

# Building a Better Neck

## Preserve the Curve

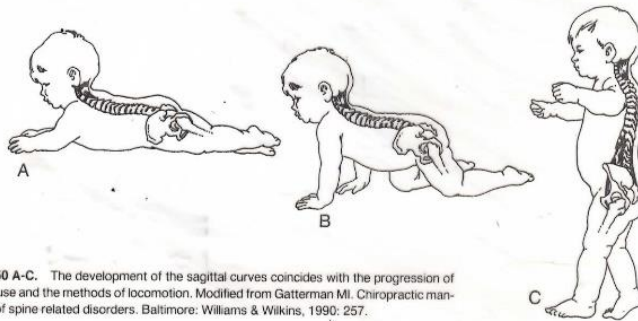


Figure 2.50 A-C. The development of the sagittal curves coincides with the progression of muscular use and the methods of locomotion. Modified from Gatterman MI. *Chiropractic management of spine related disorders*. Baltimore: Williams & Wilkins, 1990: 257.



Figure 2.51. Normal spinal posture viewed in the sagittal plane

The possibility of improving the spinal curves is less likely in these cases, unless their presenting configurations are acute disturbances. Therapy is mainly directed at improving mobility and slowing the process of degeneration. Research is needed to determine if there is any positive influence of chiropractic care on degenerative processes.

### THE RIB CAGE

The rib cage is an integral part of the spinal column (2.54). It is important to recognize the tremendous mechanical effect it has on spine function and stability. There are several biomechanical functions of the rib cage, including (2):

1. To serve as a protective barrier against lateral or anterior impacts;
2. To stiffen and strengthen the spine. Resistance to displacement is provided by two mechanisms:
  - a. The costovertebral joint provides additional ligamentous structures and attachments that contribute to spinal stiffness and strength. Mobility is also reduced;
  - b. An increased moment of inertia of the thoracic spine. Moment of inertia is a measure of the distribution of a material about its centroid. This distribution determines the strength in bending and torsion. The unit of measure is meters to the fourth power (Fig. 2.55). The addition of the rib cage to the thoracic spine effectively increases its cross sectional area and mass. The increased moment of inertia stiffens the spine when it is subjected to lateral bending and axial torsion. The added stiffness of the spine provided by the rib cage has been well described by Andriacchi et al. (86) (Fig. 2.56). As can be seen, the results of sternum removal have as devastating an effect as removal of the entire rib cage; and
3. To add additional strength and energy absorbing capacity to the spine structure during trauma.

## **Preserve the Motion**

**Rotation:** Ability to look right and left

**Flexion:** Ability to touch chin to chest

**Extension:** Ability to look up

**Lateral Flexion:** Ability to tilt ear towards shoulder

## Threats to Normal Cervical Curve and Motion

Postural Distortion

Trauma

- Whiplash
- Slip-And-Fall
- Slip-And-Stumble
- Workplace accidents
- Sports injuries
- Gardening Injuries

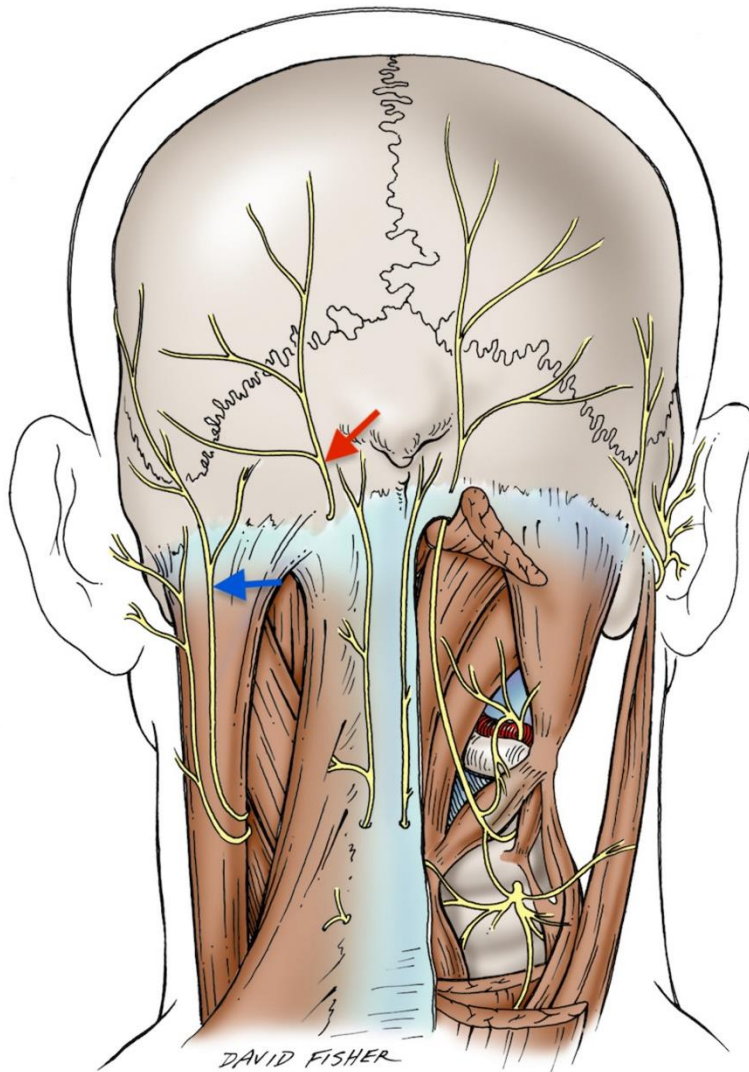
Emotional Stress

## Not All Cervical Trauma Is Obvious



<https://www.loc.gov/item/00694192>

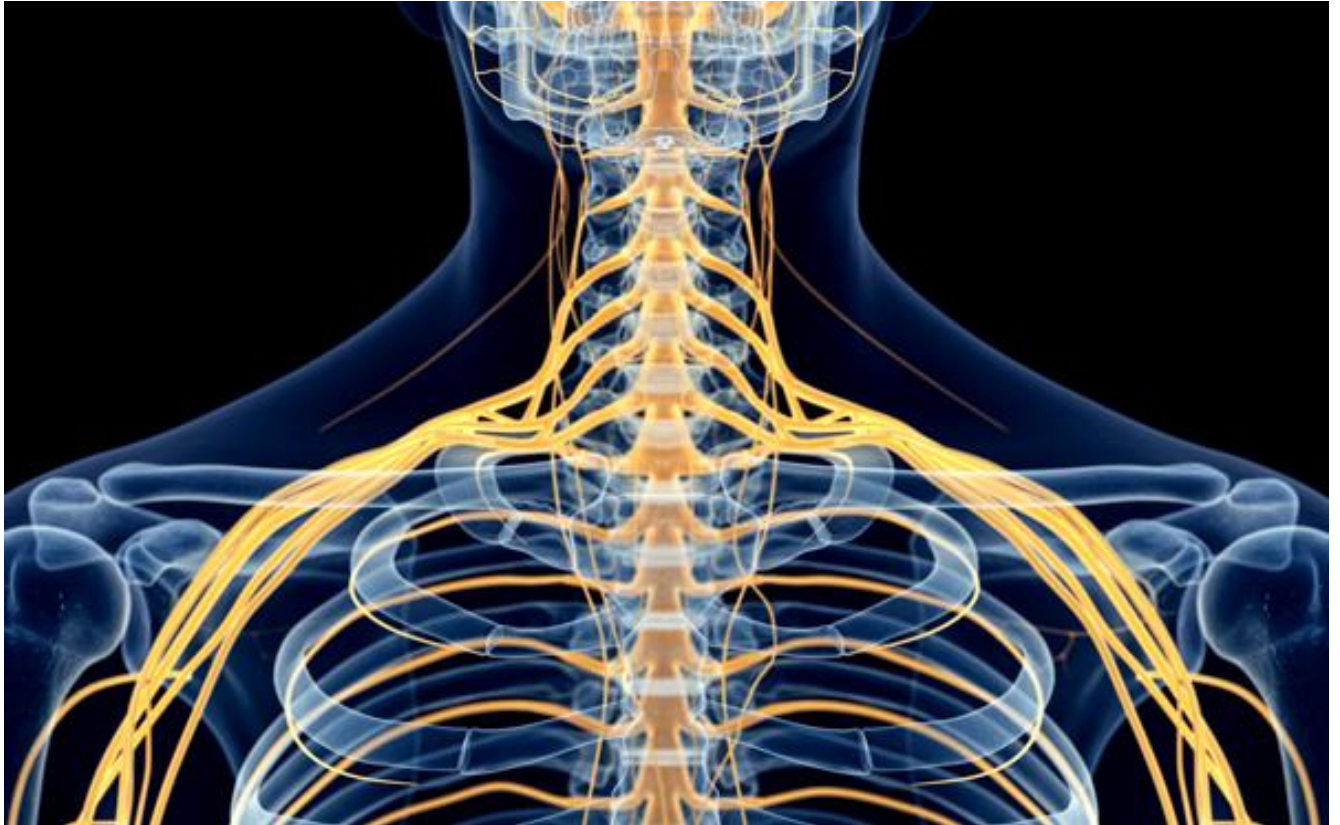
## Cervical Spinal Nerves and Head Sensation



Susanne Lynge, Kristina Boe Dissing, Werner Vach, Henrik Wulff Christensen, Lise Hestbaek. [Effectiveness of chiropractic manipulation versus sham manipulation for recurrent headaches in children aged 7–14 years - a randomised clinical trial](#). *Chiropr Man Therap*. 2021; 29: 1.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7792176/>

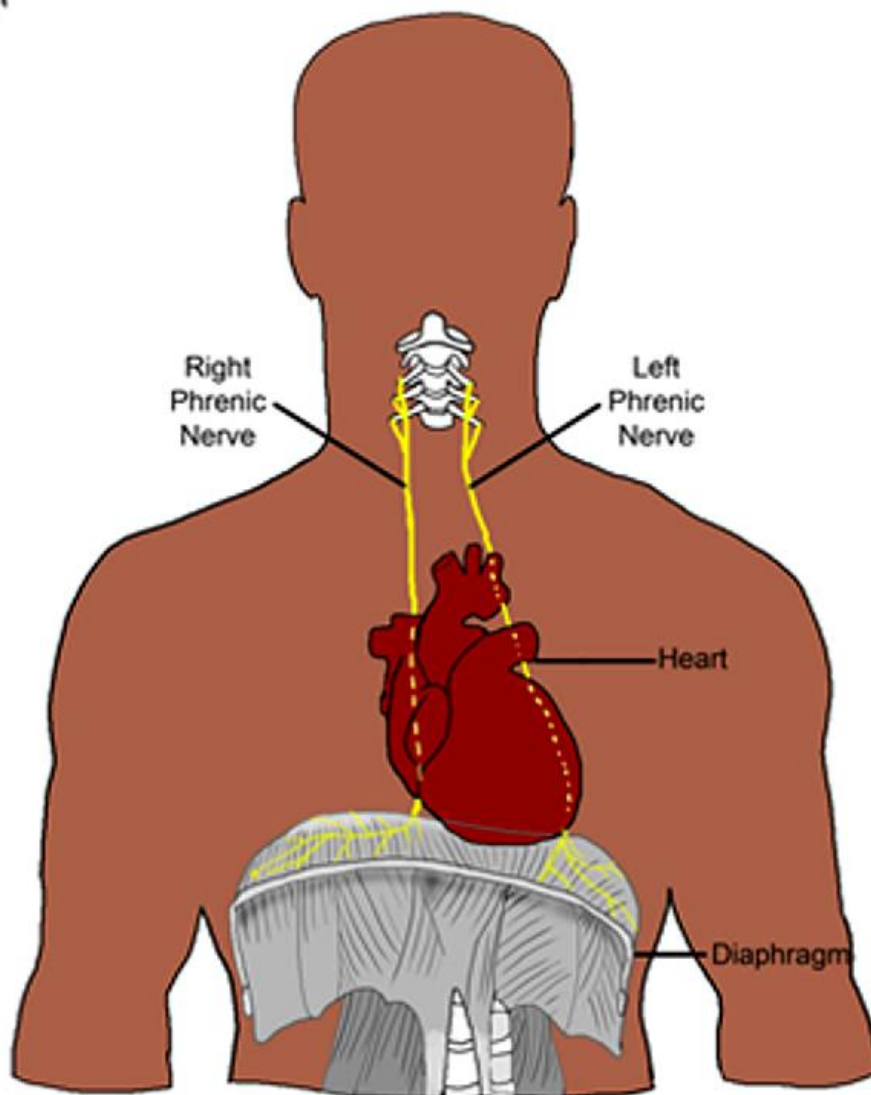
## Cervical Spinal Nerves and the Upper Extremity



Brent S Russell. [Carpal tunnel syndrome and the "double crush" hypothesis: a review and implications for chiropractic](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2365954/). *Chiropr Osteopat.* 2008; 16: 2. Full text: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2365954/>

## Cervical Spinal Nerves and Breathing

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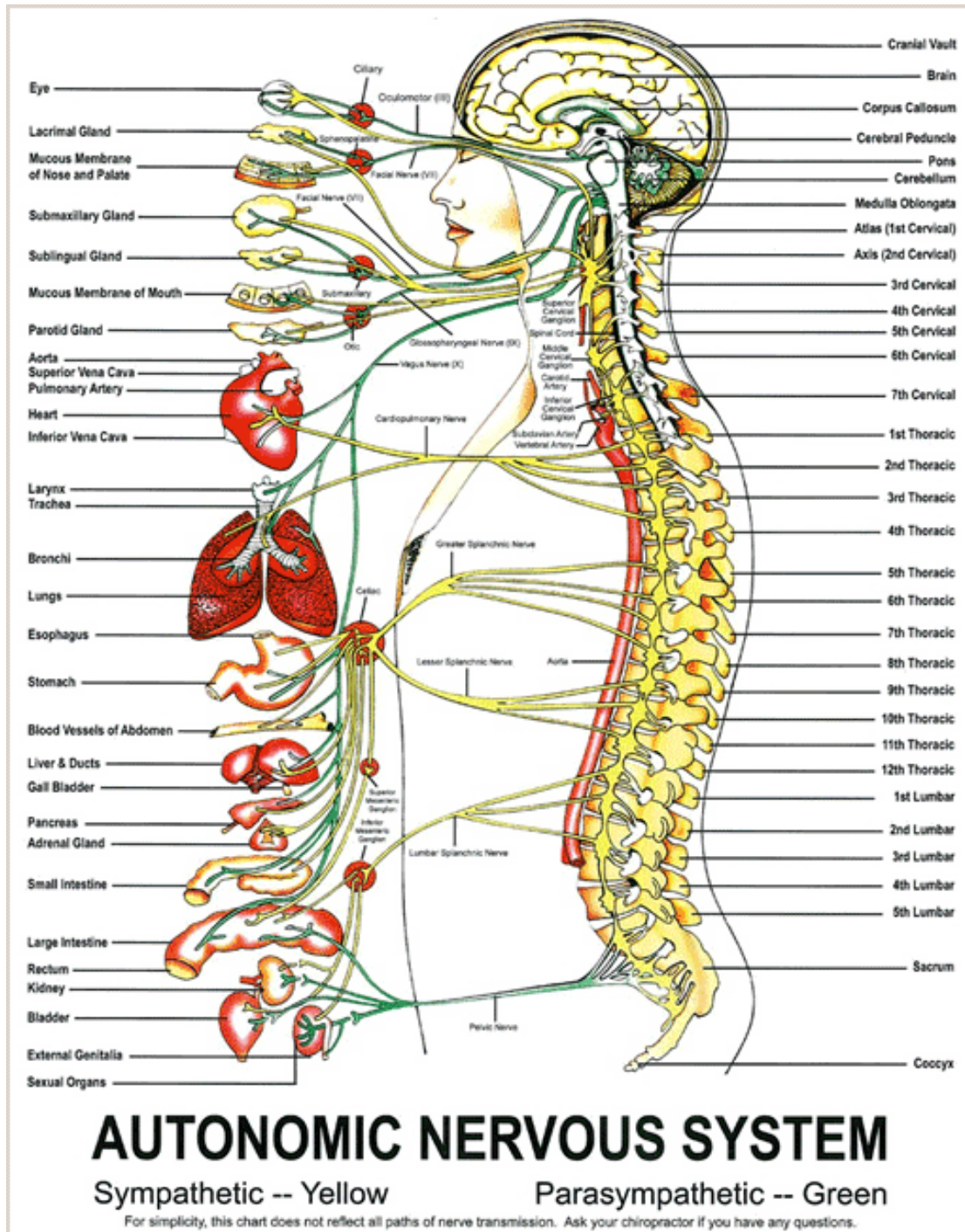


Kessinger R. Changes in Pulmonary Function Associated with Upper Cervical Specific Chiropractic Care. *J Vertebr Sublux Res*, 1997; 1(3): 43-49.

Masarsky CS, Weber M. Chiropractic and Lung Volumes – A Retrospective Study. *ACA J Chiropr*, 1986; 20(9): 65.

Masarsky CS, Weber M. Chiropractic Management of Chronic Obstructive Pulmonary Disease. *J Manipulative Physiol Ther*, 1988; 11: 505-510. Abstract: <http://www.ncbi.nlm.nih.gov/pubmed/3253396>

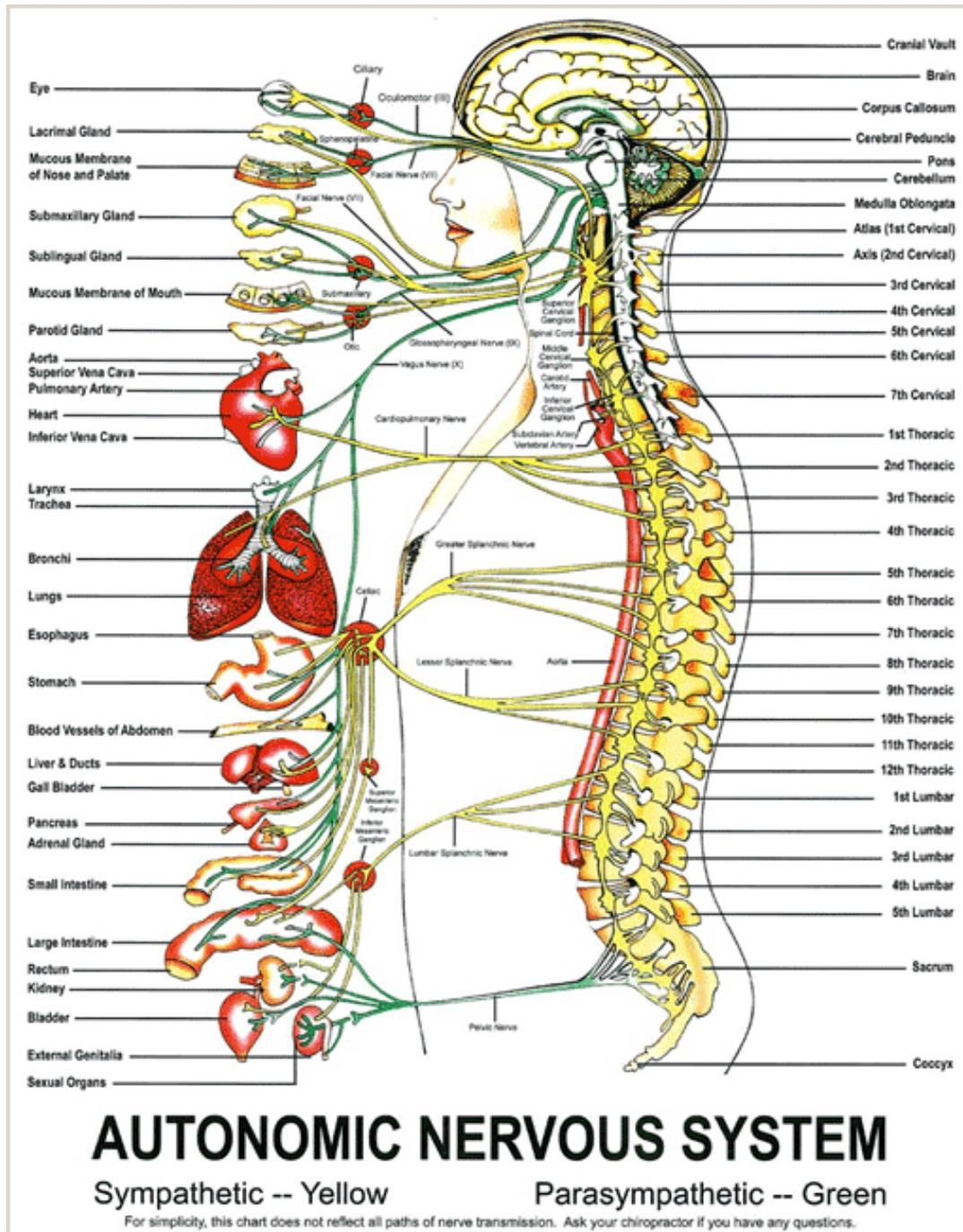
# Cervical Spinal Nerves and Dizziness



Aleksander Chaibi, Peter J. Tuchin [Chiropractic spinal manipulative treatment of cervicogenic dizziness using Gonstead method: a case study](#) J Chiropr Med. 2011 Sep; 10(3): 194–198 Full text: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3259942/>



# Cervical Spinal Nerves and the Heart



Daniel J. Cohen, Steven Schulman, Charles S. Masarsky, Marion Todres-Masarsky. [The Kaleidoscope Model of Integrative Healthcare as a collaborative paradigm for cardiology and chiropractic: a call to action](#). Integr Med Res. 2018 Mar; 7(1): 1–8.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5884005/>

# Building a Better Neck

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You Tube: <https://www.youtube.com/channel/UCkEKVboDAUWH4YEJnfrlnPg>

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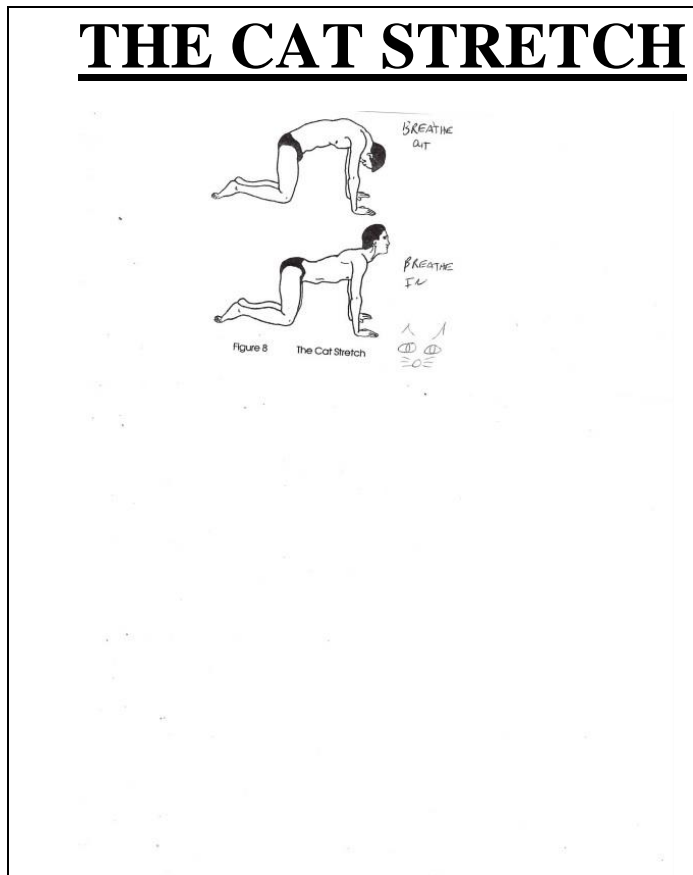
***Perform one to three sets per day unless otherwise advised by your health care provider. If any exercise causes pain, dizziness, nausea, double vision or any other form of distress, discontinue until you are cleared to resume by your health care provider.***

**Press-Relax for Head Tilting:** Tilt your head to the left side, as if trying to bring your left ear to your left shoulder. Look up slightly. Press the right side of your face firmly but comfortably (avoiding pain or strain) into your right hand for approximately ten seconds, as if you were trying to bring your head back to the upright position. Take a deep breath, let it out, and try to tilt a little further to the left. Repeat the above in the opposite direction.

**Press-Relax for Head Rotation:** Turn your head all the way to the left. Look up slightly. Press the right side of your face firmly but comfortably (avoiding pain or strain) into your right hand for approximately ten seconds, as if you were trying to turn your head back to the middle. Take a deep breath, let it out, and try to turn a little further to the left. Repeat the above in the opposite direction.

Jaw Release: (Note: A hearing aid may have to be removed to do this exercise comfortably.) Pull down on your earlobes (not your earrings!) gently but firmly, while slowly opening your mouth one time. Pull back on the ears and repeat the opening and closing of your mouth. Pull up on the ears and repeat. Place the tips of your fingers just barely in your ears (or your knuckles if you have long fingernails), press forward very gently (with the same amount of pressure that would be comfortable over your eye), open and close.

The “Mirror Trick”: When you start your car, sit tall and adjust your seat and rear-view mirror. Now, whenever you “scrunch” into a compressed posture, your inability to see out of your rear-view mirror will remind you to balance and lengthen.



**Cat Stretch:** On your hands and knees, breathe out as you rest your head down and arch your back up. Do this slowly and within the limits of comfort. Then slowly breathe in as you lift your head up and arch your back down. Repeat 10 times. If there is pain at a certain point in the movement, work only within the “painless envelope” until your spine becomes more limber.

References:

*Fred Ott's Sneeze:* <https://www.loc.gov/item/00694192>

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*Cervical Headache:* Susanne Lynge, Kristina Boe Dissing, Werner Vach, Henrik Wulff Christensen, Lise Hestbaek. Effectiveness of **chiropractic** manipulation versus sham manipulation for recurrent headaches in children aged 7–14 years - a randomised clinical trial. *Chiropr Man Therap.* 2021; 29: 1.

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*Carpal Tunnel Syndrome:* Brent S Russell. **Carpal tunnel syndrome** and the "double crush" hypothesis: a review and implications for **chiropractic**. *Chiropr Osteopat.* 2008; 16: 2. Full text:

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*Breathing:* Kessinger R. Changes in Pulmonary Function Associated with Upper Cervical Specific Chiropractic Care. *J Vertebr Sublux Res*, 1997; 1(3): 43-49.

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*Dizziness:* Aleksander Chaibi, Peter J. Tuchin **Chiropractic** spinal manipulative treatment of **cervicogenic dizziness** using Gonstead method: a case study *J Chiropr Med.* 2011 Sep; 10(3): 194–198 Full text: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3259942/>

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*Cardiovascular Function:* Daniel J. Cohen, Steven Schulman, Charles S. Masarsky, Marion Todres-Masarsky. The Kaleidoscope Model of Integrative Healthcare as a collaborative paradigm for cardiology and **chiropractic**: a call to action. *Integr Med Res.* 2018 Mar; 7(1): 1–8.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5884005/>

## **IMAGINE A PILL**

Imagine a pill that helps most people alleviate and prevent back pain, neck pain, headaches, and more.

It will do no harm to your stomach.

It will do no harm to your liver.

It will do no harm to your kidneys.

It carries no risk of addiction or overdose.

It will not make it unsafe to drive or operate machinery.

In fact, it usually improves attention span & coordination.

If this pill existed, everyone would be talking about it.

It does not exist, but the chiropractic adjustment does.

***If you are under chiropractic care, please continue!***

***If not, please contact your friendly local chiropractor to get started!***