# The Spinal Column

Winter 2016

### King William Road Chiropractic

73 King William Rd Unley SA 5061

Ph. 8357 9229

www.kwrchiropractic.com.au

Dr Aaron Scott Dr Anette Lajumin

> Fenella Jinu Sarah Huckins

### Consulting hours

Mon.	8-12	2-7
Tues.	8-12	2-6
Wed.	8-12	2-6
Thurs.	8-12	2-6
Fri.	8-1	2-6
Sat.	9-12	

### **Our Commitment to** <u>you</u>

Our aim is to provide efficient and effective health care through the removal of vertebral subluxations in a friendly and caring environment.

Furthermore we are committed to providing the knowledge that will allow our patients to make informed decisions concerning their health.

## Chiropractic under attack... Why? You be the judge

been a measured and deliberate attack on chiropractors from the media under the direction of mainstream medicine.

On a personal level this saddens me greatly. At a time where professional maturity should be emphasizing an integrated approach to patient care, we have disintegration. A small section of the medical community is abusing their cultural authority over health care to undermine chiropractic and unfortunately they are selling it via the platform of science. They are suggesting that there is no evidence to support chiropractic care other than the very narrow field of low back pain management. Additionally, they are suggesting that chiropractic is unsafe and unethical and finally they are now attacking the care of infants with chiropractic care claiming that it is both dangerous and unwarranted. It is worth mentioning that all of these claims are made without evidence to support their views! In the next few paragraphs I will attempt to set the record straight and let you decide for yourself what the motivation might be for initiating these actions.

Chiropractic has always based itself on three fundamental principles which at its essence form the philosophy of health care that chiropractic advocates. Firstly, the body has an inborn ability to regulate and heal itself. Secondly, the nervous system controls and regulates the function of every cell tissue and organ in the body and thirdly the function of the nervous system is affected by altered spinal biomechanics or more specifically subluxations.

Therefore, provided there is

In recent times there has evidence to support this, it is seen in an individual who had possible to deduce that subluxations influence the nervous system which in turn influences the way we regulate our body, reducing our capacity to respond to changes in our environment. An inability to respond to our environment leads to a state of dis-ease which if left unchecked will result in signs and symptoms that fit the categorization of disease.

> Sceptics of chiropractic continually suggest that chiropractic is unscientific and that there is no evidence of its influence on the nervous system. Well this is simply not true, there are many well documented studies on this with the most recent being carried out by an independent medical researcher and published in the peer reviewed journal, Neural Plasticity (1).

This study not only shows that when we adjust subluxations we change brain function. But it changes activity by a whopping 20%. More importantly this effect occurs in the prefrontal cortex which is thought to be the conductor of the brain. This shows us that every time we're adjusting someone, we're having a big, positive effect on the brain. And a brain that's functioning differently and conducting its activities better is sure to have an effect on the body.

Another recent study demonstrates the effect of this very nicely. In this study Heidi Haavik and her team sought to look at the impact of chiropractic adjustments on strength and fatigability (2). What we can say based on this study is that when we adjust subluxations, we improve strength, we prevent fatigue and we change the way the brain drives our muscles. In fact, the changes observed after just one adjustment, were similar to those

completed a three week strength and conditioning course!

Just these two studies alone justify the claims made by chiropractors suggesting that chiropractic can improve your health, however in addition to this there are numerous studies done that justify chiropractic for the management of many conditions. Be sure to ask at reception for any references if vou are interested.

I would however like to close on the safety record of chiropractic, in particular in the treatment of children. A review of the literature performed in 2015 (3), which looked into adverse events due to chiropractic and other manual therapies for infants and children found that serious adverse events due to manual therapy were very rare and while there have been 3 published deaths attributed to manual therapy, none were from a chiropractor. Chiropractic is very safe, in fact, more safe than simple over the counter medications such as Nurofen!

All of this is very interesting when you consider the current attacks on our profession by the medical profession which incidentally also includes physiotherapy. One can only wonder what the true motivation would be. We look forward to assisting you with all of your health needs now and in the future using only the best evidence to drive our decisions.

#### Aaron

- 1. Lelic et al. "Manipulation of dysfunctional spinal joints affects sensorimotor integration in the pre-frontal cortex: A brain source localization study," Neural Plasticity, Volume 2016
- 2. Changes in H-reflex and V-waves following spinal manipulation. Experimental Brain Research. Vol 233, 4, pp 1165-1173
- 3. Adverse Events Due to Chiropractic and Other Manual Therapies for Infants and Children: A Review of the Literature. Journal of

## **Exercise - How Much Is Too Much?**

The weather has cooled down and I have noticed a lot of people coming in with colds and flues. I have been asked quite a few times now "How can I avoid getting sick?". A study published online in 2010 in the British Journal of Sports Medicine found that adults who exercised were least likely to suffer from colds in the winter months. If they did develop an upper respiratory infection, it was much less severe compared to someone who didn't exercise. The exact reason why there is a link between exercise and increased immunity still requires further research, but at this stage it is believed that "each bout of exercise causes a transient increase in immune system activity, increasing the numbers of white blood cells and immunoglobulin in the blood, which acts to reduce a person's susceptibility to disease" (Lavelle, 2010).

The next question is: "How much exercise is too much?" The key thing to remember is that exercise strengthens your immune system, but too much exercise weakens it. The conclusion of a 2014 study published in Medicine & Science in Sports and Exercise showed that a long duration of exercise (120 minutes) caused a temporary weakening of the immune function, while short (30 minutes) of intense exercise did not. It is however very difficult to generalize this finding as overall fitness was not taken into account (Hutchinson,2014). If you are used to running two hours every weekend, it may not cause as much stress on your body as someone trying to run two hours for the first time. There are various ways to figure out what your limit is – some people just "feel they could use a rest", others use a log, listen to their coach's suggestions or work out on alternate days.

So, what we have gathered so far is that moderate exercise is sig-

nificantly better for you than no exercise at all, but there is a point where that benefit stops and it starts doing you more harm than good. People who have lower levels of stress hormones in the blood usually have improved immunity (Lavelle, 2010). Exercise raises the levels of two hormones in your body – norepinephrine and cortisol. These are two hormones that tend to suppress the immune system. The amino acid glutamine plays an important role in immunity. It is also significantly affected during exercise so a plunge in your immune function may be related.

"How can I avoid workout-induced colds and flus?" SIM-PLE – Don't overtrain and don't undereat (the right foods). Your body needs to be fueled by the right ratio of carbs, proteins and fats before and after a workout so that it can do a good job of defending itself against pathogens. Aim for shorter workouts, less often and make sure you factor in recovery days! If you find that you are waking up feeling physically and emotionally drained and unable to function without a few cups of coffee before heading to the gym or realizing you can't remember the last time you didn't have those niggly aches, pains or bruises, it's time to add a few more rest days into your routine. This may sound like the end of the world to avid gym-goers who push themselves to the limit, fully embracing the "no pain, no gain" motto even when you're not feeling 100%. But the research shows - you aren't doing yourself any favours and you may even find that your training improves by incorporating more

rest. Anette

## Zinc: It does more than you think!

Zinc is an essential mineral and is found abundantly throughout the human body, from the liver to the fingernails! It is required for the function of more than 300 enzymes, is involved in the structure of several proteins and is essential for immune function, brain cell signalling and the expression of genetic information through stabilising the RNA and DNA structure of cells and effecting cell division.

Foods that are high in zinc are animal proteins, such as red meat, poultry and liver, as well as seafood, particularly oysters. Phyates, which are present in the outer husk of cereal grains, can block zinc absorption, so the availability of zinc from plant based foods may be lower than that of animal proteins. Because of this, vegetarian or vegan diets or those that are high in unrefined grains and low in animal proteins could potentially lead to zinc deficiency. High intakes of calcium, iron and copper can also reduce the absorption of zinc in our bodies, which is important to note if people are taking regular calcium or iron supplements.

Zinc is essential for our immune system function and a deficiency of zinc can cause an increase in infections within our body, as well as delayed wound healing time. Severe zinc deficiency can cause reduction in the activity of several of our immune cells including our natural killer cells and T<sub>4</sub>-helper cells and can cause the thymus gland, which is important especially for

childhood immunity, to shrink. Zinc is also needed for us to taste and smell correctly, so a zinc deficiency can result in the reduced ability to taste and smell.

Because zinc is so important for our immunity, various studies have been conducted as to whether zinc supplementation is effective to shorten the duration and reduce the symptoms of the common cold. Although some studies have had conflicting results, overall it is considered that supplementation can be beneficial for some individuals. For example, one study showed that a group of people who took 1 zinc lozenge of 13.3mg of zinc acetate every 2-3 hours whilst awake had a shorter duration of cold (4 days versus 7.1 days), cough (2.1 days versus 5 days) and nasal discharge (3 days versus 4.5 days) when compared to placebo. It is important to be aware though that there can be risks involved in taking zinc in high doses or for a long duration, so it's best to speak to your health care practitioner before starting supplementation.

Mahan, L & Escott-Stump, S 2004, *Krause's Food, Nutrition & Diet Therapy*. Elsevier, Philadelphia, Pennsylvania.

National Institutes for Health Office of Dietary Supplements 2016, Zinc Fact Sheet for Health Professionals, National Institutes for Health Office of Dietary Supplements, Bethesda, Maryland, viewed 4 May 2016, <a href="https://ods.od.nih.gov/factsheets/Zinc-HealthProfessional/">https://ods.od.nih.gov/factsheets/Zinc-HealthProfessional/</a>

Prasad AS, Beck FW, Bao B, Snell D, Fitzgerald JT. Duration and severity of symptoms and levels of plasma interleukin-1 receptor antagonist, soluble tumor necrosis factor receptor, and adhesion molecules in patients with common cold treated with zinc acetate. J Infect Dis 2008: 197:795-802.

Sarah