DoD Ergonomics Working Group NEWS

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Strength Through Neutrality: The Big Deal About Having a Neutral Posture

Ergonomists, industrial hygienists, safety officers, physical and occupational therapists, and even your mother will tell you to maintain a good posture.

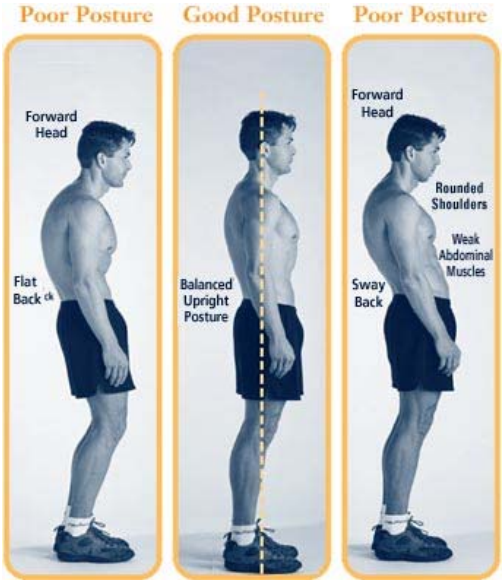
While you generally listen to your mom's advice, you might ask yourself, **"At my job, why does it matter if I keep a good, neutral posture?"**

Quite simply, neutral postures maximize strength, speed, and endurance.

A neutral posture:

- Promotes blood flow into the muscles making your muscles less tired.
- Promotes nerve conduction increasing your speed.
- Decreases your risk of a work-related musculoskeletal disorder (WMSD).

Examples on page 2 illustrate the importance of maintaining a neutral posture—whether you're an office worker or performing manual tasks.



Good Posture = Neutral Posture

Webster's New World Medical Dictionary defines neutral posture as the stance that is attained "when the joints are not bent and the spine is aligned and not twisted." A good rule of thumb is "ears over shoulders, shoulders over hips, hips over knees, knees over ankles."

For more information on preventing WMSDs, contact the Army Ergonomics Program, U.S. Army Public Health Command, at Armyergonomics@amedd.army.mil.

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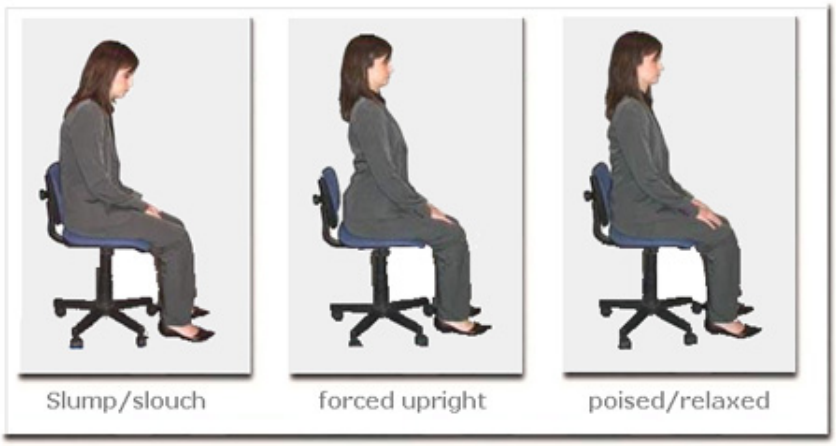
The Soldier on the left in this photo is in a more neutral posture and can bring optimal strength and speed to the task.

The flexed posture of the Soldier in the middle reduces the amount of force his back muscles can generate, causing them to fatigue quicker, making him at risk for a WMSD.

Sitting while slumped or forced upright actually increases the pressure on the discs of the spine and can result in static muscle loading, increased muscular energy expenditure, reduced muscular waste removal, and eventual discomfort or injury. Sitting in a poised/ relaxed position with the small of your back against the lumbar support of the chair, leaning slightly back, will decrease this disc pressure.



For this office worker, the mouse is too far away from her chair and keyboard causing her shoulder and neck muscles to be overtaxed. In this position, she is at risk for a WMSD.

Moving the mouse next to the keyboard puts the worker's shoulder in a more neutral position. She is expending less energy moving the mouse and is at less risk for a WMSD.