if your neck is fluid, lengthen it like a giraffe and look *slightly* upwards. DO NOT drop your head back (regardless of any photos you have seen of yogis doing this). This action done incorrectly can cause compression in the cervical vertebrae. For greater steadiness, you can have your back heel on a wall and your back knee slightly bent. Focus on having equal weight in each foot, as though you are stretching your mat apart.



Standing Preparatory pose



Adding the arms



Modified Virabhadrasana A







Full Pose Virabhadrasana A

Incorrect alignment

Standing full pose Virabhadrasana A/Warrior A: For most people with some tightness in the hips (and this means just about everyone who regularly sits in a chair) this posture can take months (or years) of regular practice to get into with proper alignment. Taking all steps of the standing preparatory pose above, gently roll your back leg open from the hip and place your back heel down at an angle. Press your feet down and away from each other as though you are pulling your mat apart. The left/back toes will point out to about 10 or 11 o'clock. If this is not possible without turning your hips and torso to the side, or if you feel a strain in your knee, it may be best and safest for your knee to focus on the standing preparatory pose until the hips open up. Lift your inner back thigh and inner arch of the back foot and align your hips forward like headlights. The back hip often lags behind the front one in this position so be mindful of drawing your hips to as aligned a position as possible, without straining the back knee. On an inhale, lift your arms to shoulder height and draw the upper arm bones into the shoulder sockets. Then lift your arms until you feel the first point of sensation. In the beginning, keep your hands shoulder-width apart and focus on a lifting up of the rib cage out of the waist. Eventually you will bring your palms together, but only if you can keep your shoulders relaxed and down, away from your ears, and your neck long.



Gaze straight ahead, extending up through the crown and fingertips. Breathe five breaths here. Exhale as you release your arms down, bring the weight into the front leg and step back to Tadasana. Repeat on the other side. Again, if one hip flexor muscle is tighter, repeat that side.

**Note**: You may have seen photos of this pose in which the head is released back and the gaze is upward. A lengthened, relaxed and agile neck is required for this action to be done safely. Since relaxed and agile necks are a rarity, particularly with scoliosis, one needs to gaze straight ahead and focus on lengthening the neck. Patience is required and remember, this is called a yoga *practice* for good reason. The idea is to deepen our body awareness, which leads to progress, not perfection. Starting where you are is the only place to start.

**Posture benefits:** The expanded chest in Virabhadrasana A allows for deep breathing. It relieves stiffness in the shoulders and back, tones the ankles and knees and cures stiffness of the neck. This pose opens the psoas muscle deep in the front of the hip, which helps balance the hips, relieve low back strain and improve posture. The psoas muscle is often tight in people with scoliosis and breathing is often compromised. This posture addresses both of those issues.





### Viparita Karani/ Legs up the Wall



Viparita Karani with support. Viparita Karani or Legs up the wall is one of my favourite postures and is a highly effective inversion for everyone. Inversions reverse the blood flow in the body, giving the heart a rest and recharging stagnant areas. Inverted postures are some of the most powerful yoga postures, with far-reaching effects.

Place a bolster, cushion or rolled-up mat

on the floor near a wall with 1 block or about 4 inches of space between it and the wall. Sit on the cushion with your side body touching the wall. Leaning away from the wall, position yourself on one elbow so your upper body is perpendicular to the wall. Move your body closer to the wall so your buttocks are almost touching it, unless you have tighter hamstrings in which case, you may need more space away from the wall. Stretch your bottom arm out away from the wall and come all the way down onto your side. Rolling onto your back and the cushion, lift your legs up the wall together using core strength. The cushion is to support your sacrum. Your sitz bones drop down into the space between the cushion and the wall, thereby releasing the inner groin and hip muscles. You may want neck support and/or a blanket around your legs. You can do this pose actively and engage the legs to stretch the calves and hamstrings or as a resting pose, relaxing all muscles and breathing fully. If your legs then fall apart or to the side, using a belt may help. Arms can rest by your sides or out in a cactus position with the shoulder blades drawing down the back. A third option for the arms is reaching up alongside the ears. Only do this option if your shoulder blades can remain resting on the floor and your neck stays long. Feel the support of the Earth and allow yourself to completely rest.

Option 1: Some people prefer simply to lie with their back on the floor and legs up the wall without sacrum support. Experiment and see which feels better to you.

Option 2: Use a yoga belt around the thighs and/or shins to keep the legs together and long.



**With a buddy:** Have your friend place a sandbag or heavy weight on the soles of your feet when you are in the pose. This helps to root your thigh bones into the hip sockets. Have your friend remove the weight for you before you come out.

**Posture benefits:** Viparita Karani relieves tired or cramped legs and feet, gently stretches the back of the legs, front torso and back of the neck, relieves mild backache and calms the mind. This restorative pose helps with:

- Anxiety
- Arthritis
- Digestive problems
- Headache
- High and low blood pressure
- Insomnia
- Migraine

- Mild depression
- Respiratory ailments
- Urinary disorders
- Varicose veins
- Menstrual cramps
- Premenstrual syndrome
- Menopause





## Sucirandhrasana/Eye of the Needle



Step 1: Knee to chest



Step 2: Place outer ankle on opposite knee and engage the foot as if it's pressing into a wall



Step 3: Lift both legs towards chest evenly



Going further: Straighten the back leg





### Sucirandhrasana/Eye of the Needle

**Step 1.** Lie on your back with your knees bent, feet flat on the floor. Find your neutral pelvis. Bend your right knee into your chest and hold it there for a few breaths, feeling the back muscles stretch. You are pressing into the ascending colon here, which relieves gas and encourages bowel movements.

**Step 2.** Roll your right leg open from the hip and place your outer right ankle in the notch just above your left kneecap.

**Step 3.** Lift both legs off the floor towards your chest, wrapping your left arm around the outside of your left thigh and your right arm in between your two thighs. If your shoulder blades have to lift off the ground to do this movement, then use a belt around your left thigh and allow the shoulder blades to soften down. Keep neutral pelvis all the way through. One way to check this is by looking down at your pants. If you have an inseam down the midline, check to see if it is straight. Ensure your lower back stays in its natural curve and does not flatten or arch. This will require core muscle strength, so draw your navel in and up and press your lower back ribs into the floor. A rolled-up towel or lumbar pad can help support the lumbar curve here, especially for those with flat-back syndrome. Do not allow your lower back to arch more than its natural curve.





Option 1. Use the wall for extra support

Piriformis stretch





**Going further**: Straighten the back leg, being sure to keep the knee very slightly bent.

**Fine-tuning**: Maintain neutral pelvis as you continue to roll your right leg out at the hip. Breathe five breaths here. Switch sides. Notice if one side feels different and how. If one side is noticeably tighter, then repeat that side.

**Option 1**: Place your lower foot on a wall with your knee at a right angle for support.

**Piriformis stretch**: Start at the end of Step 2 for Sucirandhrasana. Slide the ankle of the front (right in this case to start) leg to the outside of the opposite thigh and bring it down a little closer to your hips. With your left hand, press the sole of your right foot towards your right knee. With your right hand, press your right knee down towards the pelvis, rooting the thigh bone into its socket. Feel the stretch deep in the right buttock near the sacrum. Keep the sacrum resting on the floor. Breathe into it for 5-10 breaths. Switch sides.

**Posture benefits:** This stretch works the back muscles, buttock muscles and opens the hips. The piriformis stretch helps open up this small muscle. The piriformis tends to get tight in people who sit in chairs or those with uneven pelvises as it is attached to the sacrum. Tightness in this area can contribute to nerve pinching and sciatica.

## Yoga in everyday life or tips for happy hips:

- Do not sit on your wallet or have anything bulging in one back pocket. This can aggravate pelvic imbalance.
- A wise woman once told me, "Never carry what you can wheel".
- Push rather than pull weighted objects using the strength of your legs, keeping your back long.
- If you need to carry bags, alternate hands with your arms long and stretched out. If you have two bags, have equally weighted loads if possible.
- Do not always carry a bag or purse on one shoulder as this can aggravate an imbalance.
- · Pack lightly.
- Avoid crossing your legs "ladylike" fashion as this can aggravate an uneven pelvis and pull sacral ligaments out of alignment.
- Regularly check in to see if you are in neutral pelvis. Do you stand with one hip sticking out? Which one? If so, come back to centre.



• To relieve tight buttocks, iliotibial bands on the outside of the thigh and other muscles and tissues, rolling on tennis balls or foam rollers helps. I have two tennis balls in a sock that I use to roll various body parts on. One of my friends likes using three. Experiment to find what works for you.

**Sleeping**: I find it necessary to have a pillow between my knees while I sleep on my side. This keeps my legs about hip-width distance and helps to keep my pelvis aligned. Some people like to use a longer pillow that reaches from the knees to the ankles, thus keeping the entire lower legs separated. It's also important to avoid the top shoulder rounding forward when sleeping on the side as this can compress the shoulder joint.

For back sleeping, I use a pillow under my knees or thighs to shift the angle of my pelvis and create space in the lumbar spine.

Be aware that soft mattresses do not provide much support for side sleepers wanting to decrease or support their lateral spinal curve. To counteract this, place a folded blanket across the mattress underneath the greatest point of the lateral curve. Placing it under the sheet may help keep it in place during the night.

Stomach sleeping can cause compression in the lumbar spine, especially with a soft bed and so it is not recommended.

Experimenting with pillows for the head over many years I have found that cervical support is important. This is true for me whether side sleeping or on my back. I encourage you to use different pillows until you find one that works. Also know that as you work with your body, your needs may change.

One treatment for scoliosis in India cited by Atreya, a Western-born Ayurvedic practitioner in his book *Secrets of Ayurvedic Massage*, involves sleeping on a flat wooden board!

**Driving**: Be sure to have your car seat adjusted properly so you don't have to strain any part of your body. Have your seat upright rather than leaning back, since leaning back may cause you to jut your chin forward into "chicken neck". Jutting the chin and head forward of the spine dramatically increases the load of weight on the neck and leads to strain and tightness. See neck and shoulder sections for ways to address this pattern.



Have a lumbar cushion for support. When I started driving regularly, I noticed my right sacroiliac joint pain became aggravated compared to before I had a car. I've had students who noticed this as well, especially when driving standard because of all the extra movements needed on the right side.

When getting into the vehicle, open the door and turn to face away from the vehicle. Sit down on the seat as though you were sitting in a regular chair. Use your pelvic floor and inner thigh muscles to draw your legs together. Use the steering wheel or handle on the inner roof of the car for support. Then, using your core and leg muscles, lift your legs together and swing your torso and legs as one unit towards the front. I find that keeping the legs together decreases the likelihood of straining the sacroiliac joints.

**Sitting in chairs:** Be sure to have your feet supported as opposed to dangling whenever sitting. The weight of the legs dangling can tip the pelvis forward, causing low-back compression, especially if the chair lacks a back or lumbar cushion to lean into and if the abdominals are less toned. Sit way back in the chair to take advantage of the full amount of support of the backrest and seat. Breathe and widen your body to expand your lungs. Enjoy the feeling of steadiness and firmness as you are supported. Be aware of any tendency to sag into your scoliosis posture when tired. Try a kneeling chair.

**Sitting at a desk**: Use a footrest to keep your pelvis in neutral and prevent your lumbar spine from becoming compressed by the pelvis tipping forward. Be sure to have lumbar support. I like Obus Forme backrests because the lumbar cushion is the right size for me and its position is adjustable. Be sure to take regular stretch and water breaks in order to stay fresh, hydrated, energized and limber. I use a timer. Position your chair so the angle of your hips is ninety degrees and the same goes for your elbows and knees. I want to feel aligned, complete and satisfied at theend of my workday rather than depleted, tired and crumpled up. Taking the time to be set up properly makes a world of difference.

Consider stand-up desk options or alternating between sitting and standing. How do you feel in each position?

Smile, breathe and go slowly. - Thich Nhat Hanh



**Journaling**: How do you like being fluid? When you are "in the flow", what do you notice about your mood? When you are going downstream rather than fighting a current upstream? How does it feel? What is your state of mind?

What does neutral pelvis feel like to you? Does it feel balanced? Do you notice any shifts or openings with these exercises? If so, where in your body do you feel them? Which particular movement was responsible for the opening? Did any of the explorations in this chapter lead to insights or new learnings about your body? Of what are you now aware?

Write your responses here:



**Going further**: How do you feel when you've had 10 glasses of water a day? Practise this for one week, finding creative ways to remind yourself so you get into the habit. Does it help to have one beside your workstation? What about on the kitchen counter? Setting a timer? Do you notice a shift in energy levels? Are your thirst cues changing? How do your muscles feel in particular? Do you notice any changes in your skin?

Write your responses here:





## Chapter 3 - Core Strength and Support: Fire Element. Navel

The navel is considered the literal and metaphorical centre of our bodies in many Eastern systems. It is the source of our original vital connection to our mothers, the place from where we drew nourishment. The rotated rib cage and vertebrae of scoliosis can create excess pressure on organs in this region such as the liver and the kidneys. An uneven pelvis can put pressure on the digestive and eliminative systems. These are sometimes looked upon as 'fiery' organs and systems, since they transform food into the building blocks of life and discard waste, similar to how a fire reduces matter to its essential elements. Uneven and unusual pressure caused by the structural effects of scoliosis can lead to compromised organ function and, in extreme cases, severe impairment of vital systems.

With a scoliosis structure, ligaments, tendons and muscles are compressed, overstretched and pulled away from their natural positions. This can create tension, constriction and pain. The tight and weak muscles vary from person to person depending on their curvature and compensatory pattern; however, general trends are apparent. For example, when one hip is raised, the back muscles on that side of the body between the bottom of the rib cage and top of the pelvis can become strained and weakened. Typically, the hip flexor muscles will also be tight and weak. Combined with a sedentary lifestyle, the result can be weak core muscles and tight hip muscles resulting in poor posture, excessive lordosis (swayback), collapsed chests, hunched shoulders, constipation, compromised breathing, low energy and strained backs.

I experienced many of the symptoms mentioned above before I established a regular yoga practice. When I make the effort to include regular core strengthening exercises, I feel more solid, strong, even and supported. I also experience less back pain, which is a great motivator to keep up these exercises. My personal experience with compromised organ function resides in the intestines. With a lumbar curve, strained sacral ligaments and reduced space in the right pelvic area, my sense is that these factors contribute to my experience of difficult elimination. One of my health practitioners recently confirmed that the connective tissue is pulling my pelvic organs and muscles from right to left, the same direction as my lumbar curve. This is related to compression of the colon and elimination issues.



My nutrition teacher, Darko Prce, used to say that the digestive and eliminative organ systems are "packed in tight like a Japanese car engine. No room for error." The compression effect of scoliosis interferes with this intricate packaging, with widespread results.

**Note**: There are nutritional and lifestyle changes I made that dramatically improved these systems. These topics are beyond the scope of this manual. Check <a href="https://www.yogakat.ca">www.yogakat.ca</a> for updates on other materials addressing these areas.

Toned core muscles help combat the tendency for flexible people to pop their rib cage forward. This action of popping forward drops the bottom back rib cage inwards, which can create unnecessary pressure. The preferred action is to lift the rib cage evenly as if it were a bucket with handles.

Strengthening your core stabilizers, i.e., the abdominal, hip and back muscles of the core area, is the key to decreasing an excessive lumbar curve, establishing aligned posture and reducing back pain. One of these deeper muscles is called the transverse abdominus or TA for short. It is shaped like a wrestling champion's belt or corset and it wraps around the torso.

## **Locating Your Transverse Abdominus Muscle (TA)**

**Easy method**: Cough with your hands on your lower belly. Sense the contracting action of the deeper layer of muscles, the TA.

**To engage this muscle**: Lying down, bend your knees and place your feet flat on the floor. Practice gentle, small, rocking motions of the pelvis, tilting forward and back to feel the deep abdominal muscles engage and your lumbar spine lengthen. To feel this more strongly, draw a line from the outer hip creases towards your midline and imagine strings drawing together to this point. To feel this even more strongly, lift your lower legs parallel to the floor with your knees bent at a 90-degree angle. Place your hands on your knees and try to push your legs away from you while resisting this pressure with your legs. You will feel the transverse abdominus, as well as some back muscles and perhaps others. See if you can soften around this action. Stay with the flow of your breath. These muscles help keep your pelvis in neutral alignment and your lumbar spine in its natural curve, thus avoiding compression, tightness and pain.



Now we can build on this foundation of core awareness to develop core strength and support.

**Building a sense of support:** Lie down on your back. Have a padded or layered mat beneath you. Have a pillow for your head, if that's comfortable. One option is to bend your knees, place your feet on the floor and allow the knees to fall together. Take a few, slow, conscious breaths, settling into the support of the floor. Find neutral pelvis. See Chapter 2 for instructions. Now roll and tuck your shoulder blades back and down the spine one at a time. Scan your back body, starting at the root of the pelvis, noticing which areas are in contact with the floor and which are not. Compare right and left sides of the back torso. Place rolled-up washcloths or eye pillows in the gaps or caves to allow both sides of your torso to be evenly supported. For example, if you have a space under your upper right shoulder blade, place a rolled-up washcloth there, adjusting the height and size of it until your rib cage and shoulder blades feel even. You may also need one under the left lumbar spine, perhaps of a different shape. Rest here for 20 breaths or so, allowing your body to embrace the supports. Feel fully what it's like to be supported.



Resting and feeling supported



Step 1



Step 2







Step 3 Step 4

**Breath practice**: This breath is sometimes called Durga Breath or Three-part Breath. The Hindu Goddess Durga is a form of Shakti (cosmic energy), worshipped for her gracious as well as her terrifying aspect. Mother of the Universe, she represents the infinite power of the universe and is a symbol of female dynamism. Breathe that power in and allow it to join with your own personal power.

**Step 1.** Start with your hands on your lower belly, near the belly button. Inhale through the nose, filling your belly and feeling your hands rise. Exhale through the nose and feel your hands fall. Sense the breath expansion from the inside as well as on the outside with your hands. Does your lower back expand equally on both sides? Repeat five times.

**Step 2.** Move your hands to the sides of your rib cage. Inhale through your nose, directing the breath primarily into the muscles between your ribs, expanding in all directions as if your lungs are two balloons. Feel them contract as you exhale through the nose. Notice how it feels. Do your ribs expand equally on both sides? Repeat five times.

**Step 3.** Place your hands on your upper chest, below your collarbones. Focus your breath here, inflating the entire heart and shoulder girdle areas both front, back and sides. Notice how it feels. Repeat five times.

**Step 4.** Place one hand on your lower belly and keep one hand on your upper chest. Breathe into the lower belly first, then the rib cage, then the chest, filling all three parts as though you were filling a pitcher of water. Notice how it feels. Exhale smoothly for the entire breath. Repeat five times.



Joining all three parts seamlessly with deep even inhalations and exhalations is a powerful practice anytime, and especially during asana practice. It is particularly useful during restorative and resting postures.

### **Questions for reflection:**

What did you observe?

Which breath did you prefer?

How do you usually breathe?

Were there areas where the breath entered less easily than others?

**Going further**: Focus on sending the breath into any constricted or diminished areas when you practise the full breathing. In daily life, have an intention to allow the breath into compressed areas and remember to breathe fully whenever you can.





## The Yoga Practice and Poses

## Eka Pada Urdhva Prasarita Padasana/Dip Foot in the Lake pose



Resting in neutral pelvis



Pressing the legs to engage core muscles



Maintain neutral pelvis and engaged core



Dip one foot in the lake



Going Further with arms Step 1



Going Further with arms Step 2

Lie on your back with your head supported if it's comfortable. One at a time, bend your knees and place your feet flat on the floor. Find neutral pelvis and ensure your lower back is in its natural curve away from the floor. Feel your deep core muscles engage by pressing your legs away with your hands and simultaneously drawing the legs towards the chest. Breathe a few breaths here, noticing how it feels and the position of your lower back.

Then rest your hands on your belly. One at a time, bring one leg up so the knee is over the hip and the lower legs are parallel to the floor. With your hands on your belly, feel your breath and your muscles. Inhaling, lower one leg to the floor, keeping it in the 90-degree configuration and pointing your toes. Exhaling, bring it back to the starting position. Inhale, switch and lower the opposite leg. Exhale, bring it back to the starting position. Repeat 8-10 times, alternating legs. Notice that you may feel your lower back muscles working. Hopefully it's the transverse abdominus. If you have weak abdominals, are overarching your back, flattening your back, or you feel a strain in the back, then place a rolled-up towel or other cylindrical item under your lumbar spine. Then you can press your lower back into the prop during the exercise as a temporary measure until you build up your abdominals enough to stabilize this area without the support.

**Going further:** Lift both arms straight up, palms facing each other. Continue with the leg movements as above, adding the action of extending the opposite arm straight up and overhead by the ears. Match this movement with your leg action and your breath. Ensure the pelvis stays in neutral and the lower back ribs are touching the mat. This alternating of arms and legs increases communication between the left and right sides of the brain and the body.

**Posture benefits:** Increases core awareness, strength and stability. Increases leg strength. Shoulder opener (with arms variation).

Continue with postures from Chapter 1 and 2, emphasizing a) full breathing and how comfortable (or not) you are with that. Once it is comfortable and fairly second nature for you to breathe fully then focus on b) breathing into diminished areas.





### **Uttita Trikonasana or Extended Triangle pose**







Trikonasana correct

Trikonasana incorrect

Trikonasana incorrect

From Tadasana, step your left leg back into a long stance, at *least* one leg length back, and turn those toes to about 10 or 11 o'clock depending on the comfort of your knee and openness of your hips. Line up the back toes with the back knee and back hip. Your shoulders are aligned over your hips. Press into all four corners of your feet. The front foot is pointing straight ahead and the centre of that ankle is lined up with that knee and the front hip bone. Engage all the muscles in your legs, especially pulling up on the front of the thighs. Find neutral pelvis. Inhale your arms up to shoulder height and on your next exhale, *hinge towards the wall in front of your front leg from your hips* (NOT your ribs) . Keep the underside of your torso as long as the upper side. This is crucial to gaining the benefit of the pose. Release your right arm down and lengthen it from your shoulder towards your ankle or rest your palm on the seat of a chair or a block on its tallest side. Avoid reaching for the floor as this tends to collapse the underside of the ribcage. Lift your left arm up in line with your shoulder, palm facing the side wall. Keep your neck long; you can turn to look down at your big toe or look up to your left hand. Lengthen through the crown and the tailbone. Breathe fully into the spaces between the ribs. Repeat on the other side.

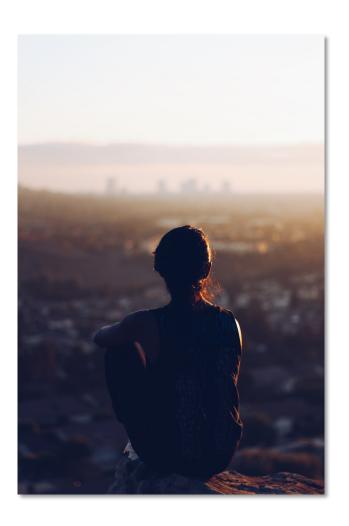
**Helpful hint:** Have your side body facing a mirror so you can see that your torso remains long when you fold.



**Modifications:** Keep your hands on your hips rather than stretching out the arms. If your hips are tight, you may find it helpful to bend your front knee first, then fold from your hips, working towards straightening your front leg. Instead of reaching the top arm up, keep that hand on the back hip and roll the shoulder blade back and down. This is expecially helpful if that shoulder tends to lift up.

**Note**: It is common to collapse the underside of the rib cage in this pose, and that action is counterproductive. In fact, it can aggravate a curve pattern in the spine. See the incorrect alignment pictures above. Facing a mirror helps, as does holding your ribs as you fold sideways to ensure the distance on both sides remains even. Fold only as far as you can while maintaining equal distance on both sides of your torso.

**Posture benefits**: Tones the leg muscles, relieves leg and hip stiffness, relieves backache and neck strains, strengthens the ankles and develops the chest.





### Vasisthasana/Side Plank Pose Variations



Option 1. Side Plank on forearm and knees



Incorrect alignment, sagging under torso



Option 2.



Option 3.



Option 4.



Going further Option 1.



Going further Option 2.



Going further Option 3.

This pose was recently studied and shown to decrease both convex curvatures when practised on the side with the lumbar convex curvature only. For full details on the study, see the *Global Advances in Health and Medicine Journal*:

www.gahmj.com/doi/abs/10.7453/gahmj.2013.064. It is a complex and challenging pose and therefore I have included many variations here. The important thing to emphasize is the ribcage lifting evenly away from the floor so that the lower side muscles of the torso are engaged and the upper ones are relaxed.

**Forearm Plank** Option 1. Being on the forearm is helpful for people with wrist or shoulder challenges. Start by lying on your convex side with knees bent at 90 degrees in line with your hips and resting your head on your lower arm. Use the front or top arm to press into the floor and lift your torso away from the floor, placing your lower elbow directly below your shoulder and your forearm at 90 degrees from your torso, fingers pointing straight ahead. Place your upper hand on your top hip and ensure your hips are perpendicular to the floor and in line with each other. You can look straight ahead here or turn to look up at the ceiling if it is comfortable for your neck. If this is comfortable and easy for you to breathe fully, then proceed to the next variation.

Option 2. Straighten the legs, bend the top knee, plant that foot in front of the hips and press strongly down. Press into the forearm and into the outside edge of the straight leg's foot to lift the entire torso off the floor.

Option 3. Place the foot of the top leg down in front of the bottom foot. Engage all the muscles of the legs, core and lower side of the torso. Breathe and smile!

Option 4. Stack the top leg on top of the bottom leg. Lift the top arm straight out of the shoulder, and look up to that thumb.

**Going further:** Similar variations with the bottom arm straight are options in the absence of wrist or shoulder issues.

Option 1. Start in Downward Facing Dog. Bring both feet together. Place the hand of your convex side in the centre or midline space, one hand span ahead of the other hand. Step the top foot halfway forward, turn the toes outward and strongly press down into that foot. Roll onto the outer edge of the bottom foot. Place the top hand on the top hip.

Option 2. Place the top foot in front of the bottom foot, both legs straight.

Option 3. Stack the feet on top of each other, reach the top arm straight up towards the ceiling and look up. Smile and breathe

**Posture benefits:** Strengthens the wrists (straight-arm version), exercises the legs and tones the lumbar and coccyx regions of the spine.



### **Abdominal Strengthening**





Straight bottom leg option





**Abdominal strengthener**: Lie on your back in Savasana. Support your lower back in its natural curve and keep it there throughout this exercise to get maximum abdominal action. Use a small rolled-up blanket to support the curve if you like. This is generally a small curve and is not necessarily obvious in the photos above. Bend the left knee and place your foot on the floor. Bend the right knee into the chest and breathe a couple of breaths there. Inhale and extend that leg straight up, reaching equally through all four corners of the foot as though you were standing on the ceiling. The knee is straight (or as close as you can be to straight without straining) but not locked. If you cannot get the knee of the raised leg close to straight, bend the bottom leg and place that foot on the floor. This will help prevent strain in the lower back.

Exhale. Inhale. Exhale and lower the leg to 60 degrees from the floor. Pause. Check that your weight is even across the pelvis as the weight tends to tip towards the active leg. Inhale and exhale. Inhale again and exhale, lowering the leg to 30 degrees from the floor. Check your pelvis to ensure it is not rolling to the side. Inhale and exhale.

Inhale again and lower the leg five centimetres (two inches) from the floor. Check the pelvis again for evenness. Inhale and exhale here. Inhale and exhale, resting the leg gently on the floor. Repeat with the other leg, gradually increasing time spent at the 90-, 60- and 30-degree angles and then two inches above the floor as you gain strength.





### Supta Padangusthasana/Reclined Big Toe pose



Step 1. Gentle



Step 1 for those with more open hamstrings



Step 2 Gentle Supta Padangusthasana

**Step 1.** Lie on your back in Savasana with the lower back in its natural curve. Use a support if you need to. Bend your left knee and place it on the floor. Bend your right knee into your chest and breathe a couple of breaths there. Inhale and extend your right leg straight up, reaching equally through all four corners of the foot as though you were standing on the ceiling. The knee is straight (or as close as you can be to straight without straining) but not locked. If you have a belt, you can loop it around the ball of your foot, reaching up as though you could grasp the sides of your foot. Hold one end of the belt in each hand. If you don't have a belt, hold the back of your thigh. Breathe five breaths into the back of the leg, engaging the muscles of the front of the leg.



**Step 2.** Hold both ends of the belt in the right hand. Place the left hand on your left hip bone and press down, keeping it level with the right hip bone Inhale as you open the right leg slightly (about 30-45 degrees) out to the right, *keeping the hips level and core engaged*. Avoid lifting the left hip. Keep the left back thigh pressing down towards the floor. Only go as far as you can with the right leg outward while comfortably maintaining neutral pelvis. Your leg may not move very much at all in the beginning (the picture above is showing the advanced pose). Remember, we are looking for an integrated quality of movement and breath. Breathe five breaths here.

**Step 3.** Engage your core muscles, bring your right leg back up to 90 degrees and breathe. Change sides. Notice any differences between the two sides.

#### Going further:

- a) Have the bottom leg straight and engaged.
- b) Add in an abdominal strengthening exercise of lowering the top leg through 90, 60 and 30 degrees as described above if you feel up to it.

**Posture benefits:** This posture stretches all the leg muscles, opens the hips, relieves sciatica, prevents hernia and increases blood circulation to legs and hips, rejuvenating the nerves.



## **Bharadvajasana/Chair Twist**



To the right: Step 1.



Step 2.



Step 3.



Step 3. Side view



Step 4.



Incorrect: increasing the curve



To the left: One hip off the chair



Step 2.



Checking hip evenness

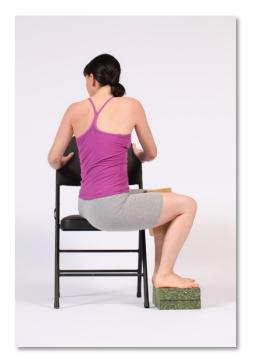


Step 3.





Step 4. Derotating the thoracic curve



Incorrect twisting increasing the curve

### **A Few Notes on Twisting**

There are several key points to keep in mind when twisting with a scoliosis. One posture that can be done safely is chair Bharadvajasana. Named after the great Hindu sage Bharadvaja, this posture can be adapted to feel supportive and help balance the curvature. A standard folding chair works well. Sit sideways with your right thigh facing the back of the chair.

**Step 1.** To the right. Have a block between your legs and support under your feet if they are not level on the ground so your knees are at 90 degrees. Holding the block engages the inner thighs and pelvic floor, thus helping to create core stability. Experiment to see if you feel more or less balanced with the left sitz bone off the edge of the chair. Depending on the position of your pelvis, this can help to even out your base or make an imbalance feel noticeably worse. Find what works for you.

**Step 2.** Inhale, lift both arms up overhead and breathe fully into your rib cage creating expansion and length in the torso.



**Step 3.** Exhale, twist from the left waist for a left convex lumbar curve towards the back of the chair, keeping the length in the spine and spiralling up, i.e., starting with the waist, then chest, then shoulders and then the neck so that you twist from your waist.

**Step 4.** The head turns last. For a right convex thoracic curve, focus on drawing the right side of the torso and rib cage in towards the centre of the body, rather than twisting. Keep the right shoulder blade drawing towards the spine and down the back of the ribs. Only go to the first point of sensation. Push your right palm into the chair back as your left hand gently pulls your body around. These actions derotate the left lumbar curve, whether it's the major curve or a compensating one. Inhale to lengthen, exhale to soften. Remain here for five breaths, noticing any tightness or resistance. To help level the shoulders, bring the shoulder blade down and in towards the spine. Inhale fully and release, coming back to centre.

Change sides so your outer left thigh faces the back of the chair. Experiment with the right sitz bone off the edge of the chair here to see if it feels more or less comfortable. Inhale both arms up, fully expanding the rib cage and lengthening the torso, then twisting from the apex or greatest part of the curvature towards the chair back. This would be the right ribs for right thoracic or right thoracolumbar scoliosis. For left lumbar scoliosis, use the left hand against the back of the chair to press the left lumbar curve in towards the centre of the body rather than letting it go into its left curvature pattern. Focus on the upper rib cage slightly twisting to the left. Take five full breaths, noticing any tightness or resistance.

**Note:** Depending on the curvature pattern, twisting on one side only may be more useful than twisting on both sides. Seek advice if you are unsure. It is very easy to go into the pattern you have as those muscles are used to taking over. Have a partner watch the muscles engage as you twist. They may be able to point out if you are overstretching already stretched muscles or collapsing into the concavity. If so, come out of the twist and re-enter it with new awareness and using other muscles. Focus on *lengthening* rather than twisting.

**Posture benefits:** When practised with awareness of one's particular pattern, this posture makes the back supple, benefits arthritis, increases circulation to the spine and organs, and can help prevent the curvature from increasing.



### Yoga in Everyday Life

Practice engaging in thoughts and activities that fill you up, inspire you to step into your personal power, i.e., your fire and not only accept but *celebrate you as you are*. One of the paradoxes of this practice is that only when we truly embrace how things are, when we fully accept our current situation, when we relax into the posture, do we then experience positive shifts. Getting angry with ourselves or trying to force our bodies doesn't work to change anything. Tightening or straining in one body part to access an opening somewhere else doesn't help either. Being in the pose, being in your body, being present in each situation with open eyes, is the aim of this practice. Without the filters of our history, prejudices, beliefs, opinions, ego strivings and expectations, we embrace what IS, *as it is*, not as we would like it to be.

Whatever form a pose takes for you in the moment, the "seat" that you can sit in experiencing steadiness and sweetness with an easy full breath, that is your pose. Not the one you experienced last time, not the one the instructor demonstrated or you see in this book, not the one the person beside you can do, but the one that YOU are in in this moment. Breathe. Watch. Feel. Allow the sensations, thoughts and waves of emotions to move through you like clouds across the sky without your *habitual reactions* to them. The cultivation of conscious choice rather than old patterned reactions (re-enacting from the past) is the yoga practice, in essence. Each moment, we are choosing how to frame our experience. Examples of how these patterns may appear include:

Sensation: Dry mouth. Thought: I'm thirsty. Habitual reaction: You jump up and stop your practice to get a glass of water. Conscious choice: You wait until you are finished practising to get a drink.

Sensation: Tingling on the scalp. Thought: My head is itchy. Habitual reaction: You come out of the pose to scratch it. Conscious choice: You wait for the itch to subside.

Sensation: Muscle tension in the hips. Thought: I don't like how this feels. Habitual reaction: You give up and come out of the pose. Conscious choice: You observe the breath and adjust the position if necessary.



Your body is your temple, its intelligence is the product of millions of years of evolution and it never lies. Going inside, becoming quiet and intimately acquainted with any resistance to stepping into your personal power is one of the greatest benefits of this practice.

In yoga, one resistance pattern of self-sabotage is called the monkey mind, and it often lies to serve its own purpose. Picture a drunken monkey stung by a bee swinging from tree to tree. This is a metaphor for the distracted mind, hopping from one idea to the next, never settling on anything and without a clear direction. Focused attention in the present, on our bodies, cultivates discernment. This discernment helps to identify what is You and what is simply a distraction from You. Once you are aware of this drunken monkey and the various conversations happening in your mind, you can consciously choose where to operate from. Expect the monkey to get louder before it gets quieter. Your thoughts and beliefs can change, as can your experience, if you allow yourself to experience fully what IS right now. Forcing does not work; allowing and accepting your current circumstances does. Operating from this loving place tells you when it is time to go deeper, to breathe more fully, to modify, to come out of the pose, to rest.

Asanas, done correctly, will feel light and increase freedom in the body.

If they feel heavy, they are incorrect. They go beyond the muscles and ligaments to affect the nervous system and unearth the source of our angst. In this way, we can bring it to the surface, to the light, for examination and dissolution.

- B.K.S. lyengar



### By Kathryn Kusyszyn

## Scoliosis *Undone*

**Journaling:** What did you notice in your body when practising these postures? Were there differences between the two sides of your body? Where? Where and when do you feel most centred in yourself? Where and when do you feel your most powerful? Where and when do you feel you are most aligned with who you are at your core? Who or what supports you in being your True Self? Where and when do you feel most *out* of alignment? Are you willing to replace any unsupportive activities or habits with supportive ones? Are there ways you can support yourself or ask for support in challenging situations?

Write your responses here:	



strength and your ability to support yourself physically?		
Write your responses here:		
<b>Going deeper</b> : Ask yourself: 'Who am I?' every morning and write down what comes. Use stream of consciousness. Don't edit yourself.		

Track your results as you practise the core-strengthening exercise above (or one of your own)

a set number of times per day or per week. How do you feel taking charge of your core



## **Chapter 4 -** Heart and Lungs: Air Element. Compassion in Action

Without the breath, the asanas are empty calisthenics. – attributed to B.K.S. Iyengar

The main physical difference between hatha yoga (which includes the physical yoga postures) and regular stretching exercises is the conscious use of specific breathing techniques. The basic technique used in yoga is to fully, deeply and evenly breathe in and out through the nose keeping the lips closed. This method warms and filters the air and allows for greater control of the breath. Breathing fully and completely increases the amount of oxygen and therefore energy, known as prana in Sanskrit, to enter into the body. Prana means more than just energy; prana encompasses the life force, vitality and our impetus to grow.

The force that through the green fuse drives the flower. – Dylan Thomas

Being able to direct this life force has immense value and confers great health and personal power. Prana eases pain. Conscious breathing (especially with sound) gives the distracted mind a place to focus that is in the present. Being in the present is our place of power. The past is history and the future is a mystery; being here now is the point of action.

Different breathing techniques are used at various stages in yoga practice. In the beginning, the main focus is on increasing the amount of prana entering the system. This has the effect of calming the mind, increasing energy and speeding up healing on multiple levels. Other benefits are regulating the nervous system, toning the diaphragm, clearing blockages and impurities as well as refreshing the mind.

For those with scoliosis, identifying areas where the breath is not flowing freely is key. These areas could be more on one side of the torso than the other, or different pockets on each side. Once these areas are identified, you can begin directing your breath into them. This process will create openness, increase prana and thereby bring healing to those areas. Changing breathing patterns like this can increase nutrition to the cells and help alleviate strain on the lungs and heart caused by the curvature.





By Kathryn Kusyszyn

#### Heart

At the heart of yoga is self-love, honouring all aspects of our being. In Sanskrit, this is called ahimsa. Ahimsa translates as non-harming or kindness: thoughtful consideration of others and ourselves. This attitude of kindness includes the parts of ourselves we may not like or admit to, whether physical or aspects of our personality. For those with scoliosis, it can be challenging to maintain a positive self-image due to looking different from others. Clothes may not fit well, a brace may need to be worn and physical limitations can exclude participation in certain activities. Decreased breath capacity due to rib shifting and compression reduces energy. Tight muscles, strained ligaments and spinal disc compression can lead to chronic pain, which uses up a lot of energy. Lack of mobility and flexibility patterns reinforce muscle tension over time, leading to more tightness and rigidity. All these factors can contribute to feelings of fear, isolation, despondency and hopelessness. Elise Miller shares in her yoga story how she lamented "Why me? Why do I have to suffer with this condition of scoliosis?" and a friend said to her, "Everyone has something." And we all do. We are all imperfectly perfect, I like to say, and always changing as long as we are alive. The question is: can we love ourselves as we are — without creating anxiety around our perceived imperfections? Framing our life experience as a journey towards recognizing our wholeness and acceptance of all that we are, rather than towards an impossible ideal of non-existent perfection, takes the pressure off. This perspective allows for compassion towards ourselves and others.

**Breath practice**: It may be simpler to start with a practice of breathing into one area first before expanding into others. Looking in a mirror, find the midline of the body and discern if there are diminished parts or sides. Choose one diminished area and direct your breath into it. For example, when I look in the mirror, I see that the left side of my rib cage and torso tends to collapse or diminish. It takes up less space than the right side. After sitting at a computer or on the couch for a while, the left side feels even more diminished. Breathing deeply and fully into the entire left side of the rib cage just as much as I breathe into the right allows me to feel immediately more spacious and even. Once this practice is established, I can then move on to fine-tune the direction of the breath into other restricted areas.

Loving-kindness meditation: Prepare yourself by noting who/what voice is actively speaking in your mind and choose to put your mature, loving adult self in the driver's seat. I like the image of a kindly Wise Elder who has unconditional positive regard for all parts of me. Set an intention to be present to yourself and accepting of whatever arises. Sit or lie down in a comfortable position. Be sure you stay awake! Support your head, your legs and everywhere else you like. Place your hands over your heart. Breathe. Feel your heart beating. What would it be like to have unconditional positive regard for yourself? All of you? To fully love, honour and cherish all aspects of your being? What would that feel like?

Note whatever thoughts, sensations or emotions arise. Keep asking these questions until you have a tangible sensation. Allow this sensation to spread throughout your entire body. Bathe yourself in this loving-kindness for a few minutes. Note how it feels. Do you see colours? Hear sounds? Other sensations? Once you are completely engulfed in it for a few minutes (and don't expect this to happen on your first attempt or be easy to maintain), begin to emanate this kindness outside of yourself. Spread it to the people, plants, animals and rocks in your life, both near and far. Especially note how it feels to send loving-kindness to people who challenge you, animals you dislike or fear, etc. Journal your observations, again with unconditional positive regard for yourself.

Your vision will become clear only when you look into your heart. Who looks outside dreams, who looks within, awakens. – Carl Jung





### The Yoga Practice and Poses

### Cat/Marjaryasana and Cow/Bitilasana



Tabletop starting position



Cow/Bitilasana



Cat/Marjaryasana

This is a great sequence for gently warming up and massaging the entire spine.

Begin on your hands and knees in the Tabletop position with a blanket on the mat or under your knees for comfort. Position your knees directly below the hips and your wrists directly below the shoulders. Press the shins and tops of your feet into the floor, spreading your toes wide. Spread your fingers wide and press down with the index fingers and thumb knuckles.

If you have one raised shoulder, it may work better for you to turn that hand and arm slightly outward to help draw that shoulder blade down the back. Press the opposite hand down a bit more firmly to lift that shoulder blade more in line with the other.



Inhale and lengthen your entire spine from crown to tailbone. Exhale, and at the end of the exhale, engage the pelvic floor. Keep it lifted throughout the inhale. Release the pelvic floor as you exhale. At the end of the exhale, engage the pelvic floor again. Repeat three times. When you are ready, inhale and begin to tip your pelvic bowl slightly forward as though releasing its contents into the ground. Lengthen the front of your torso, including your neck, and look *slightly forward, i.e., to the top of your mat.* Do not look up to the ceiling and compress the back of your neck (a common tendency). Keep all sides of your neck long. This is Cow or Bitilasana.

When you reach the top of the inhale, pause and then begin exhaling as you start moving your pelvis in the opposite direction for Cat or Marjaryasana. The tailbone descends, reversing the pelvic bowl angle and the spine follows like a wave. Arch your spine like a cat, and allow your neck and then head to release last, gazing back at your legs. At the end of the exhale, pause, engage the pelvic floor and when you inhale, allow that breath to start the next round of movements. Repeat 8-10 times. Take a rest. Note that in the photos I also show the pose with the toes tucked under. This is an option for people with sensitive knees.

**Posture benefits:** Cat-cow pose increases the flow of spinal fluid to the discs, thereby increasing their nutrition, health and flexibility. It also lengthens the spine and creates internal space with the breath.







### **Supported Child's Pose: Balasana**

I liken this position to curling yourself up into a ball. It's a very useful pose when external stimuli are distracting and you need a "time in." Use a bolster or two, wrap a towel or a blanket around a rolled-up yoga mat to make your own bolster, or pile up enough pillows to create a level area. You may wish to place a blanket on your mat for extra cushioning. Kneel with your big toes touching and knees apart, and bring your bolsters close in towards your body. If your hips do not settle back and down towards your heels, place a cushion under your buttocks for support. Place a folded blanket under your concave area to lift it up, i.e., for a left lumbar convex curve, place the blanket under the front lower right torso as shown in the photo below.

\*Inhale and lift your arms and torso up to the sky. Exhale and extend your body forward as if reaching for the opposite side of the room. Keep your hips grounded and lay your front body down onto the support, resting on one cheek. Relax your shoulders and arms to a position that creates spaciousness in the neck and top of the shoulders. Note whether your body is parallel to the floor and if it is not, build up your bolsters until it is. If you feel any strain in the knees, add rolled-up washcloths behind the knee joint and support your buttocks with cushions. You may want rolled-up cloths under the front of your ankles as well. Relax into the support. Really feel it underneath you. Let your body sink into it; you no longer need to hold yourself up. Breathe into your side ribs and your back body. Feel your clothing moving against your skin with each breath you take. With each exhale, let your hips sink further and further down, as though an anchor is pulling your tailbone heavily. After 10-15 breaths, slowly turn your head to the other side for an equal amount of time.



Supported Child's Pose/Balasana with blanket under concavity



### By Kathryn Kusyszyn



**Modification:** If your knees are not happy in this position, move so your legs are straight out in front of you and pile your bolsters and pillows on top of them. Sit on a cushion or two to lift the pelvis and allow for bending at the hips. Now continue from the \* asterisk point above. Your torso will not be strictly parallel to the floor in this variation.

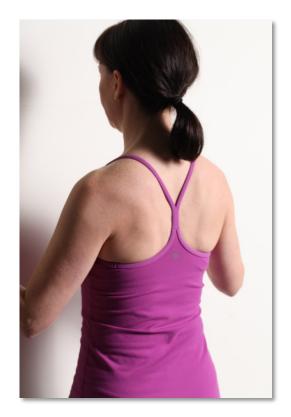
**Posture benefits:** Restorative postures teach us to surrender and allow the flow of thoughts and emotions to move through us while we remain calm and observing. Resting on support connects us to the earth, matter and our bodies and gets us out of the thinking mind, back to the rest, digest and repair mode (parasympathetic nervous system). This pose allows for full back and rib cage breathing, creating internal space. It is also therapeutic for the knees and a great stretch for the buttocks and ankles.

**Rhomboids**: The rhomboids are muscles between the shoulder blades that can become tight and weak with a thoracic curve. These muscles are important to strengthen as they help lift the upper chest and support the neck and head in proper alignment. A forward-leaning skull causes excessive weight and strain on the neck and can lead to complications in the joints.

**Rhomboids activator:** Step 1. Face a wall, standing about four to six inches away from it. Bend your elbows, bringing your hands about shoulder height just outside your shoulder line. Place your fingertips on the wall like crab claws. Step 2. Press into the wall with your fingertips and draw back through your palm, making a suction cup action. Keeping this action, also press your hands towards each other, as if you could compress the wall space between your hands. Feel the muscles between your shoulder blades engage.

**Rhomboids strengthener**: Find a corner and put your back to it about one foot away. Bend your elbows just below shoulder height and press them into each wall as you inhale and push away from the wall. Squeeze your shoulder blades together as you do so. Exhale as you release and let your body go back towards the wall. Repeat 10 times. This opens the chest and engages the rhomboid muscles, which help to stabilize the shoulder blades.

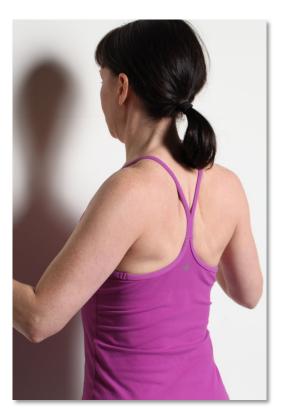




Rhomboids activator Step 1.



Rhomboids stretch

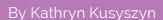


Step 2.

#### **Rhomboids stretch:**

Kneel with a Swiss ball or the seat of a chair or stool in front of you. Place your elbow on the ball and roll the ball so that your elbow is across the body. If using a chair, simply place your elbow on the far side of the chair seat so your elbow is across your body. Press your elbow into the ball/chair to stretch the muscles between the shoulder blades while holding the ball/chair with the other hand. Alternatively, place your other hand behind your back. To increase the stretch, roll the ball with the opposite hand so that the elbow reaches further away from its own shoulder. Hold for 20-30 seconds. Release and repeat on the other side.





**Journaling**: What did you notice in the cat and cow positions? Did your breath move easily into some areas and not others? Note how it felt to be supported in Balasana/Child's pose. Could you allow yourself to rest? Were any parts of your body more ready to rest than others? How did the rhomboids strengthener, stretch and activator exercises feel? Do both sides feel similar when stretching or activating them?

Write your responses here:	



### Yoga in Everyday Life

Practise the full breathing, especially into the diminished side, whenever you can: at your desk, waiting in line, washing the dishes, in the bathtub, etc.

At the end of your morning practice, before a meeting, a job interview or any challenging situation, practice the loving-kindness meditation for a few minutes. Notice what shifts occur and how you feel.

When working at the computer or in any one position for a period of time, be sure to take regular breathing and stretch breaks. Setting a timer is helpful.

**Practice outdoors:** When walking, take deep, full (see Chapter 3 for details) breaths. Whether you practise this on a mountain, in a forest, at the park or on a beach, smell, taste and feel the air in your lungs. Allow yourself to receive this nourishment.

**The power of oil massage**: Oil massage is also known as love therapy. It is lubricating, grounding and nourishing. Oil the hands, arms, chest, and whole body 20 minutes before bathing if you are so inclined. The 20 minutes of allowing the oil to absorb is the perfect time to meditate.

**Going further**: Write a letter to someone who has moved on or left your life. What are all the things you loved about them? What are all the challenges you experienced with them? Is there any unresolved emotional clearing to do? Practise self-empathy first. Forgive yourself for your part in any misunderstanding. Then notice if you have a request of yourself regarding the emotions, feelings and needs that arise.

P.S. I suggest burning rather than sending this letter to release it.





### **Chapter 5 -** Throat: Sound Vibration. Space Element. Self-Expression

Ask not what the world needs. Ask what makes you come alive ... then go do it. Because what the world needs is people who have come alive. – Howard Thurman

With scoliosis, many people have a small, compensating curvature in the neck. This may result in the head and neck not being centred over the body. The head may be tilted because the eyes will adjust the position of the head in order to look horizontally, which creates strain on one side. One correlation of this is skewed proprioception, i.e., a distorted perception of where the body is in space. This makes it difficult to balance and to know which way is up, what is straight, what is level, etc. In addition, a raised shoulder can cause compression on that side of the neck and those tight muscles can create pain.

On the physical level, check how many of these tension-creating habits apply to you:

- Head leaning forward when driving or looking at a screen, sometimes called "chicken neck"
- Cradling the phone between your ear and the top of your shoulder
- Always carrying a purse, bag or backpack on one shoulder
- Side sleeping with only one pillow so your neck is lower than the rest of your spine
- Grinding teeth at night or clenching the jaw
- Hunched or rounded shoulders, sunken chest posture
- A small compensating curve in the neck or the neck may be flat
- Playing an instrument, like a violin, that uses neck and shoulder muscles unevenly
- Playing a sport that uses neck and shoulder muscles unevenly such as racquet sports, baseball, hockey, golf etc.
- Uneven jaw common in scoliosis
- Using tools or the computer mouse always on the same side
- Working at a surface that is too high or too low
- Chewing gum often (excess swallowing can create jaw tension)
- Sitting in chairs without lumbar support or with feet unsupported



I trained myself out of most of these habits and into supportive ones with diligence and compassion. It is a process, and often outside perspectives are helpful in gaining insight. For example, I wasn't aware until my mid-thirties that my jaw is uneven, and I found out with the assistance of a dentist who specializes in the bite. Keep an open mind as you explore your ways of being in the world and as you seek knowledge. Notice how you express yourself with your voice and your body and how this changes with awareness and practice.

The neck houses the throat and is the link between the heart and the head. It is the home of our voice, our unique expression. Our voices are how we are recognized over the phone, in recordings and what we miss when people leave. I treasure a Christmas card my mother sent to me before she died because it has her voice recorded on it and is the only voice recording I have of her.

On the emotional level, feelings or words that are suppressed can become trapped in the throat (and may feel like a lump in the throat) and over time contribute to tension in the neck. In her book, *Heal Your Body*, Louise Hay relates the flexibility of the neck to the ability to see different perspectives. So literally being able to turn your head to see in different directions is a direct reflection of your willingness to see different *view*points or points of view. Rigid stubbornness in one's beliefs and opinions can be reflected in a rigid body. Keeping a "stiff upper lip" is another habit that can translate to tension in the jaw from holding in energy that wants to move.

**Observation practice:** Look in the mirror. Is your chin level? Is your head squarely over your neck? And is your neck evenly placed between your shoulders? Does your lower jaw look even on both sides? Are your shoulders level?

Have someone look at you from the side. Is your head straight above your spine rather than forward or backwards? Are your ears in line with your shoulders? Get to know the current mobility of your neck.

**Neck exercises:** You can do these sitting in Virasana (see Chapter 1) or standing. They are most useful when facing a mirror.

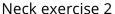
**1.** Inhale and lengthen your crown up, as if a string were pulling the back of your head towards the sky. Exhale and swivel your head *slowly* to the right like an owl, staying in a



straight line. Inhale and exhale back to centre. Inhale to lengthen and exhale to turn your head to the left. Inhale and exhale back to centre. Repeat a few times, noting any differences between the two sides. Is it easier to turn to one side than the other?

- **2.** Inhale and lengthen up through the back of the crown. Exhale and draw your chin in and slightly down, releasing it towards your chest until your first point of sensation is felt as a gentle stretch in the back of the neck. Inhale to lift your chin up, and when it is level, slightly bring the head forward and extend the chin up *a small amount*, again only to your first point of sensation (a gentle stretch). We do not want to compress vertebrae in the back of the neck. Be sure to extend all sides of the neck evenly like a giraffe. Maintain space between the vertebrae in the back of the neck as you lift. Less is more here. Exhale to release, coming to level, then slightly bring your chin back in again and lower it towards your chest. Repeat several times. Note how close or how far your chin is from your chest and any changes in the neck muscles.
- **3.** Inhale and lengthen up through the back of the crown. Exhale, draw your chin in and slightly down. Inhale and move your head to the right, tipping your head to the side. Your right ear ends up above your right shoulder and your eyes are gazing straight ahead at the horizon. Pause and breathe, enjoying the stretch on the left side of the neck. Exhale back to centre, inhale and lengthen the back of the neck, exhale, ensure your chin is drawn in rather than lifted and inhale to the left. Pause, breathe and feel the stretch on the right side of your neck, noting any differences from the left. Exhale back to centre and repeat several times. Be sure to keep your shoulders over your hips. Do not tilt your rib cage as you tilt your head (a common tendency).









Neck exercise 3



#### Going further with exercise 3:

- **a)** When your head is tilted to the right, stretch your left arm away from you and breathe into the left side of the neck. Repeat on the other side. If sitting, your fingertips may be on the floor, if standing, fingertips reaching out towards the floor.
- **b)** When your head is tilted to the right, reach your right arm overhead and place your palm on your left cheek to add weight, gently. Do *not* pull on your head. Repeat on the other side, noticing any differences between the two.
- **c)** Take a few breaths with your head tilted to one side looking at the horizon, and then release your chin down towards your armpit. Feel the stretch on the opposite side of the neck move to muscles further back. Breathe a few breaths here. Repeat on the opposite side.







3 c)

**4**. Swivel your head right and left, drawing an imaginary straight line in the air with your nose. Notice if it is easier to turn to one side over the other. Pause on each side for at least one breath. Repeat 8-10 times.



1 and 4



**Teeth and jaw**: Issues in the teeth and jaw area are common in people with scoliosis. In my case, my upper left and lower left teeth do not meet evenly or at the same time as my right jaw when I bite down. Again a chicken and egg question: does the right side of the bite meet first because the neck muscles are tighter, the right shoulder is lifted, and there's a slight compensating curve in the neck therefore creating compression? Or does the right side of the jaw meet first and this action causes strain, which pulls on the right side neck muscles? Who knows? All I know is, I feel better when I regularly stretch my neck with the exercises above and when I wear an appliance created for me by my dentist.

Did you know that we swallow and close our jaws more than 2,000 times per day and that our jaw muscle is the strongest in our body in terms of ability to exert force on an external object? Bringing awareness to the amount of strain and tension we carry in our jaws can be a powerful act of mindfulness. Notice even now as you read this. Is your jaw tense or relaxed? When the jaw meets unevenly, there is inconsistency in the biofeedback signals being sent. I've found multiple factors that contribute to strain in this area of the body. In my case: an accident, a structural imbalance, overuse of one side of the body, rounded posture, an infection in the gums, a habit of clenching the jaw, grinding the teeth at night ... to name a few. It's a mystery with several key players.

Besides structural considerations, there are nutritional and emotional factors to address. Lack of hydration and mineral imbalances can lead to muscle tension. Emotional withholding is a key action whose effects show up in this area. What am I keeping in that wants to come out? What am I not saying? What does my heart want to express? When am I telling myself to grin and bear it or bite my tongue? Why am I telling myself that's what I need to do? Conversely, there is also over expression or over-sharing and lack of discernment in expression. Are there situations when you say more than you wish you had later? Or when you share personal information with the wrong person? Note any insights as you reflect on these questions for yourself.



### The Yoga Practice and Poses

#### Tadasana/Mountain Pose



Practice Mountain pose facing a mirror with your back to the wall, releasing the chin in and down until you have a gentle stretch in the back of the neck. The back of your head may or may not touch the wall, depending on various factors. However, what we are aiming for here is alignment of the head with the torso.

**With a buddy**: Have someone stand beside you and observe your Tadasana to see if your head lines up with your torso, if your chin is level, and if your ears are over your shoulders.

### Simhasana/Lion pose

This is a wonderful tension reliever and fun for all ages. Rest on your knees on your mat or on a cushion. Your hands are resting on your thighs. Inhale deeply and make fists like a cat retracting its claws. On the exhale, straighten your arms, release your fingers wide, stick your tongue out far and roar, looking up between the eyebrows. Repeat at least twice. As you are exhaling and releasing, choose a direction for what you are letting go. For example, you may wish it to go into the Earth, into the ocean or into a fire to transform the energy. When you do this, you are consciously allowing your waste (that which you no longer need) to proceed to its next stage. Like compost, it will evolve into richness in a different medium. Note any shifts or openings in the throat area.



**Posture benefits:** Simhasana opens the throat, relieves tension in the jaw and cleanses foul breath and the tongue. This pose is recommended for those who stammer.



### Savasana/Corpse Pose



Lie on the floor on your back for this resting pose. Be sure your forehead is slightly above your chin. You may need a rolled-up blanket under your neck to achieve this. Remember to roll and tuck each shoulder blade down and under when you set up.

**With a buddy**: Ask someone to gently lengthen the back of your neck using traction by placing their fingers at the base of your skull and drawing it towards them. Breathe. Have them check that your forehead is even with or slightly higher than your chin from the side.

**Going further**: Prior to Savasana, place a firm and even rolled-up blanket underneath the base of your skull, complimenting the natural curve of your neck, feeling a gentle stretch. The support should be under your neck and the first few vertebrae of your upper back. Have your knees bent and feet flat on the floor. Place your palms on your forehead, fingers pointing towards your crown, and bring your elbows close to each other. Close your eyes and tune into your breath. Notice where in your body your breath travels easily and not so easily. Do you have areas that feel tight, dull, sharp or constricted? Allow the wave of the breath to travel over all areas. Allow yourself to rest on the blanket. After a few breaths, when you start to feel your muscles release, allow your shoulder blades to slide down your back. Repeat this action a few times. Stay on the blanket for up to five minutes, and then rest in the same position without the blanket for a few breaths, feeling all the sensations in that area.

**Journaling**: What do you need to express? Do you have an artistic bent? How are you creative in your everyday life? Creating a meal? A bouquet? A poem? Putting together an outfit? Singing a song? How do you feel when you are unable or unwilling to speak your truth? What happens in your throat? Or in your neck and shoulders? Do you notice shifts in other areas of your body when you hold yourself back or bite your tongue?

Write your responses here:	



### Yoga in Everyday Life

**Yawning:** Yawning releases energy, jaw tension and allows oxygen to enter the body. Even fake yawns do this, so go ahead and have a few.

**Sleeping**: Be sure to have proper pillow support for your neck. This may mean an extra pillow when side sleeping to ensure your neck and back are in a straight line. Experiment with different types and combinations until you find what works for you. Having a pillow between the knees and maybe even down to the ankles keeps the pelvis even and supports a balanced torso when side sleeping.

When sleeping on your back, use a bolster under the knees or lower thighs (check which feels more supportive for you). Also have a neck roll or pillow that supports the natural curve of your neck. The guideline is to have the forehead even with or slightly higher than the chin here as well as when in Savasana. This position allows for gentle stretching of the back of the neck and spaces between the cervical vertebrae. If your head is too high, this will put it in a forward leaning position that can create excess tension in the cervical spine. It may help to have someone else look to see if your forehead is higher than your chin.

Some people find it's most comfortable to sleep on the concave side of their major curve. In other words, if their curve is a convex right thoracic (i.e., it shifts out to the right side in the ribcage), then they prefer to sleep on their left side. During the night, sleeping on their left will cause their curvature to the right to be gently pulled closer to the centre of their body by gravity.

Others find that sleeping with a folded blanket under the convex side of their major curve is more to their liking. For example, with a left lumbar curve, this would mean folding a blanket and placing it under the left side waist of the lower back and sleeping on the left side of the body. The blanket helps to balance out any possible sinking of that part of the body down into the mattress since such sinking would increase the lateral curve due to the pull of gravity.

**Self-massage**: Two tennis balls in a sock placed at the base of the skull on either side of the spine while lying on your back are wonderful gentle tension relievers. The weight of the head provides the pressure down, and the tennis balls create spaciousness in this small area. Rolling your head around a bit here will give you a lovely massage. A friend of mine likes using three tennis balls to massage her neck. Rubber lacrosse balls can be used as well and are firmer. Experiment and see what works for you.



**Singing**: Singing in general and chanting sacred music in particular regulates the breath, opens the heart, brings emotions to the surface, strengthens the diaphragm and releases tension in the neck. Sanskrit, the language of yoga, is based on the effects of its sound vibrations and as such is very potent for healing, especially when chanted in a group. Where and when do you sing? How do you feel when you sing?

**Going further:** Do you have a favourite artistic mode of expression? More than one favourite? Are you actively engaged in artistic expression? If not, I encourage you to give yourself time to play. It could be as simple as a sketch or as elaborate as a symphony. If you have difficulty with inspiration, consider taking your inner artist on an Artist Date. As described by Julia Cameron in *The Artist's Way*, an Artist Date is for the pure joy and pleasure of your inner artist and nothing needs to be produced at the end of it. It could be seeing a film, wandering a gallery, window shopping, building a sand castle, walking in the forest, whatever lights you up and inspires you.

Creative work is not a selfish act or a bid for attention on the part of the actor. It's a gift to the world and every being in it. Don't cheat us of your contribution. Give us what you've got.

– Steven Pressfield, The War of Art: Break Through the Blocks and Win Your Inner Creative Battles





### Chapter 6 - Insight and Intuition: The Third Eye

Ever since I was a little girl, I just *knew* things. Like who was calling on the phone before I picked it up. I thought everyone had this ability. Later, I realized that while everyone may have the capacity for this kind of knowing, some are more in tune with it than others. When I travelled to Australia, I learned that tribes of Aborigines communicated through thought waves. One member of a tribe would send a message and a member of the neighbouring tribe would pick up that message. The highly tuned perception of these tribes allowed them to pick up the information from thin air.

Intuition, or insight into our very nature, is crucial in differentiating and distinguishing truth from fiction, reality from fantasy, me from not-me, and wisdom from ignorance. Have you ever had a gut feeling or first instinct that you wish you had listened to after the fact? This may arise as a peaceful feeling, a quiet, reassuring voice, a vision, a flash of insight or a combination of all of these. This is your inner wisdom making itself available to your conscious mind. Our unconscious minds store every experience we have ever had, every single one. Our intuition scans this enormous databank to find answers for us and then sends us the signal. This is how we know which direction to take.

On a physical level, proprioception, or the internal awareness of a body's position in space, is noticeably different in people with scoliosis. To remain balanced, our eyes need to stay level and for the eyes to remain level, the body unconsciously adjusts its position in space. This adjusted position is perceived to be straight when, in fact, it is not. This is where mirrors can be helpful. The yoga practice is designed to refine the internal perception of the body's orientation in space. This process can cause confusion as we deliberately shift, open and change our bodies. Without conscious effort and attention, our unconscious pattern will continue to reassert itself in order for our eyes to remain level and to stay balanced. Learning a new pattern is a process that takes time, trust, patience and willingness. To be effective, it requires the deliberate cultivation of internal perception, intuitive knowing and receptivity to being in a vulnerable state of ambiguity or not knowing which way is up as one student described it. What feels familiar or right may not be balanced or supportive. This can be challenging to accept, as those patterns have been supportive in the past, and feeling unbalanced on any level is destabilizing and unsustainable in the long term.



Taking the time to meditate, be introspective and observe our internal experience helps. As we track our internal processes, we become better able to accept being in ambiguous or limbic states. Finding centre is a process that is fluid, and our centre point is unfixed. Like standing on a flagpole, when we are in Tadasana, we can cultivate a sense of connection deep into the Earth, a straight axis of support and a gentle swaying in the breeze, simultaneously.

As I explored my physical misalignment, I recognized a spiritual and psychological misalignment as well. I became aware that I often didn't trust myself (my inner knowing) and I acted out of harmony with my core values and beliefs in order to fit in to society, to what I told myself my life "should" be like, to what my parents told me I "should" be doing, what my friends did, etc. It was easier in the short term and more acceptable to those around me to toe the line, be like everyone else and not buck the system. The result was an extreme case of anxiety, self-doubt and self-criticism that led nowhere fun and everywhere painful. Then I came to a place where I decided I could no longer ignore the internal messages I was receiving. Regular yoga practice and the beginnings of a meditation practice were integral to this shift. I knew that continuing in my way of being in the world was leading to disease and ill health, and so I chose to start listening to my intuition and making conscious choices that were in harmony with the real Kathryn. Exploring, discovering and embracing all parts of oneself is one way to describe the spiritual journey.

Recently, I've begun to think of scoliosis as a metaphor for my life. I've struggled to please teachers, employers, parents, boyfriends, husbands, twisting myself into someone I can't be.

I hurt when I do this, because it's not natural. And it never works.

But when I stretch my Self, instead, the results are different. When I'm reaching for my personal goals – to be a good mother, wife, friend and writer – I feel my balance return.

And the sense of relief, as I become more the woman I truly am, is simply grand.

– Linda Wisniewski,

Off Kilter: A Woman's Journey to Peace with Scoliosis, Her Mother, and Her Polish Heritage

A very important tool for accessing the real you or what yogis call the True Self is meditation. As my practice deepened, I became clearer about my actual preferences, needs, wants, abilities and skills, rather than the ones superimposed upon me or that I chose to adopt. I became stronger, more empowered and more comfortable in my own skin.



This is an ongoing process. I still practice loving-kindness meditation and being gentle with myself because the old patterns sometimes return.

Meditation facilitates easier access to my inner wisdom. It increases my ability to trust the times when I am unfocused, feeling out of control or unable to trust the process of life. It allows me patience with living in a place of uncertainty and unknowing, without having to rush for certainty and closure. In short, it cultivates acceptance and surrender, thereby reducing inner conflict, agitation and anxiety. The resulting freed-up time and energy can then be directed towards enjoying and being present in life.





### Patanjali's Yoga Sutra 2

yogaścittavṛitti nirodhaḥ

Translation: Yoga is the ability to direct the mind exclusively towards an object and sustain that direction without any distractions.

Among the ancient texts of yoga teachings, *The Yoga Sutras of Patanjali* rank highly. Patanjali was a grammarian and yoga student who was one of the first people to record the oral tradition of yoga on paper. The above quote is often cited to define yoga. Historically, meditation was the main focus of yoga practice. Hatha (physical) yoga postures were practised to develop a balanced physical body that could easily sit for long periods without being a distraction. With repeated effort, thoughts slow down and gaps between them appear. We develop a greater ability to choose our thoughts consciously and to recognize falsity from truth. We begin to recognize that we are not our thoughts, beliefs and opinions. We are much more. This *more* is called the True Self in yoga, the divine aspect in each living thing.

"Who am I?" is the perennial question asked by all seekers.

"What is my purpose?" This is a question I asked Baba Hari Dass, a monk from India. He responded: "To find your True Self."

The journey to wholeness or embracing your True Self takes courage and vigilance. Once you have made that choice, you can't unlearn what it means to choose the opposite. This decision means recognizing and distancing yourself from the distractions, excuses and old stories that are the artillery of the monkey mind. Removing the self-created obstacles to stepping into your true power is a choice that takes willpower and commitment. Being kind to yourself and recognizing the nature of human frailty and foibles is part of cultivating compassion towards ourselves when we 'fall off the wagon', so to speak. We call it a yoga *practice* for good reason! It's a journey of discovery, with no fixed end point.

*I do yoga to improve my life, not to be perfect. – Elise Browning Miller* 





### The Yoga Practice and Poses

### Repeated from Chapter Four: Balasana / Supported Child's Pose







Adho Mukha Vajrasana/ Downward Facing Hero

I liken this to curling yourself up into a ball. It's a very useful pose when external stimuli are distracting and you need a "time in". Use a bolster or two, or wrap a towel/blanket around a rolled-up yoga mat to make your own bolster; or pile up enough pillows to create a level area. You may wish to place a blanket on your mat for extra cushioning. Kneeling with your big toes touching and knees apart, bring your bolsters close in towards your body.

\* Inhale and lift your arms and torso way up to the sky. Exhale and extend your body forward as if reaching for the opposite side of the room. Lay your front body down onto the support, resting on one cheek. Notice which side you naturally choose and later, when you change sides, notice any differences between the two sides. Relax your shoulders. Note whether your body is parallel to the floor and if not, build up your bolsters until it is. If you feel any strain in the knees, add height under your buttocks and/or a washcloth behind the knee joint. You may want rolled-up cloths under the front of your ankles as well. Rest into the support. Really feel it underneath you. Let your body sink into it; you no longer need to hold yourself up. Breathe into your side ribs and your back body. Feel your shirt moving against your skin with each breath you take. With each exhale, let your hips sink further and further down, as though an anchor is pulling your tailbone heavily. After 10-15 breaths, slowly turn your head to the other side for an equal amount of time.



### Alternative forward bend: Adho Mukha Vajrasana / Downward Facing Hero

Kneel on your heels with your legs a comfortable distance apart. Ensure your shins are not far beyond hip width; you want to feel supported when you fold forward. Inhale, extend your arms upwards, breathing into your rib cage and lengthening your torso. Exhale, fold forward reaching for the opposite wall and come all the way down to the floor. If, when you rest your head, your ears are not lined up with your upper arms, then you may wish to place a cushion or block under your forehead. If your buttocks do not reach comfortably to your heels, you can place a cushion under your buttocks for support. It is important for your muscles to be supported for them to release. Breathe 5-10 breaths here into your back body and your ribs. Feel your shirt move against your skin. Literally putting your head down will help to cool your mind. These postures are helpful at the end of a practice or when getting ready to go to sleep.

**Posture benefits**: These restorative postures are ideal for cultivating inner awareness. Watch your breath travel, watch your thoughts flit around and watch the waves of emotion rise and fall, without engaging with them. Feel the support of the Earth and the props steady you. Each thought, emotion and breath is like a stone thrown into a pond. Each creates a ripple effect. Allowing the ripples to fade away on their own, rather than jumping into the pond or throwing more rocks in to catch the ripples or break them up is the practice. This is what we call nondoing.

Everything feels crazy. But on small patches of earth,
I can see just as much messy mercy and grace as ever. – Anne Lamott



### By Kathryn Kusyszyr

## Scoliosis *Undone*

you listen to your intuition? What keeps you from listening to your intuitive knowing? What are your habitual distractions: TV, food, telephone, Internet? Notice and write down when you indulge in these distractions. Ask yourself what you are avoiding. What does your intuition tell you? Write your responses here:

Journaling: How do you know when your intuition is signalling you? How does it feel when



### Yoga in Everyday Life

Make time for self-reflection. The yogis call this self-study or *svadhyaya*. Do you take time to contemplate, to allow for possibilities to arise, for spontaneity? Daydreaming has a purpose: to allow for the richness below the conscious mind to come up in the imagination. Give yourself permission to play. What if your life could be everything you wanted it to be? What would that look like, feel like, sound like, taste like, smell like? Who would you be with? Where would you live? What would you be doing? Draw or paint a picture of this scene, capturing the key elements.

Understand that the right to choose one's own path is a sacred privilege.

Use it. Dwell in possibility. – Oprah Winfrey

**Physical practice**: Remove clutter of any type, big or small. For example, pick one drawer and clear it out or organize it. For clarity, wash the windows and mirrors in your space. Edit your closet by asking: How do I feel when I wear this? Does this item reflect the person I am becoming?

Your sacred space is where you can find yourself again and again. - Joseph Campbell







### Chapter 7 - Grace and Trust: Spiritual Connection

... just learn to become quiet, still and solitary, and the world will offer itself to you to be unmasked; it has no choice. It will roll in ecstasy at your feet. – Franz Kafka

Most people in the West come to yoga because they are experiencing pain and suffering on some level. We look to the hatha yoga postures to alleviate our discomfort and feel better. In the case of scoliosis, the physical practice certainly has multiple benefits for the body: improving balance and posture, breath capacity, strength, alignment, flexibility and stability. Seen from a broader perspective, these benefits are ancillary to the main practice, which is mindfulness. Being aware of how we are standing, sitting, breathing and thinking has repercussions far beyond standing up straight. The more we pay attention, the more we learn. The deeper we breathe, the more we oxygenate our tissues and the greater capacity we have for health. The more aware we are of our thoughts and habitual reactions, the more opportunities we have to choose a new response or action. As we improve our physical strength, our resilience and confidence grow. In turn, opportunities once passed over are taken and new roads appear.

While some cases of scoliosis are from the result of trauma such as an accident, the majority of cases are idiopathic, meaning their cause is not well understood. We may be tempted to ask, Why me? What did I do to deserve this? The answers will come from your own understanding of grace and connection to Source. Do you believe that you create your life or are you at the mercy of outside factors? Or is it a combination of the two? Since we have free will, I believe the answer lies somewhere in-between. Our free will allows us to choose from moment to moment how we wish to experience our life. While we may not have consciously "chosen" to experience a chronic condition with pain and limitation, we can choose how we deal with our circumstances. Attitude makes all the difference.

Our pain is the breaking of the shell that encloses our understanding. - Kahlil Gibran



To me, yoga practice is about taking charge of one's life in partnership with Spirit. Making conscious choices in what thoughts we think, which words we say, how we spend our time, and who we interact with shapes our world. It's a co-creation between our willpower and grace. Moving from a why me? victim mentality, which reinforces powerlessness, to a mentality of empowerment takes faith and trust. Accepting that the place of empowerment is one of personal responsibility is a crucial turning point in the life of a yogi. We start to see the interconnected layers of all things and how our individual situation has implications much bigger than ourselves.

I can be changed by what happens to me. But I refuse to be reduced by it. – Maya Angelou

Another definition of yoga or union is the individual joining with the universal, referring to consciousness. Not "we" but one. Just like individual waves on the ocean, there is a place where the wave meets the ocean and you cannot tell which is which. There is no separation. Yoga is the practice of coming to this place of recognition that we are all connected in ways that are unseen. Cultivating and honouring this awareness leads to deeper realms of spiritual inquiry with amazing insights. Trust your intuition, your inner knowing and the support of grace to lead you down your heart's path: your fullest expression.

Today you are You, that is truer than true. There is no one alive who is Youer than You.

– Dr. Seuss







**Practice**: Meditation on the breath. Anapanasati (respiration) technique for remaining in the present moment.

Sit with an erect spine. Use as many cushions or supports as you need. Get yourself comfortable so that your body is not a distraction. Virasana (see Chapter 1) is one option, as is sitting with your back against a wall or in a straight-backed chair with lumbar support. Close your eyes and lips, relax your jaw. Bring your awareness to the place below your nostrils on your upper lip. Feel your breath entering and exiting here. Notice if the air feels warm or cool, deep or shallow. Allow the regular breath pattern to establish itself. And observe this breath. Your task is to bring your awareness back to the breath every time your mind wanders. Come back to your breath as if you are gently leading a small child by the hand. Simply remain aware of whether you are inhaling or exhaling. That is all. Start with five minutes and work up to longer times. This is simple but not easy. Practise patience. There is nowhere to go, nothing to do. This practice is one of the best ways for becoming mindful. Notice and become aware of all the habitual thought patterns and distractions the mind creates to avoid having you take charge in this way. Stick to your resolve and remember progress not perfection.

### Yoga in Everyday Life

Spend time in nature every day, communing and contemplating the wonder and grandeur of life. Climb a hill, go to a lake, river or ocean, wander in a forest, rest under a shady tree on a hot day. Being in a garden for five minutes can be profoundly calming and healing. See, sense or feel connections with nature and all those around you. Cultivate respect for every living thing. Notice what shifts in your body as you live in wonder and awe of nature.



**Journaling**: Do free-form stream of consciousness writing for 20 minutes by answering the question: Who am I? Keep your pen moving on the page. Do not stop, even if you are writing gibberish. This is an extremely powerful practice that reaps new insights in direct proportion to the number of times it is used.

As far as we can discern, the sole purpose of human existence is to kindle a light in the darkness of mere being. – Carl Jung

How do you feel about this statement? Do you agree or disagree? What do you think the purpose of human existence is?

Other questions to consider: When do you feel most spiritually connected? Disconnected? What brings you closer to God or Source? What takes you further away? Do you feel that you have influence over what happens in your life?

Write your responses here:	



God never asks about your ability or inability, only about your availability. – Mary Kay Ash

I interpret the above quote as a call for presence to the part of us that is Divine. Are you available for your True Self? Are you expending energy dwelling on the past or being anxious about the future? Are you listening, truly, deeply listening? The choice is yours, in each moment.





### CREATING A SUSTAINABLE HOME PRACTICE

### Set yourself up for success by:

- Designating a sacred space. The energy in this space will change as you focus on it.
- Designating a sacred time. Turn off all distractions, close the door, ensure everyone else knows (including pets) that you are not to be disturbed.
- Dedicating the same time every day. Rhythm and structure may shift slightly with the seasons. However, a regular practice is more likely to be followed when it is integrated into your daily routine. Earlier is better, in my experience.
- Being accountable to someone. Have a buddy that you text or check in with.
- Having a journal to note observations and what you practised. Some questions to ponder for asanas:
  - Where do you feel the most intensity? What shifted from beginning to end of the posture? Where are you strong? Where are you holding tension?
  - For breathwork: Note in your journal your level of energy on a scale from 1-10 before and afterwards. Note sensations.
  - For meditation: Note stress level or blood pressure if you want to get technical on a scale of 1-10 before and afterwards. Note if there were repetitive thoughts or themes. Note areas of discomfort in the body. Note what avoidance strategies your mind came up with and offer yourself love and compassion.
- Making it doable. Keep it simple and rewarding so that you will actually do it. Do not, for example, plan on 2.5 hours of complicated practices at sunrise every morning forever and ever. Perhaps three postures and 5-10 minutes meditating in Savasana is enough to begin with.
- Taking a rest day.
- Being sure to take Savasana, ideally for a third of the entire practice time. This is your
  dessert and integration time. It is crucial for a balanced body, mind and spirit.
- Rewarding yourself. Remember it takes 30 days to form a new habit, on average.





### Elements of a complete practice:

- Intention setting
- Forward bend or flexion of the spine
- Back bend or extension of the spine
- Side or lateral bending of the spine
- Twisting in both directions of the spine (ideally both an upper body and a lower body twist)
- Balancing posture (may be one of the above)
- Inversion where the head is below the heart or hips are above the head (may be combined with one of the above, i.e., Downward Dog is both a forward bend and an inversion)
- Savasana or Corpse pose

### Tips:

Have a balance of active and passive postures. Adapt to changing conditions in your body, the seasons and your environment. Ensure you stick with one routine for at least three months before making major alterations to it, especially with pranayama (breathwork).

For more detailed instructions, consult your teacher.





### **HOME PRACTICE SEQUENCES**

Note that these are suggested sequences only. Your practice is as unique as you are and will be dynamic. If all you have time for is three poses a day, make those poses count by being as mindful as you possibly can be. Working with a qualified yoga instructor or yoga therapist one-on-one is helpful. Attending therapeutic classes provides the support of community. If neither of these are available to you, contact me for an online session. Ultimately, cultivating your relationship with your inner teacher, your inner wisdom, is ideal.

### Twenty-minute Morning Practice

Establish Yogic Breath and Intention

- 1. Mountain pose/Tadasana
- 2. Arm lifts
- Cat/Cow Marjaryasana/ Bitilasana
- Puppy or Downward
   Facing Dog/Adho Mukha
   Svanasana.
- 5. Mountain pose/Tadasana
- 6. Triangle Trikonasana
- 7. Side Plank/Vasisthasana
- Warrior A/Virabhadrasana
- 9. Child's pose/Balasana
- 10. Chair

Twist/Bharadvajrasana

Corpse pose/Savasana or Constructive rest

## **Thirty-minute Morning Practice**

Establish Yogic Breath and Intention

- 1. Lion pose/Simhasana
- 2. Arm lifts
- Cat/Cow Marjaryasana/ Bitilasana
- 4. Sunbird/Surya Churya
- 5. Puppy
- 6. Downward Dog/Adho Mukha Svanasana
- 7. Mountain pose/Tadasana
- 8. Side stretches
- 9. Triangle/Trikonasana
- 10. Side Plank/Vasisthasana
- 11. Wide-Legged ForwardBend/PrasaritaPadottanasana
- 12. Warrior A/ Virabhadrasana A
- 13. Child's pose/Balasana
- 14. Chair Twist/Bharadvajrasan
- Corpse pose/Savasana or Constructive rest

### Twenty-minute Evening Practice

Establish Yogic Breath and Intention

- 1. Hero pose/Virasana
- 2. Neck stretches
- 3. Cat/Cow/Marjaryasana/Bitila sana
- 4. Puppy
- 5. Downward Dog/Adho Mukha Svanasana
- 6. Child's pose/Balasana
- 7. Legs up the Wall/Viparita Karani
- 8. Eye of the Needle/Sucirandhrasana
- Reclined Big Toe pose/Supta Padangusthasana
- Corpse pose/Savasana or Constructive rest



### **GLOSSARY**

Cervical: neck portion of the spine; consists of seven vertebrae

**Convex:** a curve that is like the outside of a ball

Concave: a curve that is hollow, or cave-like, or the inside curve of a ball

Idiopathic: no known cause

Lumbar: the lower back portion of the spine; consists of five vertebrae

**Thoracic:** the mid-back portion of the spine; consists of 12 vertebrae and the ribs are

attached

Functional scoliosis: scoliosis in which only the muscles are affected

Structural scoliosis: scoliosis that affects the muscles and bones





### **BIBLIOGRAPHY**

"Aboriginal Telepathy". The Argus. August 6, 1931, 5.

http://trove.nla.gov.au/ndp/del/article/4400765

Anderson, S. *The Journey from Abandonment to Healing*. New York: Berkeley Publishing Group, 2000.

Atreya. Secrets of Ayurvedic Massage. Twin Lakes: Lotus Press, 2000.

Balaskas, J. Preparing for Birth with Yoga. Rockport: Element Books Ltd., 1994.

Cameron, J. The Artist's Way. New York: Jeremy P. Tarcher/Putnam, 1992.

*Hatha Yoga Pradipika,* Trans. Pancham Sinh. Munshirm Manoharlal Publishers Pvt. Ltd.; 5th edition, 1997.

Hay, L. You Can Heal Your Life. Carlsbad: Hay House Inc., 1987.

lyengar, B.K.S. Light on Yoga. London: HarperCollins, 2009.

Koch, L. Core Awareness North Atlantic Books, Revised edition. 2012.

Lau, K. DC. *Your Plan for Natural Scoliosis Prevention and Treatment*. Singapore: Health in Your Hands Pte Ltd., 2011.

Miller, E. B. Yoga for Scoliosis. DVD. Palo Alto: Shanti Productions. 2003.

Rosenberg, Marshall. Nonviolent Communication. Encinitas: Puddledancer Press, 2003.

Schatz, M. P. MD. Back Care Basics. Berkeley: Rodmell Press, 1992.

Tiwari, M. Secrets of Ayurvedic Healing. Twin Lakes: Lotus Press, 1995.

www.yogajournal.com



### **Credits**

All my teachers, students, clients and

colleagues, past, present and future.

My family

Carolyn Bateman, Chief Editor

Genevieve Stonebridge

Shannon Lynch

Kashi Richardson

Sharada Filkow

Sister Eileen Curteis

Nikki Manzie

Erica Fritch

Jannine Murray

Johanna Peters

Elena Giordano

Julie Lerner Schmit

Elise Browning Miller

Elizabeth Peckham

Marie Bozek

Martha Carter

Scott Larke

Clark Konczak

Elisa Krovblit

Fabrizio Alberico

Marion Blank

Stephanie James

Cover design: Elle Designs and

**Ecover Designs** 

Scoliosis drawings: Gary Leung





### **RESOURCES**

Elise Browning Miller, www.yogaforscoliosis.com
The Scoliosis Association of Canada, http://www.scoliosiscanada.org/
Twisted Outreach Project, www.twistedoutreachproject.com

### **Chapter 1. Exercises for strengthening fallen arches**

- 1. Sitting down in a chair, pick up a washcloth from the floor with the toes and release it. Repeat several times.
- 2. For more challenge, pick up a pencil from a jar with the toes and move it to another jar. Move it back with the toes. Repeat several times, then switch feet.
- 3. Walking backwards, land on the ball of the foot with the toes facing directly forward. Keeping the ball of the foot facing forward, curve the inner arch of the foot towards the midline of the body as though carving into a mound of sand. Do this for about 10 paces three times and repeat three times a day until you see results.





### **Appendix: Foot Massage Routine**

Foot massage routine to ground and nurture. Adapted from Maya Tiwari. Early morning or before bed is best. Before bed as a winding-down part of your routine will help to deepen sleep and calm the mind.

Wash hands, face and feet and put on a fresh robe. Have towels that you are prepared to sacrifice as they will get oily. Use ¼ cup of sesame oil (heavy and warming) or olive oil (less heating and neutral) and place it next to you. Almond and sunflower oil are other options. I warm the oil on gentle heat in a pot on the stove for a few minutes only. Note that oil heats and cools quickly. Sit comfortably. Pause and contemplate for a few minutes to prepare. When calm and ready, rest right ankle on left leg and pour a small amount of oil on the foot. Using both hands, clasp the foot, the thumbs resting on the bottom of the foot and the fingers resting on the top.

Crimp the fingers and press firmly into the centre top line of the foot, beginning at the ankle and moving along the foot to the middle toe. At the same time, press the thumbs into the bottom of the foot, beginning at the heel and moving along the inner and outer edges of the bottom of the foot. Synchronize both hands so that they move at the same pace, the top and bottom of the foot being massaged simultaneously.

Continue this procedure for five minutes, always starting from the heel and working the fingers and thumbs towards the toes, repeating the process until the entire outer surface of the foot has been thoroughly massaged. Release the foot and move to the toes. Beginning with the big toe, press on both sides of the nail, using the thumb and index finger of your left hand. Gently pull the toe and then firmly massage the underside, starting from the root. Rubbing this point stimulates the brain and helps the sight.

After a time, proceed to the index toe and repeat the same procedure. This toe releases energy to the lungs.

Continue in this way, toe by toe. The entire massage may be repeated once more. Before changing feet, press your thumb firmly into the four acupressure points on the foot: centre of the sole, under the big toe mound, in the webbing between big and second toe and on the top of the sole of the heel near the instep. I press these points three times or so and sometimes move in small circles in both directions on these points. They may feel zingy or intense—just massage to your comfort level. The intention is not to create suffering but to relieve pressure caused by obstacles.

Repeat the entire procedure on the left foot. After massaging both feet, gently rub off any remaining oil. Wash your hands and contemplate for a few minutes. Prepare to greet the day with joy or succumb to a peaceful night's rest.





### **Posture and Practice Index**

Abdominal Strengthener	64, 65
Adho Mukha Svanasana/Downward Facing Dog	35
Adho Mukha Vajrasana/Downward Facing Hero	100, 101
Anapanasati Breath Meditation	106
Anjaneyasana/Low lunge	38, 39
Balasana/Child's Pose	81, 82, 100
Bharadvajrasana - Seated Chair Twist	68, 69, 70, 71
Cat/Marjarysasana	79, 80
Cow/Bitiliasana	79, 80
Dandasana/Staff	22, 32
Eka Pada Urdva Prasarita Padasana/Dip one Foot in the Lake	57, 58
Loving Kindness Meditation	78
Neck Exercises	88, 89
Pelvic Floor Exercises	31, 34, 40, 49, 70, 80
Piriformis Stretch	46, 47
Prasarita Padottanasana/Wide-legged Forward Bend	36
Puppy	33, 34
Rhomboids Activator	82
Rhomboids Stretch	83
Savasana/Corpse	24, 92
Sucindarasana/Eye of the Needle	45, 46, 47
Supported Rest	54
Supta Padangusthasana/Reclined Big Toe Pose	66, 67
Simhasana/Lion	91
Surya Churya/Sunbird	37
Tabletop	32, 79
Tadasana/Mountain	18, 32, 91
Trikonasana/Triangle	59, 60
Vasisthasana/Side Plank	61, 62, 63
Viparita Karani/Legs up the Wall	43, 44
Virabhadrasana / Warrior A Lunge	38, 39, 40, 41, 42
Virasana/Hero	21, 32



### **About the Author**



Kathryn started yoga classes at age 18 to help alleviate anxiety and back pain. What she found was an approach to life that honoured body, mind and spirit equally.

Her mission as a yoga teacher and health professional is to create a sanctuary where individuals can access their inner wisdom and feel empowered to act on it.

In 2001 she completed a 350-hour teacher training program and started teaching classes. From her own practice and observing others, she found that the attention paid to alignment in the lyengar method as taught by Elise Miller made the practice more targeted and effective.

Kathryn is also certified in Traditional Thai Massage, Ayurvedic Massage, Holistic Nutrition and Reiki. Scoliosis Undone is her first book.

To learn more about Kathryn Kusyszyn and her services and classes, please visit her website:

www.yogakat.ca

