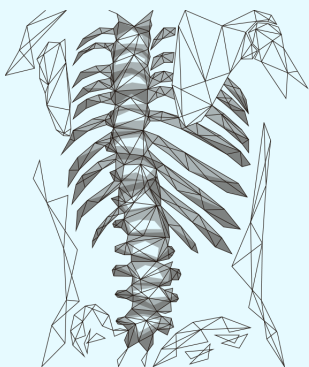


# Effects of an Adjustment



*Did you know that Chiropractors adjust dysfunctional segments in your spine called subluxations?*

Recent scientific studies are revealing a new understanding about how chiropractic spinal adjustments work. We know much more about how the brain and the rest of the central nervous system functions.



## **What is a subluxation?**

Originally, many people thought that dysfunctional 'subluxated' spinal segments were 'out of place', or misaligned, and that this put pressure on the nerves exiting the spine. We now know that a vertebral subluxation is not so much the condition of a bone being out of place; it is more that a bone is functioning or moving in a less than ideal way – in a manner that is not 'normal' for the body.



Most of what you perceive as reality is your brain's translation and interpretation of all the information it gets from its sensory receptors (in your ears, eyes, skin, muscles, etc.). With this in mind, can you be sure that what you see is a complete and accurate reflection of what is in front of you?

## What does the research show?

This is where chiropractic comes into the picture. Research indicates that vertebral subluxations lead to changes in the information the spine sends to the brain. Instead of the brain receiving information that the subluxated spinal segment is moving as it should, it will get different information.

What's really interesting is that when spinal segments don't move properly it influences how the brain perceives and responds to other sensory information. Spinal function seems to be one factor the brain uses as part of its integration of all information to create your inner virtual reality. When this happens it can result in a breakdown in proper movement control that influences human performance and can end up causing pain and other dysfunction.<sup>1</sup>

Chiropractic care plays a role in assisting those who display poor proprioceptive function which has been dubbed '*Klutz Syndrome*'. Proprioception means your brain's ability to know where all your body parts are when you close your eyes. You rely on this sense to be able to move without making

mistakes. If a subluxation alters your inner map your proprioceptive function will be impaired. This may mean you may not accurately know where your arms or legs are when your eyes are closed, which means you are more likely to be clumsy and accident prone.

Recent research has objectively demonstrated that chiropractic adjustments can improve proprioception,<sup>2,3</sup> which means the brain will be better able to control limb function and movement more accurately. To put it simply, chiropractic care improves the communication between the brain and body and results in better control of the core muscles during body movements, so that you are at less risk of injury.<sup>4</sup> Research is showing that a single session of chiropractic care may improve core muscle activation<sup>5</sup> and increase muscle contractions that are equivalent to those seen following 3 weeks of strength training.<sup>6</sup>

This has got to be good news for patients seeking to enhance their athletic performance and prevent injuries from occurring!

### 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.

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