

CHEK POINTS for Fitness Professionals

The Importance of Posture

Posture

The position from which movement begins and ends.

Ideal Posture

That state of muscular and skeletal balance which protects the supporting structures of the body against injury or progressive deformity, irrespective of the attitude in which these structures are working or resting. It is during a state of ideal posture that the muscles will function most efficiently.



Figure 1
Ideal
Posture

The next time you are at a cafe, the gym, the airport, or any public place, take a few minutes to notice the posture of the people around you. You will most likely find that the majority of the people you see have poor posture. This is a result of working in environments that are not ergonomically correct, performing repetitive tasks with poor form and an overall lack of awareness by most individuals on their posture.

In ideal posture, the ear lobe, shoulder girdle, knee and ankle joint should be aligned (Figure 1). Poor posture not only takes away from aesthetics, it compromises how we were designed to function, eventually leading to pain and/or injury.

The following are common postural dysfunctions. As a fitness

professional, it is important to learn to identify and correct these dysfunctions.

Figure 2 shows the effects of imbalance between the trunk flexors and trunk extensors. As the abdominal musculature become progressively stronger than their antagonists, the following postural aberrations may be seen A) short and tight upper abdominal musculature, B) a depressed sternum, C) a forward head, and D) an increased thoracic kyphosis, often with it's apex at T7-9.

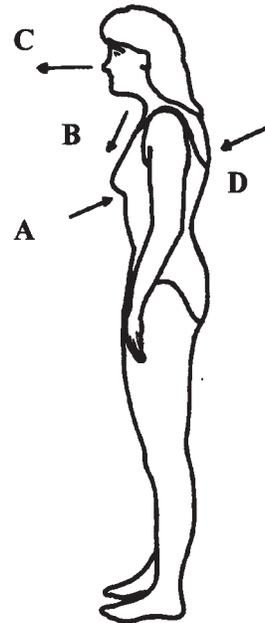


Figure 2
Imbalance between the trunk
flexors and extensors

The Lower Cross Syndrome is shown in Figure 3. In this case there is shortening of the lumbar erectors, iliopsoas, rectus femoris and tensor fascia latae with lengthening of the lower abdominal musculature, hamstrings, thoracic extensors

and superficial cervical flexors. This posture is frequently seen in exercisers who spend a lot of time in the gym exercising with unbalanced programs.

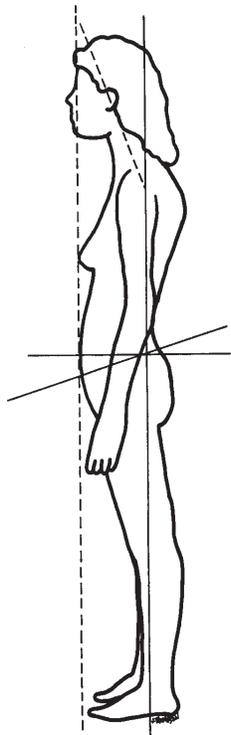


Figure 3
Lower Cross Syndrome

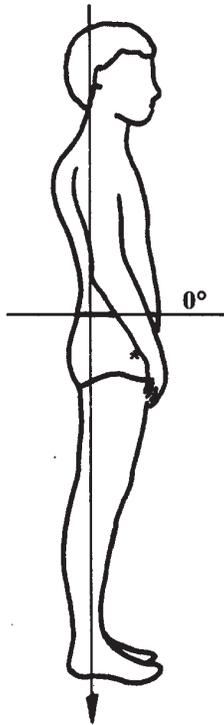


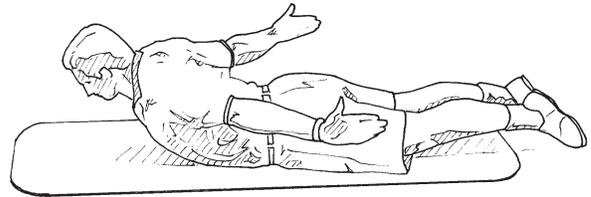
Figure 4
Sway Back Posture

The Sway Back Posture, or Layered Syndrome is shown in Figure 4. Here the hamstrings and lower abdominals are short and tight, while the lumbar erectors, rectus femoris and iliopsoas are long and may be weak.

It is very important to stretch tight muscles prior to exercising. It has been shown by Janda (*The Neurobiologic Mechanisms in Manipulative Therapy*) that tonic muscles have a propensity for shortening and tightening, often becoming facilitated. Phasic muscles have a propensity for lengthening and weakening. If a muscle group becomes facilitated, it will try to take over the function of synergistic and antagonistic muscles, resulting in perpetuation of muscle imbalance and often overuse injury to the facilitated muscles.

To correct these cases of faulty alignment, the long weak muscles must be shortened and strengthened, while the short tight muscles must

be stretched. The stretching should take place first



The Prone Cobra is an excellent exercise to strengthen postural muscles and correct forward head posture and thoracic kyphosis. To perform this corrective exercise, follow these steps.

- ① Lie face down on a mat or comfortable surface and rest your arms at your side.
- ② Lift your torso while simultaneously squeezing your shoulder blades together and externally rotating your arms. You should feel the muscles of the thoracic spine working, not those of the lumbar spine.
- ③ When you have reached the proper end position, your palms should face away from your body, your head and neck should be in neutral alignment and your toes touching the ground.

Note: Do not allow your head to roll backward. If this happens, you will perpetuate shortness of the muscles at the base of your skull and the exercise will only serve to maintain poor posture.

For more information on postural assessment and corrective exercises for postural dysfunctions, see Paul Chek's *Scientific Back Training and Equal But Not the Same Correspondence Courses and The Golf Biomechanic's Manual*.

Paul Chek is an internationally recognized lecturer and consultant in the fields of corrective and performance exercise. For more information on the C.H.E.K Institute or to receive a free catalog call **800.552.8789** or int'l 760.477.2620 Also, visit us on the web at: **www.chekinstitute.com**.