

Healthy Posture

2.5



Lesson Overview

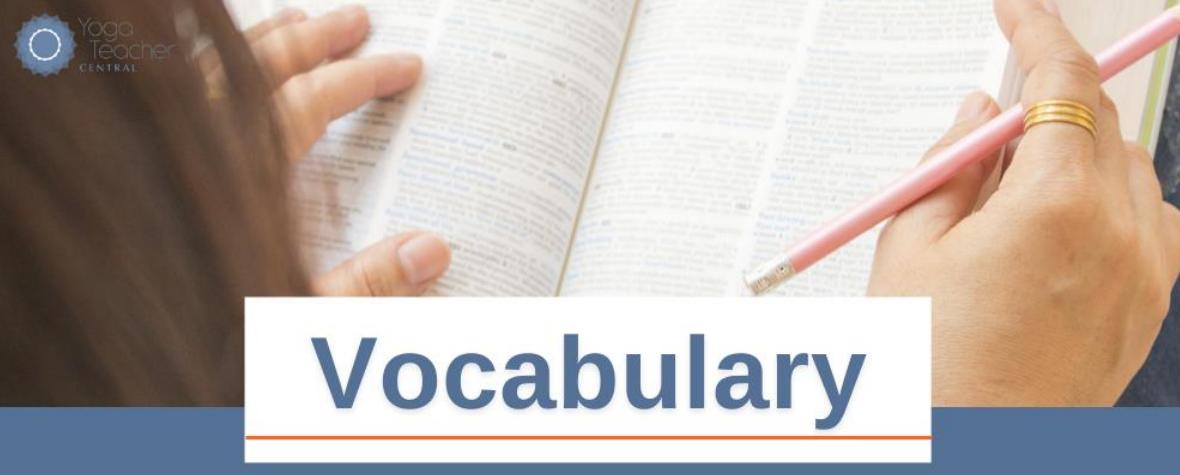
In this lesson, we explore the meaning and implications of healthy posture.

Objective

Learn terminology and considerations related to “anatomical position,” “neutral,” and the attributes and implications of healthy posture.

Description

Define the phrase “anatomical position” and what it means to stand in “neutral. Provide two definitions of “posture” and name the criteria that is often used when identifying healthy posture. Describe why it’s inappropriate to idealize body symmetry. Explain why healthy posture matters and why students may find it difficult to identify a neutral spine. Describe four considerations for pelvic alignment in *Tadasana* (Mountain Pose).



1. **Anatomical Position** – In humans, defined as “standing up straight with the body at rest” (Biology Dictionary)
2. **Healthy Posture** – A natural and comfortable bearing of the body that includes a comfortably neutral spine and promotes healthy internal functioning and muscular efficiency
3. **Neutral Pelvis** – A state of equal hip height, a neutral pelvic tilt, a neutral front-to-back placement and the pelvis is pointing straight ahead
4. **Neutral Spine** – A state in which the spinal curves are not too much or too little for the individual’s healthy norm
5. **Posture** – “An attitude of the body”
6. **Standard Anatomical Position** – Standing up straight and facing forward with the arms by the sides and palms facing forward
7. **Standing in Neutral** – Another way to describe anatomical position; refers to standing with the bones stacked vertically and the two sides of the body displaying symmetry

What is Healthy Posture?

The word “posture” appears to often be used casually and without a common understanding of its definition. Even an article in a yoga magazine that has “posture” in the title vaguely refers to “standing tall” vs. standing “hunched over.” So let’s begin by exploring the definition and attributes of healthy posture.

One definition – on a site’s “medical dictionary” – defines posture as “an attitude of the body.” It goes on to say:

Good posture cannot be defined by a rigid formula; it is usually considered to be the natural and comfortable bearing of the body in normal, healthy persons. This means that in a standing position the body is naturally, but not rigidly, straight, and that in a sitting position the back is comfortably straight. Good standing and sitting posture helps promote normal functioning of the body’s organs and increases the efficiency of the muscles, thereby minimizing fatigue. – [TheFreeDictionary.com](http://www.thefreedictionary.com/posture)

While that definition is fairly helpful, the idea of a “straight” spine tends to be misleading since the spine is naturally curved. A better term may be “neutral.” Thus, we might define healthy standing and sitting posture as:

A natural and comfortable bearing of the body that includes a comfortably neutral spine and promotes healthy internal functioning and muscular efficiency.

The identification of healthy posture often involves these criteria:

1. A neutral spine
2. A neutral pelvis
3. Muscular balance
4. Body symmetry – It’s common to find bodily symmetry as a stated factor in healthy posture and pose alignment. However, please review Body Symmetry vs. Balance below for important considerations.

See much more on these topics below.

Why it Matters



While posture may be discussed in terms of how it affects one's appearance, here we focus on the impact that posture has on healthy functioning.

Healthy posture promotes healthy internal functioning and muscular efficiency.

Fundamental to why yoga works is its use of breath practices and the overall effect on the nervous system and stress. The ability to breathe naturally without constriction is a key to promoting health. Poor posture, however, can lead to poor breathing.

Did you know that your ability to take a deep, full breath is influenced by your posture?... If the muscles that allow your rib cage to expand are tight — due to habitual slouching or other postural problems — your lungs won’t be able to expand to their maximum... And if some of your chest or back muscles are weak, your endurance will be affected... To maintain good posture for optimum respiration, cultivating both the flexibility and strength of your torso muscles is vital. – **Nina Zolotow**

A Neutral Spine



- One aspect of healthy posture is the ability to stand or sit with a “neutral” spine.
- Since the spine is naturally curved, a neutral spine isn’t straight but is instead demonstrated when the curves are not too much or too little for the individual’s healthy norm.
- Biomechanics experts explain that a neutral spine is where it is “most relaxed.”
- However, a person with chronically poor posture and the related muscular imbalances will typically have a difficult time, at first, in identifying this state. This is in part because the student may correlate what feels “comfortable” or “normal” with “relaxed” despite exhibiting poor posture and spinal stress. (Read more in Bernie Clark’s teaching below.)

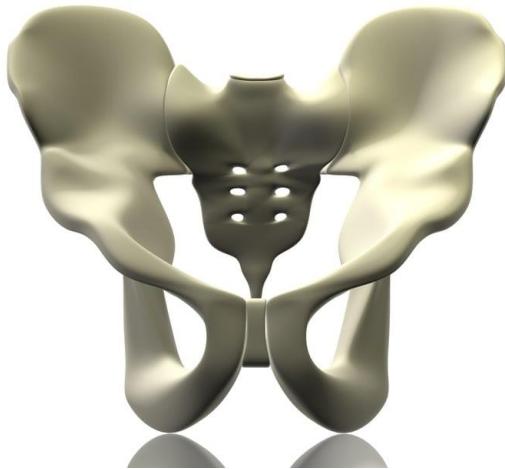
THE CHALLENGE OF IDENTIFYING A NEUTRAL SPINE

When you stand in mountain pose (tadasana), can you find the position for your spine that has the least amount of tension? If so, that is likely your neutral position. Unfortunately, chronically poor posture can also feel relaxed, but there may be a lot of stress seeping into the connective tissues because the muscles have lost their tone. When the muscles are weak, the fascia has to do the job of the muscles. When you pay attention to the tension in your spine, you need to notice not just muscular tension, but also the stresses in your joints and fascia... You may have to experiment—try different postures and check out how each position of your spine feels. Where do you feel free, light, long, yet relaxed? That is probably your neutral position. If this experimentation still doesn’t work, use a mirror or the eyes of a qualified teacher to help you discover your neutral spine. – **Bernie Clark**

See Also

- [Anatomy of the Spine & The Spinal Curves](#)
- [Common Problems in Alignment Cueing for the Spine](#)
- [Tadasana Alignment Practice](#)

A Neutral Pelvis



Roger Cole describes these four aspects of pelvis and hip alignment in *Tadasana*:

1. Equal Hip Height
2. Neutral Pelvic Tilt
3. Neutral Front-to-Back Placement
4. Pelvis Pointing Straight Ahead

See more detail: [Tadasana Alignment Practice](#)

See Also

- [Anatomy of the Spine & The Spinal Curves](#)
- [Anatomy of the Pelvis](#)
- [Common Problems in Alignment Cueing for the Spine](#)
- [Tadasana Alignment Practice](#)

Body Symmetry vs. Balance



- Typically, pose alignment includes finding symmetry between the two sides of the body.
- While **general symmetry is correlated with healthy posture**, Jenni Rawlings lays out the case here why **idealizing symmetry is unsupported by research and by the body itself**, which demonstrates asymmetry of the lungs and other internal organs.

Although an ideal of symmetry seems intuitively valuable in yoga, in reality no strong evidence exists to support this common belief. Countless scientific studies have drawn no link between body asymmetries and pain, dysfunction, and poor health... a look at the inner structure of our body [shows that we] are all asymmetrical on the inside... Our two lungs are innately different from one another in both size and structure... And whereas our heart sits to the left of center, our large liver sits to the right of center... Our diaphragm, our main muscle of respiration, is also asymmetrical! Scientific evidence simply does not support the belief that symmetrical alignment is more ideal than any other alignment... When we idealize the symmetry and “optimal alignment” of a pose like tadasana, we are comparing ourselves to the imaginary, symmetrical, vertically aligned person in the anatomy textbook drawing... simply one arbitrary position that is used as a reference point in the medical field. – Jenni Rawlings

- Instead of symmetry, Rawlings proposes that the objective be balance:

Instead of emphasizing bodily symmetry, a more helpful concept for yoga teachers to focus on is balance... Whereas symmetry is the quality of sameness on both sides, balance is about steadiness of position – like the tree that has adapted to its environment and does not fall over. – **Jenni Rawlings**

See Also

- Introduction to Choosing Cues & The Difficulty with Cueing
- Common Problems in Alignment Cueing for Standing Poses
- Tadasana Alignment Practice

Postural Effects of Excessive Sitting



Numerous health conditions are linked with sitting too much, but here we focus on only one: the significant impact on posture.

PROLONGED SITTING AFFECTS THE SPINE

Research indicates that on average, an American adult spends 10-12 hours each day sitting... More than 60 percent of people worldwide spend more than three hours a day sitting down, and the researchers calculated that sitting time contributed to some 433,000 deaths a year among 54 countries... Prolonged sitting affects the architecture of the spine, hips and neck as well putting the individual at risk for skeletal fractures. – **Yoga for Healthy Aging**

MORE ON THE EFFECTS OF SITTING

“The weight is distributed in a standing position,” says Kelly McGonigal, Ph.D... “But when you sit, you distort the natural curve of the spine, which means your back muscles have to do something to hold your back in shape because you’re no longer using the natural curves of the spine to lift yourself up against gravity.” So alignment of the spine changes in the sitting position, which means that the compressive forces on the lumbar discs change as well, which dehydrates them more rapidly and can create structural problems down the line. Short stretch and movement breaks in the course of the workday are very effective in minimizing the compressive load on the spine. – **Olga Kabel**

CAN LEAD TO NECK, SHOULDER & BACK PAIN

When you sit and stare at a computer screen for hours, your head tends to move forward out of its neutral position. This puts excessive strain on the cervical vertebrae and can lead to neck, shoulder and back pain. When you sit in a hunched or rounded position, the discs of the spine become compressed. Over time, they will lose their ability to expand and contract with movement, increasing the risk of disc herniation. The good news?... You can counteract the negative impact of too much sitting with simple yoga asanas. By bringing movement back to the spine... [you can] lubricate the vertebral disks, open stiff and sore muscles, and strengthen muscles that are weakened by long sitting sessions. – **Christine Malossi**

Conditions & Lifestyle Considerations



Consider educating students on lifestyle considerations such as their posture while reading and using technology devices, while driving, and while doing activities that include a lot of forward bending and rounding of the spine such as gardening.

Be patient and work gradually towards your goal of improved posture. It likely took quite a while to get where you are now, and it will take some time to improve... Consider activities that might contribute to slumped posture that you could also address... Be more conscious about maintaining good posture... and, if possible, spend less time in seated activities or try using a stand up desk. – Baxter Bell MD

Online Resources

Please see [online version](#) for links to more resources.