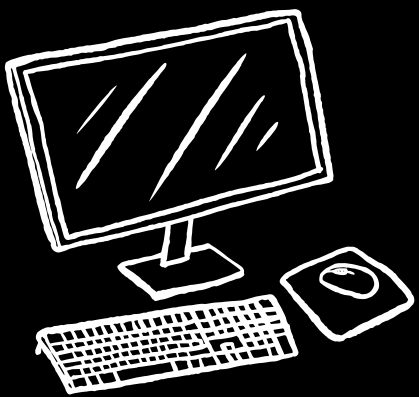
45 WAYS TO IMPROVE COMPUTER POSTURE



Todd Bowen

In this book, you'll learn how to improve your computer posture through different variables of health and wellness. These include posture, sleep, hydration, and breathing. All of them are directly related to how good (or bad) our computer posture is.

More goals of this book are to help the user:

- decrease computer-related pain
- increase energy
- improve mental clarity
- increase work productivity

This book talks about how I achieved these goals with information that is easy to understand, easy to implement, and a valuable use of our time.

Thanks for your interest in computer posture. You're taking a powerful step forward to improve your quality of life. That's something to be very proud of.

Todd Bowen
SittingPosture.com

45 Ways to Improve Computer Posture

by Todd Bowen

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Chapter 1 Introduction

After years of sitting at a computer for long periods of time, my posture was terrible and my body was broken. I started implementing as many good habits into my life that I could think of. Everything in this book is directly related to how good (or bad) our computer posture is.

My goal is to help the user improve their computer posture. I talk about habit changes that have decreased pain, increased energy, improved mental clarity, and increased work productivity in my own personal experience.

Disclaimer:

My content is not medical advice. It's based off my experience and opinions.

I talk about good habits that have helped me live a higher quality lifestyle, while still using a computer.

Do your research. Make good decisions. And be the best possible advocate for your own healthcare.

Thanks for joining us. You're taking a big step toward improving your computer posture, as well as your quality of life. That's something to be very proud of.

Let's get started...

Chapter 2
Posture

- Keep your eye level even with the top of your monitor screen.

  This applies for both sitting and standing computer workstations.

  Monitors placed too low are a common trigger that make people slouch forward. Don’t overextend your body upward to get eye level with the top of your screen. Raise your monitor, or your desk, instead.

- Keep your elbows slightly above the desk level.

  This applies for both sitting and standing computer workstations.

  Never let your elbows fall below the desk. This caused overuse in my biceps from lifting my hands up onto the keyboard and mouse. That overuse led to painful inflammation in my shoulder tendons.

  It also contributed to my chronic internal shoulder rotation. Keeping our elbows in this bent position for long periods of time can also cause ulnar nerve entrapment. That's similar to carpel tunnel syndrome in the wrist, except it's located in the elbows.

- If your elbows are below desk level, lower your desk.

- If your desk isn't adjustable, raise your chair until your elbows are slightly higher than your desk.

- If raising your chair lifts your feet off the ground, use a footrest.

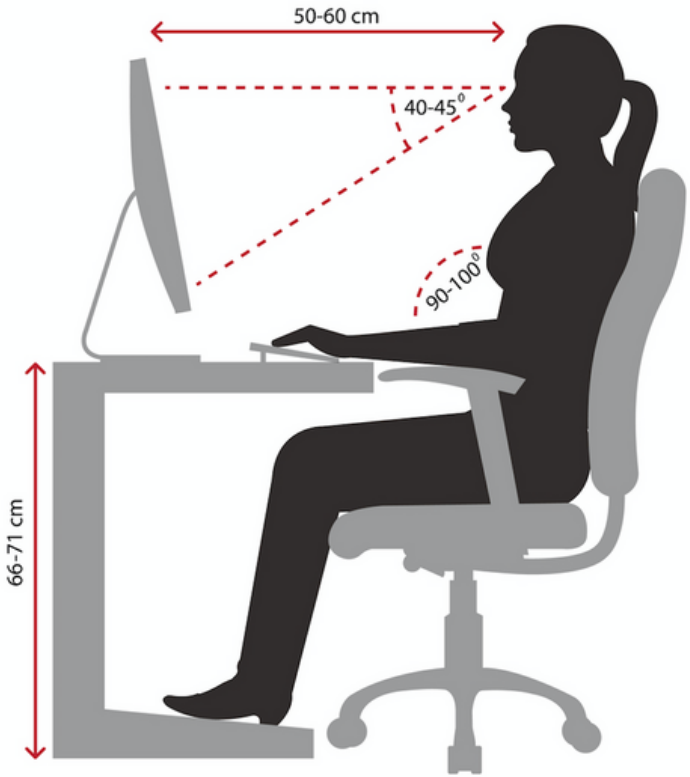
  These 3 tips apply for sitting computer workstations.

- Always keep your feet flat on the floor or a footrest.

  This applies for sitting computer workstations.

- Never pull your feet under your chair and underneath your body.

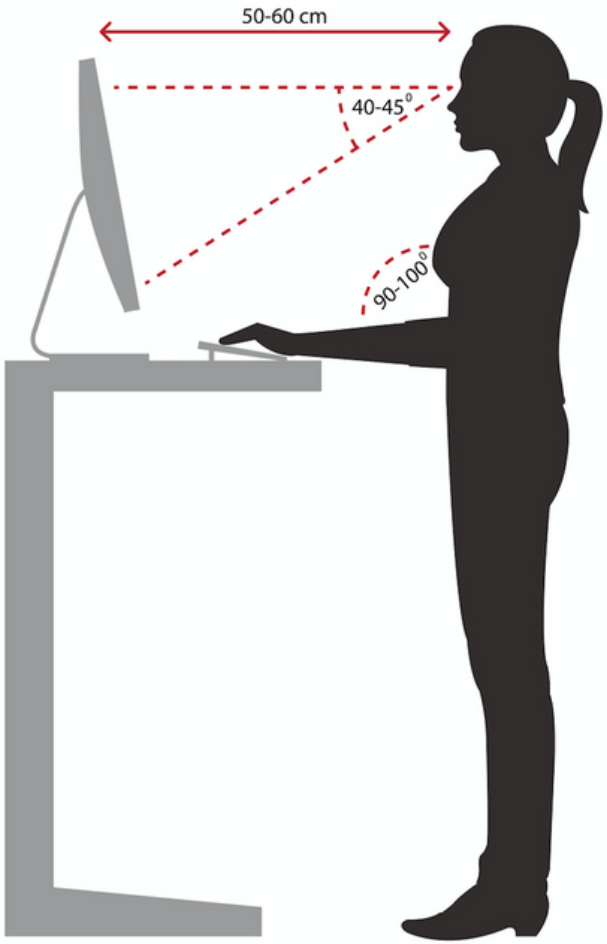
  This caused overuse and compression in my hamstrings. It also caused overextension in my quadriceps. This overuse led to muscle confusion throughout my entire legs. It also led to joint dysfunction in my knees and ankles.



Notice how the user has their:

- Eye level even with the top of the monitor screen
- Elbows slightly above desk level
- Feet flat on the floor or a footrest

Notice how those 3 important variables also apply when using a standing computer workstation.



- Invest in an adjustable desk.

  This applies for both sitting and standing computer workstations.

  Sitting isn't the only enemy we're up against. Repetitive strain and overuse injuries are the main enemy. Even if we sit or stand with great posture, repetitive overuse of the same muscles for long periods of time will still cause damage to our bodies.

  This is why it's important for me to have an adjustable desk. I like to switch back and forth between sitting and standing throughout my day.

- Don’t work in the same position for long periods of time.

  This applies for both sitting and standing computer workstations.

  I usually divide my day in half between sitting and standing. I’ll work in a sitting position for 4 hours a day. I’ll work in a standing position for 4 hours a day. But I don’t stay in these positions for 4 hours straight. I will sit for 15 to 30 minutes, then I will stand for 15 to 30 minutes.

  Sometimes I will go a little longer than 30 minutes, especially if I’m being productive and creative. As soon as my mental clarity starts to decline due to my physical posture, I take a break. When I get back to my desk, I’ll work in a different position.

- When using a laptop, use an external monitor whenever possible.

  This applies for both sitting and standing computer workstations.

  Laptop monitors cause us to look down at an excessive angle. This can cause a chain reaction of bad habits, which leads to our upper body slouching forward.

  Laptop monitors are also typically small. This used to cause a lot of eye strain and headaches for me.

- When using a laptop, use an external keyboard whenever possible.

  This applies for both sitting and standing computer workstations.

  Laptop keyboards are too small. This causes us to internally rotate our shoulders for long periods of time.

  After only a couple years of sitting at a computer, my shoulders stayed stuck in an internally rotated position 24/7, even when I was away from my computer.

- When buying an external keyboard, invest in one that is flat and low-profile.

  This applies for both sitting and standing computer workstations.

  Don’t use a big bulky keyboard. Those require us to engage our wrist muscles in order to lift our fingers high onto the keyboard. This caused carpel tunnel syndrome in my wrist.

  When I switched to a flat keyboard, my wrist pain went away in just a couple days. It was pretty eye-opening.

- Avoid using a laptop mouse whenever possible.

  This applies for both sitting and standing computer workstations.

  A laptop mouse is placed directly in the center of our body. This may not seem like a big deal, but reaching across our body to click a mouse hundreds of times a day adds up. It causes repetitive strain and overuse that will lead to pain and tension. I experienced chronic issues in the upper back and shoulder on the side I use the mouse on.

- Invest in a flat, low-profile external mouse.

  This applies for both sitting and standing computer workstations.

  This will eliminate having to overextend our upper back and shoulder hundreds of times a day, by reaching for the center of our laptop.

  This will also decrease overuse of the wrist muscles and reduce the possibility of carpel tunnel syndrome.

- Keep the spine stacked in an “S” curve as much as possible.

  This applies for both sitting and standing computer workstations.

  Learn about the natural curvature of the spine. From a side angle, the spine isn’t straight. It has multiple curves. “Sit up straight”, or “Stand up straight”, can actually be misleading advice. Advice like this makes it very easy for the user to overextend their spine.

  More effective advice would be, “Sit/stand with a balanced, neutral spine.” Also, “Maintain the natural curves of the spine as much as possible.” I like to think my posture supports my body like a tree blowing in the wind, not like a stiff brick building.

This is a drawing of a human spine from a right side angle. Notice the natural curves in the spine. Anytime we stray from this position for long periods of time, compression and overextension of the spine are both taking place.

- Keep the lumbar curve in your lower back.

  This applies for both sitting and standing computer workstations.

  The lumbar curve in my lower back is incredibly important when it comes to supporting my upper body.

  When I lose this curvature, it starts a chain reaction of overextension in my back. It also causes compression and overuse in the muscles of my chest and upper abdomen.

- Let your arms hang in a naturally supported way, with your elbows somewhat close to your rib cage.

  This applies for both sitting and standing computer workstations.

  I'd rather let my elbows hang in mid-air, compared to letting them flare out sideways to rest on the desk.

  Don't let your elbows flare outward laterally. People often make this mistake to rest their elbows on the desk. This mistake caused a lot of repetitive strain and overuse in my shoulders, neck, and chest.

- Don’t rely on office chair armrests to rest your elbows on.

  This applies for sitting computer workstations only.

  Most office chair armrests are too wide. I had to engage muscles throughout my chest, shoulders, and neck in order to flare my elbows out laterally so they could rest on the armrests. This caused a lot of unnecessary pain and tension for me.

  I’d rather let my elbows hang in mid-air, compared to letting them flare out sideways to rest them on office chair armrests.

- Learn about internal shoulder rotation and how to avoid it when using a computer for long periods of time.

  This applies for both sitting and standing computer workstations.

  I like to classify shoulder rotation into 3 categories: internal, external, and neutral (balanced).

  Internal shoulder rotation is a good thing when throwing a ball or pushing a door open. But it can be a very bad thing when using a computer for long periods of time.

  This overuse isn't just limited to the shoulder. It also caused issues in my chest, bicep, and neck muscles.

- Maintain a neutral (balanced) shoulder rotation as much as possible when using a computer.

  This applies for both sitting and standing computer workstations.

  This is another reason to make sure our elbows are not below the desk level. If they are, it often causes us to internally rotate our shoulders to lift our elbows. This is why desk height and chair height are very important.

  Maintaining a neutral (balanced) shoulder rotation when using a computer requires more muscle activation in my arms. But this is a good thing. I'd much rather have a slight burden on my triceps periodically, as opposed to a constant overuse on my shoulder.

- Avoid looking down at your fingers when typing.

  This applies for both sitting and standing computer workstations.

  This may not seem like a big deal. But turning my head downward to look at the keyboard, even slightly, caused a lot of muscle tension throughout my head, neck, and face.

  Looking down at the keyboard eliminates the natural curves of the cervical spine, which can easily cause a chain reaction of overextension throughout the rest of the spine.

- Maintain an equal balance of strength between your lower back and your abs.

  This applies for both sitting and standing computer workstations.

  A lot of people will tell you to stand up straight, engage this muscle or that muscle. But I think it's simpler than that. We want to maintain the natural curves of the spine. In order to maintain those curves, I don't want to engage certain muscles so much that my posture becomes stiff like a brick building. This will cause repetitive strain injuries, regardless if our posture is good or bad. Instead, I want to stand balanced and stable, like a tree swaying in the wind. It's a healthier, more dynamic posture for me, compared to static and stiff, like a brick building.

- Take advantage of the back support on your chair.

  This applies for sitting computer workstations only.

  It's probably not possible to create a one-size-fits-all back support for all users. People are different heights, so the curves in their spines are different distances apart. With this in mind, I don't like to rest 100% of my upper body weight on a back support. I'd be likely to lose the natural curves in my spine, unless that chair was custom made for me.

  Gravity takes a huge toll on our bodies while sitting for long periods of time. Taking a bit of that pressure off my upper body is important to me. That's why I rest a portion of my upper body on the back support.

- Don’t sit down with anything in your back pocket (phone, wallet, etc).

  This applies for sitting computer workstations only.

  I used to sit with a thick wallet in my back pocket. A chiropractor told me that it was causing a sideways curvature of my spine (from a rear viewpoint). The spine is naturally curved when looking at it from a side angle. However, we want to keep it as symmetrical as possible from a rear angle.

  Sitting on a wallet or phone will lift the pelvis higher on one side than on the other. This will likely cause a chain reaction that will curve the spine in a very harmful way.

- Your seat height should allow your hips to be slightly higher than your knees.

  This applies for sitting computer workstations only.

  Seat height, desk height, and monitor height are 3 very important ergonomic variables. These 3 variables alone can improve computer posture in a big way.

  Remember, desk height should be slightly below elbows. Also, the top of your monitor screen should be eye level.

- Your ankles should be directly under your knees or slightly ahead of them.

  This applies for sitting computer workstations only.

  One of the worst computer posture mistakes I used to make was pulling my feet underneath my chair. Doing this would cause my hamstrings to contract all day long. This caused a lot of muscle confusion in my legs. It also caused a lot of joint dysfunction in both my ankles and knees.

  Keeping my ankles directly under my knees allows a neutral, balanced position for both my knees and my ankles.

- Use a footrest when necessary.

  This applies for sitting computer workstations only.

  This variable can be dependent on elbow height. Sometimes we don’t have the ability to lower our desk so that our elbows are slightly above the desk level. When this isn’t possible, we need to raise our chair so that our elbows are above desk level. This sometimes lifts our body so much that our feet don’t touch the floor. In this case, a footrest would be necessary.

- Do not cross your legs or feet.

  This applies for both sitting and standing computer workstations.

  Crossing my feet was another critical posture mistake I learned the hard way. It caused a lot of joint dysfunction in my ankles, especially with lateral movements.

  Surprisingly, crossing my feet and not having my feet flat on the floor were 2 of my worst computer posture mistakes. I strongly believe making these mistakes at a computer for long periods of time were the main catalysts behind my ankle issues. I ended up having 3 ankle surgeries.

- Use an anti-fatigue mat when standing on a hard surface for long periods.

  This applies for standing computer workstations only.

  This is one of those posture tips I didn't think I needed until I tried it. I often wear flat, barefoot style shoes. So I didn't think I needed a mat.

  However, using an anti-fatigue mat has made a big difference in reducing my foot pain. It was a very inexpensive, yet comfortable addition to my workstation.

Chapter 3
Sleep

Working at a computer desk for long periods of time is an endurance event. Some of our muscles are overused excessively. The rest of our muscles get deactivated from underuse. The quicker we get tired at our computer, the quicker our muscles can't support our body, the quicker our posture suffers.

Sleep quality has become a valuable part of my process for improving computer posture.

- Tape your mouth closed at night.

  Until recently, I had been a chronic mouth breather all my life. Both inhale and exhale. This caused many problems. I was overusing my jaw muscles to constantly hold my jaw open. My overused jaw muscles were causing tight muscles in my head, neck, and face. This was the catalyst for a lot of bad headaches.

  Another problem was shallow breathing through my mouth. My breath wasn't in my lungs long enough to be highly effective. I needed to slow my breathing down.

  Taping my mouth shut at night has reduced muscle tension and improved my sleep. It has also increased the amount of time that air is in my lungs.

- Use a temperature controlled mattress cover.

  I've been using one for the last 4 years. I can't imagine ever not using one in the future. It's incredibly comfortable and has improved my sleep quality in a big way.

  It has both cool and heat options. I use the cool feature all night. Then, I have it set to automatically warm up gradually before my wake time. This wakes me up naturally, as opposed to a loud alarm clock. It's also like a quick body warmup right before I get out of bed. It gets the blood circulating throughout my body. My muscles aren't as stiff first thing in the morning.

- Decrease drinking water significantly starting a few hours before bedtime.

  There's a fine line between not enough water and drinking too much. When I go to bed, I go somewhat dehydrated on purpose. This way, I won't get up in the middle of the night to use the bathroom multiple times.

  Good sleep is underrated. The more times I wake up in the night, the less quality sleep I get. This is why it's important to stay hydrated throughout the day, then decrease water intake significantly in the few hours before bed.

- Silence your phone at night.

  It used to seem like a necessity to keep my phone ringer on at night. I did it for years. I never realized how much it disrupted my sleep until I finally silenced my phone at night.

  Side note: iPhones have Do Not Disturb settings that you can easily modify. I made an exception on my settings so that phone calls from a few people in my contacts would still come through. These people wouldn't call me in the middle of the night unless it was an emergency. I set my Do Not Disturb settings so that no sounds came through whatsoever, except for phone calls from those few people.

- Don’t check your phone when waking up to use the bathroom.

  The light from my phone screen, even for a second, would cause a disturbance by itself. This would wake my brain up more and more, which would take me longer to fall back asleep after a simple restroom break.

  If I found myself checking my phone at night often, I would keep it in a drawer for a while. This added a physical and mental barrier, which helped me realize I would be awake for 2 hours if I touched my phone.

  Silencing my phone, as well as not checking it at night, has helped improve my sleep quality and increased my sleep duration quite a bit.

- Make your bedroom as dark as possible.

  I have blinds on my bedroom window that keep out a lot of light. However, I didn't think I needed black out shades until I actually got them. I thought they would be overkill. When I see light, in any intensity, my brain starts to wake up. This makes me think more, which decreases my chances of falling asleep quickly.

  My sleep has gotten much deeper and more restful since I put up blackout shades over my blinds.

- Don’t turn on any lights during trips to the bathroom.

  This one might be tough logistically, since it’s hard to walk in the dark. Luckily, I have a window located on my way from the bed to the bathroom. I can leave those blinds open just enough to light my way to the bathroom. I also plugged a night light into one of my bathroom electrical outlets, so I don’t have to turn on the bathroom light once I’m in there. Eventually, my dark path to the restroom became a habit and I can now do it pretty easily without a light. I’ve been able to fall back asleep much quicker since I’ve stopped turning on any lights for middle of the night restroom trips. This has become a healthy and valuable sleeping habit for me.

Chapter 4
Hydration

The amount of water I drink, plus its quality level, is directly related to the extent of my repetitive strain injuries caused by sitting at a computer desk.

When I'm dehydrated, my muscles tense up and tighten much quicker, causing my posture to suffer. When I stay hydrated throughout the day, my posture is always easier to maintain. Improved computer posture is just one of the benefits of drinking water for me.

- Drink a glass of water immediately after waking up.

  Just because we were sleeping all night, that doesn't mean we are hydrated. Breathing alone during sleep can make us dehydrated. That's why I make sure to drink a glass of water every morning as soon as I wake up. If I don't, I get caught up doing things and the next thing I know, it's been 2 hours and I hadn't had any water yet.

- Don’t drink tap water.

  The amount of chemicals in tap water after it goes through the municipal water filtration process is one thing. But the water still needs to travel through old pipes below city streets to arrive at our faucets.

  Even though cities may claim the amount of chlorine in tap water is “safe to drink”, there are much healthier, better options.

  Without getting into a deep dive, drinking water should contain various minerals. It also shouldn’t have so much chlorine in it that it tastes like diluted pool water.

- Drink quality water that includes minerals.

  I don’t have much experience with water filters. I drink natural, artesian spring water instead.

  If there is anything I don’t mind spending a little extra money on, quality drinking water is at the top of the list.

  Sometimes companies purify water, then add minerals after the fact. I would rather drink an artesian water that already contains natural minerals.

- Drink the amount of water each day that works for you.

  An old, common rule of thumb was to drink eight 8-ounce glasses of water per day (64 ounces total). I don't think that's enough for me. 64 ounces is a lot better than nothing. However, sitting at a desk all day is an endurance event. It may not feel very athletic, but many of our muscles and tendons are activated and overused for 8 hours a day, 5 days a week, 2000 hours a year.

  Nowadays, recommendations have skyrocketed. I've heard of recommendations to drink 1 ounce of water for every 1.5 pounds of body weight.

To figure this out, you would take your body weight and divide it by 1.5. For example, I weigh 190 pounds. So, I'd drink about 126 ounces of water per day. That's a huge difference compared to the old rule of thumb's total 64 ounces.

I've definitely had days where I drank more than 126 ounces of water. They were probably hot days where I was very physically active. During cooler rest days, I feel like I don't need to drink 126 ounces.

Determine your own daily amount of water to drink. Experiment and figure out what works best for you.

I generally shoot for half my body weight in ounces. 190 pounds multiplied by .5 equals 95 ounces per day. I always raise this amount depending on external factors for that day. See the next 2 pages for more info on those factors.

- Drink more water than usual on hotter days and/or when physical activity level is higher.

  A day laying on the couch in the air conditioning will require a lot less water for me, than a day laying on the beach in the middle of the Summer.

  Rest days require a sufficient amount of water, but not as much as an intense workout day. I would estimate that I drink an extra 50% of water on a hot, active day outside, as opposed to a cool rest day indoors. For example, if I drank 100 ounces on a cool rest day, I might drink 150 ounces on a very hot day where my physical activity level is high. That's a pretty big difference.

- Drink extra water when consuming alcohol, caffeine, and sugar.

  These 3 are huge enemies of hydration. I take them in moderation as much as possible. Whenever I consume them, I make sure I drink a glass of water either before or after. The alcohol, caffeine, and sugar will have less of a dehydration effect on my body. When drinking caffeine, I keep my intake around 100 mg per serving. I make sure it is sugar free. Finally, I mix my caffeinated drink with about 12 ounces of water. This helps me stay hydrated better and avoid jitters throughout my workout.

Chapter 5
Breathing

Breathing is an important variable of having good computer posture. When I sat at a desk 40 hours per week, physical and mental stress caused shallow breath, tight muscles, and poor posture. It felt like the air I was breathing would barely pass below the airway in my neck, much less into my lungs. As soon as it would enter my lungs, I would exhale it out. Instead of letting my breath work for me efficiently, my brain and body were always in more of a defensive state.

- Try a simple exercise like box breathing.

  I needed to increase the amount of air I was taking into my lungs. Box breathing is a very basic exercise where you breathe in, hold, breathe out, then refrain from breathing (for the same count on each of the steps).

  For example, the first count I used was 4 seconds. I would inhale slowly for 4 seconds, hold my breath for 4 seconds, exhale slowly for 4 seconds, then finally I would refrain from breathing for 4 seconds. All 4 steps are the same amount of time. Eventually, I progressed to 5 seconds, then 6 seconds, and so on. This was a great beginner exercise for me.

- Take slower, deeper breaths.

  I needed to increase the amount of time that air spent in my lungs. Ironically, this would mean breathing less number of times. Once I got comfortable with box breathing, I tried a more challenging protocol that I learned from Brian Mackenzie at ShiftAdapt.com.

  I would inhale for 6 seconds, hold for 18 seconds, then exhale for 12 seconds. This is an example of where I was in my practice at a certain point in time. This is not a recommendation for anyone.

  I'd close my eyes and do this for 5 to 10 minutes a day. This protocol helped increase my breath capacity throughout the whole day, not only when I was sitting at a computer.

- Breathe through your nose as much as possible, not your mouth.

  This goes for both inhaling and exhaling. It doesn't only apply when doing breathing exercises. It applies all day, even during exercise.

  There are many reasons why breathing through the nose is more efficient than mouth breathing. For me, the biggest reason had to do with decreasing headaches. Overusing my jaw muscles to breathe through my mouth would cause excessive muscle tension in my head, neck, and face.

  We breathe thousands of times a day. Nasal breathing has decreased the amount of time my mouth is open. This has decreased my headaches, as well as the overuse of my jaw muscles.

Chapter 6
Final Thoughts

Sitting at a computer is not the enemy. Repetitive strain and overuse injuries are the enemy. Working in any one position for long periods of time is the enemy. That's why it's important to work in multiple different positions throughout the day. That's why it's important to take a well-rounded approach to improving posture, sleep, hydration, and breathing.

All of these are directly related to how good or bad our computer posture is.

DID YOU KNOW?

You can keep up with my future computer posture tips free of cost.

Sign up for my free email newsletter.

It's called Computer Posture Weekly.

You can sign up at:

SittingPosture.com/newsletter

Thanks for your interest in computer posture.

You're taking powerful steps forward to improve your quality of life.

That's something to be very proud of.

Take care,

Todd Bowen
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