

Keep your Spine Moving



Did you know that even the ancient Greeks knew that movement and physical exercise was good for your brain?

Modern scientists have shown that movement is one of the keys to promoting a healthy brain.¹ Movement has been shown to help people with dementia, depression, and ADHD.²



Why is spinal movement important?

Scientists now know that it's not just physical exercise that's important for your brain, but how your spine moves is also very important for keeping your brain healthy. It's even been shown to change the structure of your brain and improve your concentration and how fast you can think and react.^{1,5,6}

Chiropractic care helps keep your spine moving



Scientists have shown that chiropractic adjustments can have a big effect on how well your spine moves.^{7,8} They have also shown that chiropractic adjustments can help your brain to process information more quickly, know where your body is in space, and control the way your muscles work.^{9,10}

If you look after your spine, your brain will love you for it!

If we look at spinal movement in a very simplistic way, there are really three things we want our spine to be able to do on a regular basis. When we are running, we want our spinal bones to move together in a way that spreads and absorbs the impact forces generated by running. By moving well together, the impact forces are shared equally across the spinal bones. But other times, for example when we are lifting heavy objects, we want our spine to stiffen up to protect us. Without all the bones stiffening up like this we could injure ourselves while lifting heavy objects.

So how does our spine sometimes move and sometimes stiffen up? Well, it's the brain and central nervous system that does this for us by activating our spinal muscles. The brain activates the correct muscles around the spine and skull in the correct order with perfect timing, to either allow for optimal movement, e.g. during running or to allow for the spine to stiffen up, e.g. during heavy lifting.

Now there is one more thing we need from our spines, and that is for it to respond during times we're experiencing some postural challenges. In these cases, we need our brains to switch on and off the correct spinal muscles very fast so that we can maintain balance and stop ourselves from falling over.

One reason why a healthy spine is so important for your brain is that when one of your spinal segments doesn't move properly, it changes the way your brain perceives and responds to sensory information that enters your nervous system. In other words, spinal function seems to be one factor your brain uses to help process and integrate all of the information from your environment.¹¹ They believe that if your spine isn't moving in a normal or ideal way, it changes the way your brain controls your body.¹¹

New research has recently shown that chiropractors are very good at figuring out which segments in your spine are most restricted or stiff.¹²⁻¹⁴ They can then adjust your spine using specific spinal adjustments to help restore normal movement patterns in your spine, with the aim of helping your brain to better control your body. So, if you want to make sure your brain is getting the stimulation it needs to stay healthy, see your chiropractor so they can help you to keep your spine moving as best as it can.

In between chiropractic adjustments keep your spine moving well by staying active, doing yoga or other stretching exercises.

Disclaimer and References

This information is provided for educational purposes only. It is not intended to be professional advice of any kind. Haavik Research Ltd encourages you to make your own health care decisions based on your own research and in partnership with a qualified health care professional.

1. Guiney H, Machado L. 2013;20(1):73-86. 2. Morres ID, Hat-zigeorgiadis A, Stathi A, et al. 2018. 3. Tyn-dall AV, Clark CM, Anderson TJ, et al. 2018;46(4):215-23. 4. S J, Arumugam N, Parasher RK. 2018. 5. Chaddock-Heyman L, Erickson KI, Holtrop JL, et al. 2014;8:584-84. 6. Gomes-Osman J, Cabral DE, Morris TP, et al. 2018;8(3):257-65. 7. Galindez-Ibarbengoetxea X, Setuain I, Andersen LL, et al. Med 2017;23(9):667-75. 8. Branney J, Breen AC. 2014;22:24. 9. Kelly DD, Murphy BA, Backhouse DP. 2000;23(4):246-51. 10. Holt KR, Haavik H, Lee AC, et al. 2016. 11. Haavik Taylor H, Holt K, Murphy B Chiropr J Aust 2010;40(1):37-44. 12. Holt K, Russell D, Cooperstein R, et al. J Manip Physiol Ther 2018;41N PRESS. 13. Cooperstein R, Haneline M, Young M. J Chiropr Med 2010;9(3):99-106. 14. Cooperstein R, Young M, Haneline M. J Can Chiro Assoc 2013;57(2):156-64.

© Haavik Research 2021

- **Dr. Heidi Haavik**
BSc(Physiol) BSc(Chiro) PhD
- **Dr. Kelly Holt**
BSc, BSc(Chiro), PGDipHSc, PhD
- **Dr. Jenna Duehr**
BChiro, BHSc(Nursing), MHSc

GROUND
CHIROPRACTIC