

# Healthy Posture

Assessment



## **Vocabulary Mix & Match**

- 1. MUSCLE MEMORY
- 2. POSTURE
- 3. ANATOMICAL POSITION
- 4. HEALTHY POSTURE
- 5. STANDING IN NEUTRAL
- 6. NEUTRAL SPINE
- 7. STANDARD ANATOMICAL POSITION
- 8. ISCHEMIA
- 9. SENSORY MOTOR AMNESIA
- 10. NEUTRAL PELVIS

- A. Movement or posture that has become automatic; a result of the nervous system shifting control and memory of a repeated pattern from areas of the brain responsible for making voluntary decisions to making them subconscious
- B. A collection of (typically unconscious) habits and holding patterns (which form our muscle memory) that create "an attitude of the body" or an "orientation to the present moment" which reinforces itself through bodily structures and physiology
- C. In humans, defined as "standing up straight with the body at rest"
- A natural bearing of the body that includes a comfortably neutral spine and promotes healthy internal functioning and muscular efficiency
- E. Another way to describe anatomical position; refers to standing with the bones stacked vertically and the two sides of the body displaying symmetry
- F. A state in which the spinal curves are not too much or too little for the individual's healthy norm
- G. Standing up straight and facing forward with the arms by the sides and palms facing forward
- H. Insufficient supply of blood to an organ; As it relates to posture, refers to the compression of blood vessels resulting from chronic muscular tension, causing pain and damage
- The natural way in which bodily movement and posture becomes "automatic and involuntary" leading to loss of sensation, a lack of awareness of the muscular pattern, and a temporary inability to relax tight muscles
- J. A state of equal hip height, a neutral pelvic tilt, a neutral front-to-back placement and the pelvis is pointing straight ahead

### Questions

- 1. Define posture.
- 2. Discuss how posture manifests.
- 3. Is posture genetic?
- 4. What criteria are often used when identifying healthy posture?
- 5. Why does healthy posture matter?
- 6. Describe a "neutral" spine.
- 7. Why may students find it difficult to identify a neutral spine?
- 8. Describe four considerations for pelvic alignment in *Tadasana* (Mountain Pose).
- 9. While general symmetry is correlated with healthy posture, describe Jenni Rawlings case for focusing less on symmetry and more on balance.
- 10. What common lifestyle factor has a significant impact on posture and, therefore, healthy functioning?
- 11. Discuss the maintenance of healthy posture.

# **Vocabulary Mix & Match**

| ANATOMICAL POSITION             | (1)  | $\rightarrow$ | (⊂) | In humans, defined as "standing up straight with the body at rest"  |
|---------------------------------|------|---------------|-----|---|
| HEALTHY POSTURE                 | (2)  | $\rightarrow$ | (D) | A natural bearing of the body that includes a comfortably<br>neutral spine and promotes healthy internal functioning and<br>muscular efficiency   |
| ISCHEMIA                        | (3)  | $\rightarrow$ | (H) | Insufficient supply of blood to an organ; As it relates to posture, refers to the compression of blood vessels resulting from chronic muscular tension, causing pain and damage   |
| MUSCLE MEMORY                   | (4)  | <b>→</b>      | (A) | Movement or posture that has become automatic; a result of the nervous system shifting control and memory of a repeated pattern from areas of the brain responsible for making voluntary decisions to making them subconscious                      |
| NEUTRAL PELVIS                  | (5)  | $\rightarrow$ | (]) | A state of equal hip height, a neutral pelvic tilt, a neutral front-to-back placement and the pelvis is pointing straight ahead   |
| NEUTRAL SPINE                   | (6)  | $\rightarrow$ | (F) | A state in which the spinal curves are not too much or too little for the individual's healthy norm   |
| POSTURE                         | (7)  | <b>→</b>      | (B) | A collection of (typically unconscious) habits and holding patterns (which form our muscle memory) that create "an attitude of the body" or an "orientation to the present moment" which reinforces itself through bodily structures and physiology |
| SENSORY MOTOR AMNESIA           | (8)  | <b>→</b>      | (1) | The natural way in which bodily movement and posture becomes "automatic and involuntary" leading to loss of sensation, a lack of awareness of the muscular pattern, and a temporary inability to relax tight muscles                                |
| STANDARD ANATOMICAL<br>POSITION | (9)  | $\rightarrow$ | (G) | Standing up straight and facing forward with the arms by the sides and palms facing forward   |
| STANDING IN NEUTRAL             | (10) | $\rightarrow$ | (E) | Another way to describe anatomical position; refers to standing with the bones stacked vertically and the two sides of the body displaying symmetry   |

#### 1. Define posture.

Drawing from the teachings of <u>many sources</u>, we can define posture as a collection of (typically unconscious) habits and holding patterns (which form our muscle memory) that create "an attitude of the body" or an "orientation to the present moment" which reinforces itself through bodily structures and physiology.

Posture... You know it's distinctive – you can easily and immediately recognize close friends just by how they move and how they hold their collection of arms, legs, torso, and head together – that configuration is as individual to them as their fingerprint. But is posture JUST a description of how someone stands and moves – just a math equation of angles, force, and mass? Or does it go deeper than that?. Mary Bond, author of *The New Rules of Posture* ... says that posture is our "orientation to the present moment." It's affected not only by our bones, muscles, and fascia, but by our thoughts, emotions, traumas, history, chemistry, family, work – by all those holding patterns developed over years of living and being on this gravity-endowed planet. – **Heather Longoria** 

#### 2. Discuss how posture manifests.

- YogaUOnline explains <u>here</u> that posture is the result of physical exploration that began when we were babies, evolving into habits that we engage in repetitively, becoming "written into the brain" and ever "more ingrained."
- Through the evolution of habit, the body itself begins to "adapt to hold that posture."
- As a result, our habits become embedded into our bodily structure which continues to recreate and reinforce itself via our muscular holding and breathing patterns, fascia, nervous system, and mental states.

If there's one thing that everyone from bestselling authors to renowned philosophers agree on, it's the power of habits... Small actions, repeated until we do them almost unconsciously, shape our lives. What's less universally acknowledged is that our posture is a collection of habits, almost always deeply unconscious. Like the habits of thought that shape our lives, our postural habits shape our spines. – **Eve Johnson** 

#### 3. Is posture genetic?

While many sources continue to propagate the medical system's myth that genes can "cause" conditions, the 2003 Human Genome Project provided irrefutable proof that genetic determinism is false. To believe that one has "bad genes" can cause severe harm through its built-in victimization mindset. (See more <a href="here">here</a> in "Where Mainstream Medicine Got it Wrong.")

In reality, we all have predispositions but also tremendous control over the factors that impact our well-being. Eve Johnson explains this from her experience:

I learned that posture is cultural, and that although every woman in my family had a rounded upper back, our genes weren't the problem. Like all little girls, we had modeled our posture on our mother's, and achieved the same results. – **Eve Johnson** 

#### AN EXAMPLE OF HEALTHY POSTURE BUILT INTO CULTURAL NORMS & HABITS

[I was on a] train from Lyon to Aix en Provence. At one of the stops along the way, a tall black woman, Muslim by her clothing, stopped by our seats to get her suitcase from the rack above our heads. The suitcase was huge. For a moment, I struggled to form the French words for "my husband would be happy to help you with that." (It's true, he would have been). Before I could speak, she had lifted the suitcase from the rack. She centred it on her head for a moment, then lowered it to the floor and wheeled it away. I watched her graceful walk and her long, straight spine, until she disappeared. In its own way, this sight was as moving as Sainte Chapelle, and for some of the same reasons. I had just witnessed a posture as old as time, and as new as a toddler. Her strength had nothing to do with going to the gym, and everything to do with living in Original Alignment. This is our birthright as human beings, our first way of being in our bodies, and our chance to experience lifelong mobility, strength and relaxation. – **Eve Johnson** 

4. What criteria are often used when identifying healthy posture?

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.

#### 5. Why does healthy posture matter?

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 <u>why yoga works</u> is its use of breath practices and the overall effect on the nervous system and stress. The ability to <u>breathe naturally</u> 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** 

- 6. Describe 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."

- 7. Why may students find it difficult to identify a neutral spine?
  - 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.)

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 <u>fascia</u> 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** 

8. Describe four considerations for pelvic alignment in *Tadasana* (Mountain Pose).

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

- 1) Equal Hip Height
- 2) Neutral Pelvic Tilt
- 3) Neutral Font-to-Back Placement
- 4) Pelvis Pointing Straight Ahead
- 9. While general symmetry is correlated with healthy posture, describe Jenni Rawlings case for focusing less on symmetry and more on balance.
  - Typically, <u>pose alignment</u> includes finding symmetry between the two sides of the body.
  - While **general symmetry is correlated with healthy posture**, Jenni Rawlings lays out the case <u>here</u> 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, Yoga International, The Myth of Symmetry in Yoga link

- 10. What common lifestyle factor has a significant impact on posture and, therefore, healthy functioning?
  - Sitting too much has a significant impact on posture.

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** 

11. Discuss the maintenance of healthy posture.

In addition to achieving healthy posture, equally challenging is learning to maintain it.

#### REQUIRES LEARNING NEW HABITS

I learned new habits: sitting with my weight as far toward my pubic bone as possible, turning my feet slightly out instead of keeping them parallel, releasing my chin, and elongating the back of my neck. More problematic, I had to unlearn habits, such as locking my knees when I stood and, most of all, lifting my chest... Over those two days, my new alignment began to feel right. – **Eve Johnson**