

Foundation for  
**Chiropractic Progress**



HOW TO

# TRIUMPH OVER TECH NECK

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During the last three decades, innovations in technology have transformed our work environments and our daily personal lives. In the world today, 6.64 billion people utilize a smartphone. That translates to 84% of the world population.<sup>1</sup> In our homes, the U.S. Census Bureau reported that in 2018 over 92% of all households had at least one computer.<sup>2</sup>

Technology has brought with it amazing advances with access to information, communication, speed and efficiency beyond what many of us could have imaged. The downside is that along with the screen time, it has ushered in a profound surge of postural issues and neuromusculoskeletal problems that workers and young people of past eras did not encounter. With children engaging in technologies at younger and younger ages, it complicates the situation further. It is increasingly important for people of all ages to be mindful of their movement and proper posture when utilizing technology because once degeneration of the spine occurs it cannot be undone.

“ INCREASED SCREEN TIME HAS USHERED IN A PROFOUND SURGE OF POSTURAL ISSUES AND NEUROMUSCULOSKELETAL PROBLEMS. ”



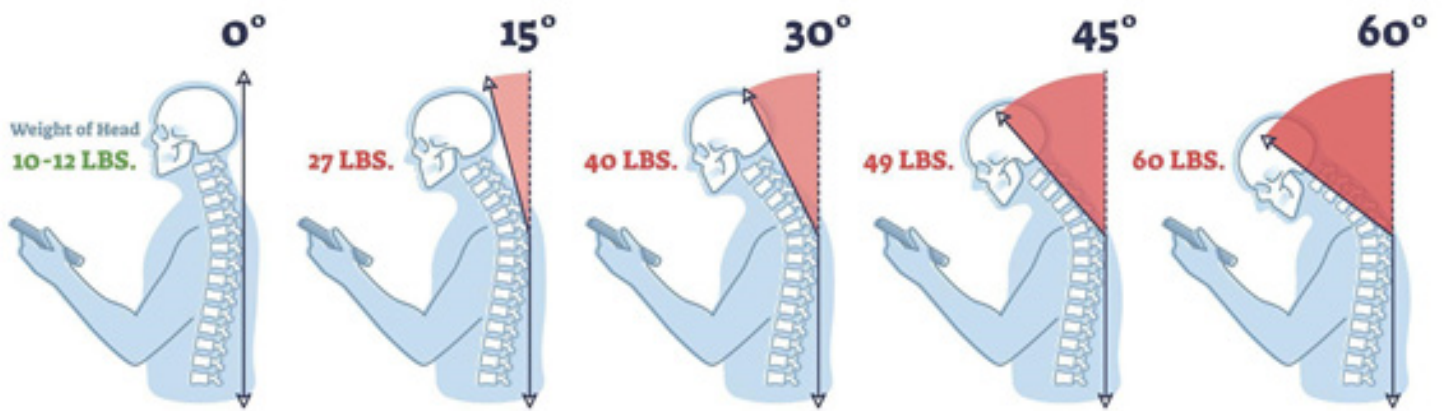
“ ‘TECH NECK’ CAN RESULT IN PAIN, HEADACHES, MUSCLE SPASM, A CHANGE IN THE NATURAL CURVE OF THE SPINE, AND ULTIMATELY A PREMATURE DEGENERATION OF THE SPINAL JOINTS AND DEFORMITY. ”



## UNDERSTANDING “TECH NECK”

Tech neck, also called “text neck syndrome,” is considered in research studies to be an emerging 21<sup>st</sup> century issue. The clinical condition refers to the onset of cervical spinal pain that is a result from the repeated stress of frequent forward head flexion while we look down at mobile devices or glide our heads forward with bad posture working at a computer screen. It can result in pain, headaches, muscle

spasm, a change in the natural curve of the spine, and ultimately a premature degeneration of the spinal joints and deformity.<sup>3</sup> The dowager hump is an example of such a change that a lack of good posture can lead to. These changes can also affect your breathing, self-esteem, balance and risk for falls.



## UNDERSTANDING “TECH NECK”

To understand the anatomy, keep in mind that the head weighs about the same amount as a bowling ball. The spine is designed to hold that bowling ball on a stable, balanced pillar. That strong pillar has proper spinal curves and good musculature. The diagram on this page shows the approximate amount of pressure that our head exerts in

what is considered good posture, and then depicts how that pressure exponentially increases as we even slightly let our head drift forward, off of the stable pillar. This undue stress on the joints and soft tissues is called “anterior weight bearing.” This forward head carriage is what contributes to symptoms and to long-term damage.





# TAKING STEPS TO TACKLE THE TECH

Everyone using technology should be taught about maintaining posture for good health. Doctors of chiropractic (DCs) regularly work with patients, schools and businesses to talk about posture and to ensure that workstations are set up with proper positioning in mind.

For workstations at your home office or place of employment, understanding the ergonomics for seating, posture and the level of screens, keyboards and microphones is important. Chairs should have adjustable heights and good back support. Desks and screens that can be adjusted to fit the worker are also ideal. If a workstation isn't set up correctly, it can lead to neuromusculoskeletal issues.



Good posture also requires neutral body positioning, which is defined as a comfortable working posture in which the joints of the body are naturally aligned. The basic rules of body positioning with computer ergonomics include:

- Head position in line with the torso, over the pillar of the spinal column.
- Shoulders relaxed with upper arms hanging normally.
- Elbows close to the body, bent between 90-120 degrees.
- The back should be fully supported with appropriate lumbar support.
- Feet flat on the floor, or on a footrest if needed.
- Knees at a 90 degree angle to the floor.
- Thighs and hips parallel to the floor.<sup>4</sup>

Remember that working in the same posture for prolonged periods of time isn't healthy, no matter how perfect your posture is. It is helpful to change your position throughout the day, stand up and walk for several minutes periodically, stretch and consider performing some of your tasks standing.

For the case of smartphones, whether texting, looking at social media or playing games, one of the best strategies is to simply cut back on the hours spent looking at it and replace that time with something active. When using your phone, don't allow yourself to bend your neck forward. Find a prop for the phone, utilize the voice feature so that you don't need to look down to text, or consider calling the person vs. texting and put your phone on speaker.

# PRACTICE PROPER POSTURE

If bad posture has become a habit, it will take time and effort to retrain the body. Be extremely mindful about where your head is spatially and keep bringing it back to sit in alignment with the spine. Change positions often, stand up and stretch. Several exercises can also be beneficial so that the muscles are more balanced to hold the weight of your head in place. Begin by standing with your back against a wall, shoulders touching the wall, back of head touching the wall, heels of feet touching the wall, feet shoulder width apart.

- **FINDING POSITION:** Begin by standing with your back against a wall, shoulders touching the wall, neck straight with the back of the head touching the wall, heels of feet touching the wall, feet shoulder width apart. Step away from the wall and maintain position.



# PRACTICE PROPER POSTURE



- **CHIN TUCK:** Glide the chin backward until the head is over the spine. (Do not tilt your head back - this is a gliding motion). Two fingers over the chin is helpful to guide the motion. Hold the position for 10 seconds and repeat. Variations of this can be performed against a wall, on the floor or seated in your car. Glide the head back and then actively push against resistance and hold for 10 seconds. You will feel the muscles at the lower part of your skull contracting. When driving, sitting at a red light is a great reminder to do this exercise.

Doctors of chiropractic (DCs) are advocates and valued partners for a variety of wellness initiatives focused on health and prevention. Not only do they offer spinal and extremity adjustments to optimize joint function, they can also advise on ergonomics, posture, exercise and muscle balance. These benefits are all part of what DCs can offer to minimize the effect of technology on the body and to naturally keep the spine healthy for years to come.

- **CHEST STRETCH/SHOULDER ROLL:** When the head hangs forward typically the chest is more contracted and the back muscles between the shoulder blades are stretched. This exercise does the opposite. Roll your shoulders and hold positions that stretch the chest muscles (think of it as trying to touch your shoulder blades together).



## REFERENCES

- 1 <https://www.bankmycell.com/blog/how-many-phones-are-in-the-world>
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- 3 Int J Environ Res Public Health. 2021 Feb; 18(4): 1565. Published online 2021 Feb 7. doi: 10.3390/ijerph18041565 PMCID: PMC7914771 Text Neck Syndrome in Children and Adolescents Daniela David, Cosimo Giannini, Francesco Chiarelli, and Angelika Mohn\* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7914771/>
- 4 <https://www.osha.gov/etools/computer-workstations/positions>





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