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HERE'S YOUR GUIDE TO ASSESSING
AND IMPROVING YOUR POSTURE

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Your mom was right: You'll look better and feel great if you stop slouching and stand up straight. Yoga can help you do just that – in a way that honors your spine's natural curves.

By Julie Gudmestad / Photography by Trinette Reed

Posture Principles

To create great alignment for your body, I recommend a three-part strategy. First, build awareness by assessing your posture and your lifestyle. Next, create a yoga prescription for your specific postural problem by incorporating a few simple poses into your regular practice. Finally, take your newly developed awareness of your alignment issues and apply it throughout your daily life.

Before tackling the how-tos, however, it's important to understand the anatomy of proper posture. Whether you're sitting or standing, your spine has natural curves that should be maintained. They are a mild forward curve (like a gentle backbend) in the neck and lower back, and a mild backward curve in the upper back and midback. As you practice yoga, you learn to maintain these optimal curves in many standing poses, in most sitting poses, and in inversions like Sirsasana (Headstand) and Adho Mukha Vrksasana (Handstand).

If any of these curves are habitually flattened or overly curved, abnormal posture can get locked into the body. A wide variety of abnormal curves can occur, including a flat neck and a flat lower back, but we'll focus on the two most common problems: a hunched upper back (known as excessive kyphosis), which is usually linked with a jutting forward of the head (known as forward head) and, at the other end of the spectrum, an extreme sway in the lower back (known as excessive lordosis). These extreme curves contribute to many of the painful problems – muscle strain, joint pain, and disk problems, to name a few – that physical therapists and other health care practitioners treat every day.

Maintaining just the right curves is only part of the equation, however; to function efficiently, your skeletal structure also needs to be aligned vertically. That means when you're standing, your ears should be over your shoulders, your shoulders over your hips, and your hips over your knees and ankles. When any body part falls out of that vertical line, the adjacent support muscles will feel the strain. For example, years of having a forward head will cause the muscles of the upper back and neck to become tired and achy from holding up the weight of the head against the pull of gravity.

So, while you needn't nag yourself about slouching, you may discover that

the simple act of straightening up can change your life. If you train your body to maintain the normal spinal curves and keep your posture vertical and spacious when you're standing or sitting upright, you're likely to feel better all over. And that's something to write home about.

Slump or Sway? The Assessment

The first step toward changing a bad habit is to recognize that you have a problem, right? So, let's start your posture-improvement program by building awareness of your postural pitfalls. You can assess your spinal curves by standing against a doorjamb. When you stand with your heels very near the jamb, you should have contact at your sacrum (the upside-down triangular-shape bone a few inches above your tailbone), the middle and upper back (thoracic spine), and the back of your head. With normal spinal curves, your lower back (lumbar spine) and neck (cervical spine) won't touch – there should be about an inch of space between the doorjamb and the vertebrae of your lower back. But if you can slide your whole hand into the space, you have a swayback, or excessive lordosis.

Standing at the doorjamb also provides valuable feedback about kyphosis and forward head. If you notice that your chin lifts up when you place the back of your head against the jamb, you probably have excessive kyphosis in your thoracic spine. The combination of excessive kyphosis and forward head is common, and it puts significant strain on your neck muscles and intervertebral disks.

It's also worth noting that you could have a combination of postural problems, such as an increased kyphosis with an excessive lordosis. In that case, it's usually best to focus on creating proper alignment in the pelvis and lower back first, and then work your way up the spine.

After your assessment, take a close look at the furniture you use every day at work, home, school – anyplace you spend a significant amount of time. Supportive beds and chairs and a carefully set-up desk and computer workstation will facilitate good alignment. On the other hand, a saggy bed, poorly designed chair, and keyboard at the wrong height will set the stage for degenerating posture. Make the best furniture choices you can to support your journey to better spinal health. (See “Furniture Dos and Don'ts,” page 8, for more furniture tips.)

Create Your Yoga Rx

While sitting is not the root of all evil, it does contribute to both kyphosis and lordosis. Most people unwittingly tip their head forward and down while working – to see the papers on their desk or read what's on their computer screen. Often the arms also pull forward to reach the keyboard. It's easy to see how this contributes to a sagging, droopy posture.

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GOT A HUNCH? If you have healthy spinal curves, there will be contact at your sacrum, upper back, and head when you stand with your heels close to a doorjamb. The photo at left shows an example of excessive kyphosis. In a case like this, don't jam your head against the wall as the model demonstrates. Instead, keep the gaze at eye level and lift the chest. See next page for suggested asanas.

When you hunch forward at your desk, the chest collapses and compresses the heart, lungs, and diaphragm. Hunching also strains the back muscles, causing them to overstretch and become weak. If you're collapsed in a kyphosis, the key to breaking the habit is to stretch the muscles of the chest, increase the flexibility of the thoracic spine and ribs, and strengthen and shorten the muscles of the back. Supported backbends (see opposite page for an example) stretch the pectoralis major, so they're an excellent way to open the chest. They also increase the mobility in the stiffest part of the spine – the thoracic.

To strengthen and shorten the muscles that support the midback, practice Salabhasana (Locust Pose) and Bhujangasana (Cobra Pose) (see next page for detailed Bhujangasana instruction). Both are effective strengtheners for the long muscles that run parallel to the spine along with the muscles that help support and position the shoulder blades (the trapezius and rhomboids in particular). In a slumped posture, the shoulder blades usually fall forward toward the chest and hunch up toward the ears. Both Bhujangasana and Salabhasana train the midback to hold the shoulder blades in their normal position, which is down away from the ears and flat against the back ribs.



▲ **BHUJANGASANA (Cobra Pose)** Lying on your stomach, lift your right leg and stretch it away from the hip. Lower it with the kneecap pointing straight down toward the floor. Repeat with the left leg. Draw your tailbone toward your heels so you don't overarch your lower back. With your palms on the floor underneath your shoulders and your elbows squeezing toward your sides, lift your head an inch or two off the floor. Keep your gaze on the floor, at the front of your mat. Open your chest by rolling your shoulder blades down your back. As you continue to coil up into Cobra, move your breastbone forward and up, spread your collarbones, and gaze at the wall in front of you. Don't push much with your hands; instead, keep the pose low and make your back muscles do the strengthening work of lifting your head and chest. Build up your endurance so you can hold the pose for 20 to 30 seconds. Repeat 3 or 4 times.



▲ **SUPPORTED BACKBEND** Roll a blanket or towel lengthwise. Lie back so the blanket goes across your upper back underneath the bottom tips of the shoulder blades, just a few inches below your armpits. The bigger the roll, the bigger the stretch, so if you're stiff, start with a smaller roll. If your neck feels awkward or hyperextends (overarches), place a pillow underneath your head for support. Bend your knees and place your feet flat on the floor. To ensure that the lower back is long, press into the feet and lift the buttocks just enough to slide the buttocks flesh toward the heels. Then actively extend your arms up toward the ceiling with the palms facing each other. Open your arms out to the sides or over your head and breathe. Relax for 2 minutes or more. Lengthen along the side ribs if the arms are overhead, and feel the chest release and open.

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CURVES AHEAD While doing your doorway assessment, if you can easily slide your hand between your lumbar spine and the doorjamb, you have excessive lordosis, or a swayback. If you find that it's easier to reduce the lumbar curve by bending your knees, your hip flexors are probably tight and your abdominals are weak. Bend your knees slightly, and draw your tailbone toward the floor and your back waist toward the doorjamb. Keep your chin level to the ground and breathe deeply as you resist the urge to grip the abdominal muscles. Hold the position for 20 to 30 seconds and repeat 2 or 3 times. See next page for suggested asanas.

Sitting all day can also contribute to serious misalignments in the lower back and pelvis. Prolonged sitting shortens the hip flexors – the muscles (including the iliopsoas, rectus femoris, and tensor fascia lata, to name just a few) that cross the front of the hip. If you sit for many hours every day without stretching your hip flexors regularly, they will gradually lose their normal length, causing the pelvis to tilt forward (known as an anterior tilt of the pelvis) when you're standing. A strong anterior tilt usually causes an excessive lordosis or swayback, which contributes to chronic tightness and pain in the lower back muscles. It can also cause lower back pain by compressing the facet joints, the small joints along each side of the spine where the vertebrae overlap one another. The facet joints weren't designed to bear much weight, and compression can wear away the cartilage lining the joints, causing arthritis. Unfortunately, you may not know that your cartilage is wearing away until, after many years of sitting, standing, and walking with excessive lordosis, you find yourself living with a chronically painful arthritic lower back.

If you fall into the swayback category, focus on lengthening and stretching those tight hip flexors in your yoga practice. Add lunges (see page 7) and Virabhadrasana I (Warrior Pose I) to your daily practice or, at the very least, do



▲ **LUNGE** With your left leg forward and right knee on the floor, interlace your fingers and place them on the left knee, which should be centered over the ankle. Rather than coming into a deep lunge, bring the hips over the back knee. As you do this, reverse the anterior tilt by lifting the front of the pelvis up as you move the tailbone toward the floor. You will feel a deep stretch across the front of the right hip. Push just enough with your arms to help lift your torso but not your shoulders. Keep your breathing smooth and steady as you hold the stretch for 1 to 2 minutes. Then repeat on the other side.



▲ **NAVASANA (Boat Pose) Variation** With your knees bent and feet flat on the floor, sit up on your sitting bones rather than rolling back onto your tailbone. Wrap the hands around the lower legs, placing them on the shins. As you press the shins into the hands, resist in the upper body by lifting the chest and lengthening the spine. Then, keeping the lift, let go of your shins and tip back just enough to balance on your sitting bones with your feet off the floor. When you're ready for more of a challenge, straighten your legs with your toes higher than your eyes, creating a strong V shape with your body. Do this only if you can stay high on the sitting bones with the chest lifted. Hold the pose for 15 to 20 seconds and repeat 2 or 3 times.

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them two or three times per week. You can, of course, include this stretching as part of Sun Salutation, but it's optimal to hold the hip flexors in a stretched position for one to two minutes. Try adding a good long hip flexor stretch later in your practice, when the muscles are warm, and focus on breathing, relaxing, and lengthening the muscles that cross the front of the hip.

Also, practice a posterior tilt by lifting the front pelvis up off the front thigh and drawing your tailbone down toward the floor in lunges or Virabhadrasana I. This action will create space and release compression in the facet joints in your lower back.

In addition to practicing these actions, you can reduce the anterior tilt of the pelvis, support your internal organs, and help reduce the risk of lower back injuries by strengthening the abdominals. Exercises like curl-ups and crunches emphasize the upper abdominals. But if the upper abdominals become overly strong and tight, they can restrict breathing and actually pull down on the rib cage, contributing to an increased kyphosis and flattening the normal curve of the lower back. Instead, practice postures like Navasana (Boat Pose) (see the variation on page 7) and Urdhva Prasarita Padasana (Leg Lifts) to strengthen the lower abdominals, which are most important in supporting the lower back and pelvis.

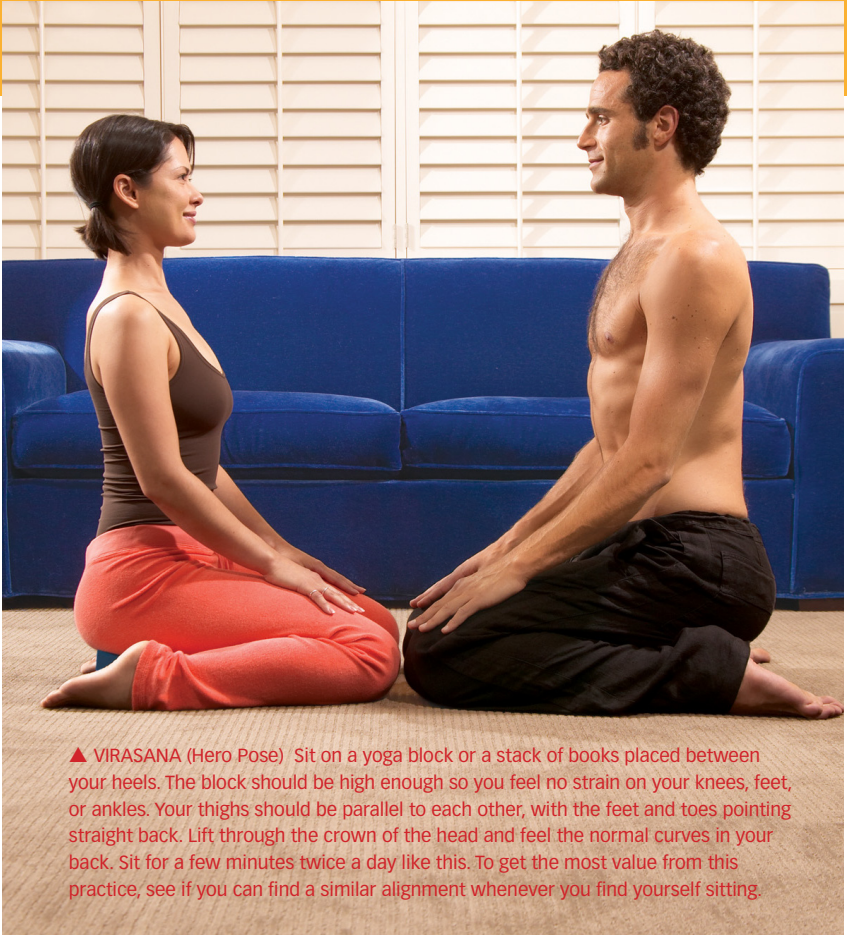
Furniture Dos & Don'ts

With a critical eye, take a look at the furniture you use most often or might buy in the near future.

No matter how fashionable it is, don't bring home a couch with a long seat, which will cause you to slump backward as you search for support. If you already have one, keep plenty of cushions on hand to fill in the space between the back of your hips and the back of the couch. That's true for any type of seat; when the backs of your calves hit the front edge of the seat and there is a gap behind you, fill in the gap so your back is supported and upright.

If possible, try a kneeling chair, which comes closest to Virasana off the floor. With a regular chair, if you're short in stature, use a stool for your feet so they don't dangle in midair and contribute to strain in the lower back. If you're tall and your knees are higher than your hips when you put your feet on the floor, you could easily fall into a backward slump. Solve this problem by raising the chair seat – if it's as high as it will go, sit on a cushion. In a pinch, you can sit toward the front edge of the seat and pull your feet back so the knees are lower than the hips. This shape is similar to that of Virasana.

When you work on a computer, make sure the screen is at a height at which you can look straight ahead or just slightly down at it. Learn to touch type so



▲ VIRASANA (Hero Pose) Sit on a yoga block or a stack of books placed between your heels. The block should be high enough so you feel no strain on your knees, feet, or ankles. Your thighs should be parallel to each other, with the feet and toes pointing straight back. Lift through the crown of the head and feel the normal curves in your back. Sit for a few minutes twice a day like this. To get the most value from this practice, see if you can find a similar alignment whenever you find yourself sitting.

you don't have to look down at the keyboard, and get a book holder or inclined desk to bring reading materials closer to eye level. Set up your keyboard – you might need a keyboard tray – so your forearms are parallel to the floor.

The best sleep positions for most people are on their back or side; sleeping on the stomach is the biggest no-no. (If you have excessive lordosis, sleeping on your stomach will exaggerate it, especially on a bed that's too saggy or soft.) If you sleep on your back, don't increase the forward head habit by piling pillows under your head. It's better to use one down pillow, which conforms to the shape of your head and neck, or a foam pillow formed with neck support and an indentation for the back of your head. If you're lying on your side, be careful not to pull your head forward.

–J.G.