

Do you notice the effects of gravity on your body and trigger muscles pain?

How anti-gravity yoga poses help us stretch the pain away

When you think about the causes of muscles pain, what comes to your mind? Sports injuries, infections, poor postures,...Have you thought about the force of gravity? Compressive force of gravity accumulates damage on our bodies over a lifetime is inescapable. We think having body pain is normal when we age. However, if we look into how gravity impacts our body and how anti-gravity yoga poses help us stretch the pain away, we can enjoy a sense of wellbeing and age gracefully. Remember, it's never too late.

Lower back

Spine forms in S-shape. This natural curvature evolved as part of the spine built-in shock absorbing system. Women's lumbar spines are even more flexible as this is built for pregnancy. Gravity can distort the spine's curvature. Vertebrae are constantly compressed and that causes lower back pain.

Lengthening the spine helps counter the compression. Weak abdominals and muscle tightness in the lumbar region are two main factors that we find it hard to lengthen our spines. Stretching and strengthening both the front and back of your body help even out muscle imbalances. As we strengthen the core, we don't overload our lower back; as we stretch the back, we reduce muscles tension and stiffness around the lower back.

Yoga can restore the spinal health, or at least to counter some of the negative effects.

Boat pose can help.



Directions: Sit down with legs in A-frame position. Lift the feet off the floor and take hold of the back of the knees if you need to. As you draw the naval in towards the spine and lift the chest up, you can lengthen the spine. Don't worry if your legs are shaking, hold for 3 – 5 breaths. If you want to challenge yourself, lift the legs higher and straighten the legs, without trading off lifting up the chest.

Knees

Our hips to knees bones form a Y-shape. The sideways orientation of our hips allows the muscles on the side of the hips (the small gluteals) to stabilize the upper body over each leg during walking when only one leg is on the ground. When this muscle weakens, the hips shift more side to side which puts more pressure downward on your knees. Without strong hip abductors and quadriceps, our upper body weight constantly put pressure on our knees joints. In this case, we need to build strength on our thighs.

Tight and weak muscles offer less support for your knee because they don't absorb enough of the stress exerted on the joint. You'll benefit from building up your quadriceps, which supports your knees.

Chair pose can help.



Directions: Come onto standing position, either feet together or feet hip width apart. Bring your hands to hips. Bend the knees. Check your knees over your heels for sustainable practice. Make sure you can still see your toes. This ensures we don't put extra pressure on knees joints but focus on strengthening thigh muscles.

Neck

What's the weight of our heads? It is about 12 lbs. Probably you notice the weight when you carry a baby but not your own head. Our necks constantly hold our heads and then Vertebrae of cervical spine are compressed. The nervous system is sensitive to mechanical movement. In an ideal situation each of the neck joints would move in a smooth and even way, coordinated and organized by the muscles and nerves. This means that the weight of the head is spread evenly over these joints when it is moving. However, we don't really use the range of motion of our necks and always keep our heads down for work

By hanging your head upside down, you take the pressure of gravity off your spine, increase the space between your vertebrae, taking pressure off nerves and relieving pain. You don't need to do headstand or handstand. You'll know how heavy the head is.

Forward fold can help.



Directions: Come onto standing position, either feet together or feet hip width apart. Bend forward. Micro-bend the knees to avoid hyper-extending. Completely relax the upper body and the head. If you feel the weight of the head, you are doing it right. Hold your opposite elbows or simply hang it towards the floor.

Want to enjoy a sense of well-being?

I hope you find this information useful, go ahead and try! In Yoga class, we contract and relax different parts of the muscles that we don't use it in our daily life, offsetting the muscles imbalance in our daily life.

Hatha Yoga runs every Wednesdays at 6pm at Ashfield Sports Club and every Saturdays at 7:30am at Gary Blanch Park, Ashfield. Invest \$12 for your wellbeing.

If you have any questions, please feel free to contact me.

Rachel Lau
Founder and Yoga Teacher of VAI YOGA
www.vaiyoga.com.au
M. 0466 835 605
E. rachellau@vaiyoga.com.au

Reference

<https://www.livestrong.com/article/498199-reverse-curve-spine-using-yoga/>

https://www.evolutionhealth.com/Inversion_Therapy/Gravity_Inversion.html

<https://www.mayoclinic.org/diseases-conditions/knee-pain/symptoms-causes/syc-20350849>

<http://www.meadowheadphysiotherapy.co.uk/news/a-pain-in-the-neck-or-is-your-head-simply-just-too-heavy-for-your-body/>

<https://www.livestrong.com/article/390775-do-inversion-tables-help-with-neck-pain/>

<http://www.nosecreekphysiotherapy.com/hip-abductors-the-muscles-that-stabilize-your-walk/>

Daniel Lieberman, "The Story of the human body", Penguin Books, 2013