

What is the chance you are slouching and have forward rounded shoulders while reading this article? Did you just correct your posture because it was mentioned? Let's see if you have "good posture" during this article read.

The definition of posture by Cole Britnell and company (co-author of Postural health in women: the role of physiotherapy) states that good posture is to be a state of muscular and skeletal balance, which protects the supporting structures of the body against injury or progressive deformity.

The bottom line is that we take good static or standing posture for granted and ignore that definition. Attention is given later in life when abnormalities occur in the lower back or shoulders. I am not saying faulty posture is giving individuals lower back or shoulder pain but it is a definite contributing factor.

This carries over to dynamic posture in activities such as hiking, skiing, running or swimming. There is a direct relationship between how you sit or stand reading this article and how you ski, for example. The little localized muscles holding you upright while you read are the same stabilizers (local) muscles that keep you in a bent position while skiing. Of course the "dynamic" of movement is different but by slouching and rounding your shoulders in static will carry over to other activities. Remember you stand and sit in one long position longer than you perform activities.

For example, researchers at the Institute of Sport & Recreation Research New Zealand, Auckland University of Technology, state, "that swimmers competing in sprint events (200 meters and shorter) had square shoulders, upright trunks, and possessed long clavicles [collar bones] and large scapulae [shoulder blade]. In contrast, distance swimmers, who are defined by stroke length, are observed with abducted scapulae [shoulder blade winging out] and rounded shoulders and, thus, an increase in flexibility of the shoulder girdle. Additionally, athletes involved in contact sports have been observed with abducted scapulae and rounded shoulder posture. It is theorized that this posture is beneficial because it allows the athlete to assume a tuck or covered-up position quickly while running into defenders."

How does one have good posture? Individuals at T2BB begin with a complementary consultation. During this consult, we touch on concepts of posture in the work place, socializing and exercise. The most effective way to stand up is "go up with the top of your head". Too many of us, on a basic level, attempt to stick our chest out, tuck the chin, tilt the pelvis...etc. That does not do much for posture, typically. When you move individual body parts, it creates mal alignment. The muscles of the body work synergistically. Therefore, we preach "go up with the top of your head" or to better understand, "walk in to cold water slowly". This should engage your legs, glutes, core, and shoulders automatically. Note, that this is only a 1-2 inch correction, the same distance it can take to create a mal alignment.

The New Zealand researchers continue with "the advantages of having good posture are both mechanically functional and economical, with the least use of energy occurring when the vertical line of gravity falls through the supporting column of bones where the body does not have to continually adjust its position to counter the forces of gravity. For example, an athlete with rounded shoulder posture performing a pushing and pulling movement may need to first adduct and medially rotate the scapulae [pull the shoulders back and down] to be in the correct dynamic posture position to perform a technically proficient pushing or pulling movement. These anticipatory strategies are less efficient, causing the athlete to expend extra energy to perform a safe and technically proficient pushing or pulling movement. In addition, force production would be sacrificed. Faulty movement is a deviation from the ideal pattern of motion."

Prehab is T2BB's exercise category to counter such posture issues. Prehab is the opposite of Rehab. Preventive exercises designed to help dynamic posture.

For example T raises on a Swiss Ball. **Starting Position:** Lie face down on ball with chest off ball, back flat, feet shoulder width apart, arms out to side with thumbs up. **Movement:** While squeezing shoulder blades, raise arms and torso forming a "T" (hold 2 seconds). Return to starting position. Repeat 11 more times. **Considerations:** Keep thumbs pointing up and avoid pulling arms into side of body. **You Should Feel:** Back of shoulders and shoulder blades.

Another exercise is our Spinal hold exercise. **Starting Position:** Standing with one Theraband end or pulley directly perpendicular to body and band wrapped around stationary object, pull until there is tension. **Movement:** Hold without rotating torso for 30 seconds. Repeat for another 30 seconds then switch directions. **Considerations:** Spine straight,

arms bent, knees slightly bent. **You Should Feel:** Activation of deep lower back muscles and small amount from shoulders.

Optimal standing static or dynamic posture is when the least amount of neuromuscular activity is required to maintain body position in space and that minimizes gravity stresses on the body. Did your posture hold through the entire article? How is your posture now currently?