



36 Winterfold Road

Hilton, WA 6163

P: 08 9337 6033

E: admin@hiltonchiropractic.com.au

W: www.hiltonchiropractic.com.au

OUR CHIROPRACTORS

Dr Gareth Calverdash

B.Sc.(Chiro), B.Chiro

Graduated from Murdoch University. He is the head of the well-being team.

Dr Sasha Aspinall

B.Sc Hons (Chiro), B.Chiro

Graduated from Murdoch University as Dux of her class. Her particular interest lies in spinal pain.

Dr Cameron Rennie

B.Sc.(Chiro), B.Chiro, B.SportSc.

Graduated from Murdoch University and has an interest in sports medicine.

CLINIC STAFF

Jo Brook (Senior Receptionist)

Sarah Oldham (Receptionist)

CONSULTATION TIMES

Consultations are by appointment.

Monday to Friday

7.30am - 11.00am 2.30pm - 6.00pm

Saturday

8.00am - 12.00 noon

Urgent problems are dealt with promptly.



YOUR CHIROPRACTOR

JANUARY/FEBRUARY 2018

Bugs: Food for Thought!

For many people the thought of eating creepy crawlies for dinner might be cringe worthy. However, a recent study from the University of York found that consumption of bugs in our diet, called entomophagy, could not only help solve the world's food shortage problems, but would also have a substantial positive impact on the environment.

The study, which was conducted in collaboration with the Centre for Australian Weather and Climate Research, revealed that halving the world's meat consumption would substantially reduce greenhouse gas emissions and free up a surface of land approximately 70 times the size of the UK. According to the UN Food and Agriculture Organisation (UNFAO), agricultural land currently takes up a third of the world's land surface.

Switching to a bug protein diet would also have a massive impact on water conservation. The UNFAO estimates that agriculture is responsible for 70% of our global freshwater usage, with cattle weighing in as the most wasteful farming, using a staggering 22,000 litres of fresh water per 1kg of beef.

The Canadian filmmaker, Ian Toews, whose documentary, Bugs on the Menu featured during Australia's 2016 Environmental Film Festival, claims that five to seven times more people could be fed on an insect diet when compared to a current western diet. Edible insects provide 40% more protein because

they convert grains into protein and good fats much more efficiently than animals. Insects are also packed full of fibre, amino acids, vitamins, and minerals such as iron and calcium. According to the UNFAO 1,900 varieties of edible bugs exist and the taste of many are actually similar to meats which are more familiar to us. For example, stinkbugs are described as having an apple flavour, red agave worms are spicy and tree worms are said to taste similar to pork rind.

Saliou Niassy, from the University of Pretoria, claims 2 billion people worldwide already consume insects as a part of their diet. The majority of these people are from African countries, though it is also popular on other continents. Australia's Aboriginal population has been eating witchetty grubs, honey ants and moths for thousands of years. For those thinking of incorporating edible bugs into their diet, they are available online in Australia and New Zealand, as are plenty of bug cookbooks. For those averse to eating whole bugs, another popular way to integrate bug protein into the diet is in the form of insect flour which is made by finely grinding insects such as crickets or mealworms.

With entomophagy being touted by the UN as the sustainable food source of the future, and western supermarket chains already starting to stock insect-based foods, it's clear that bugs are here to stay. Are you ready to join entomophagy's growing fan base?

Take me home to complete our PUZZLE – check inside!

Can Meditation Change our Gene Expression?

We hear a lot about the benefits of incorporating meditation into a healthy lifestyle, but what scientific evidence is there to support the physiological benefits? Is it really worth it?

A systematic review article in *Frontiers in Immunology*, decided to investigate this question. Their review, published in June 2017, examined the current research on the health benefits of what they termed Mind-Body Interventions (MBIs). This review targeted 18 scientific studies that looked at the impact of varying MBIs including yoga, Tai Chi, Qigong, relaxation response and breath regulation.

One of the major arguments for incorporating meditation into daily life is to combat stress. Chronic stress can actually be seen in our genes in the form of CTRA (Conserved Transcriptional Response to Adversity). CTRA refers to a change in gene expression, which occurs in people who have undergone prolonged periods of severe stress. The primary outcomes of CTRA can be observed as an increase in inflammation on a cellular level as well as a decrease in antiviral and antibody related genes. This creates an increased risk for many illnesses, including cancer, neurodegenerative diseases and digestive

disorders among others. It can also increase the risk of mental illnesses such as depression and post-traumatic stress disorder (PTSD), and lead to early mortality.

Chronic stress has also been shown via neuroimaging to reduce the amount of grey matter in our brains. However, MBIs can reverse this, which can positively impact emotional state, learning, memory, self-referential processes and perspective taking.

In addition, MBIs reduce inflammatory markers in the body which are associated with inflammatory diseases. One factor in particular, nuclear factor kappa B (NF-kB), has shown to be positively affected by MBIs. NF-kB is produced when the body's fight or flight stress response is activated, and causes release of inflammatory markers. By reducing production of NF-kB, MBIs reduce the impact of stress on the body.

While evidence of the benefit of activities like yoga and meditation seem promising, further research is required to determine the exact impact of MBIs and alternative lifestyle changes such as regular exercise or a change in diet. Keeping that in mind, results so far make

a compelling argument for incorporating activities like meditation into a healthy lifestyle in order to reverse the effects of stress on our body.



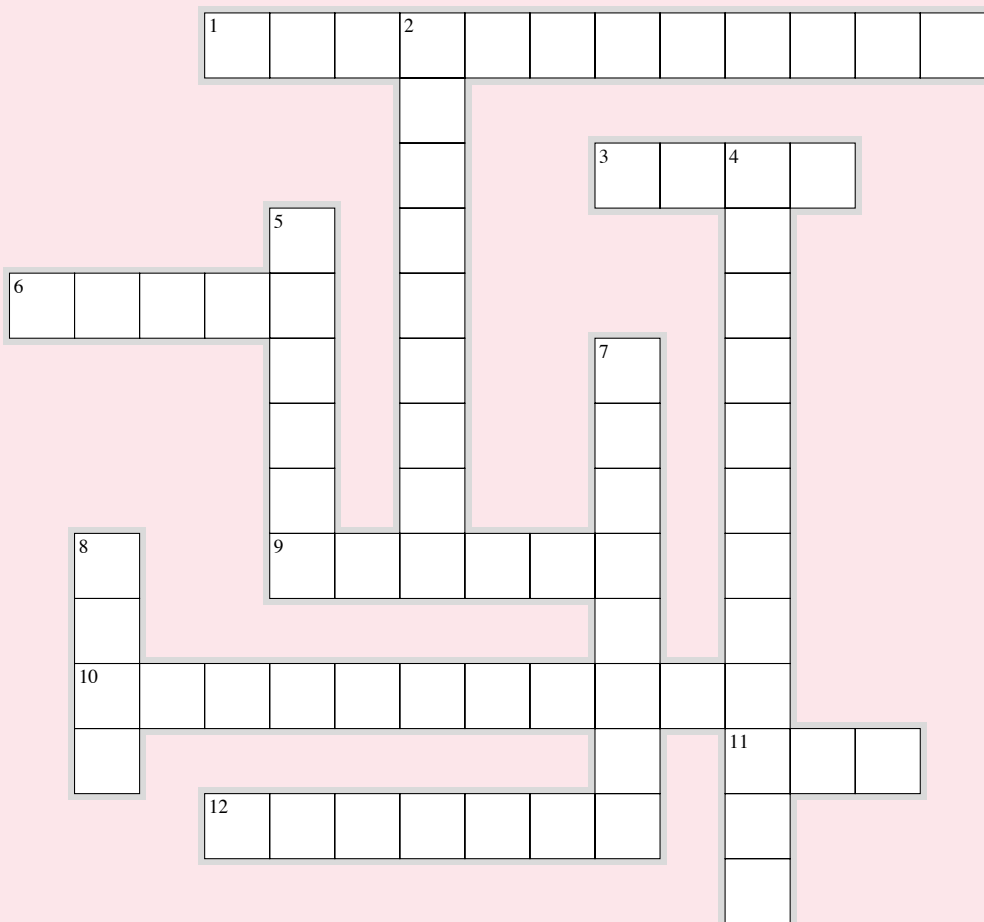
Clever CROSSWORD

Across

1. MBI stands for Mind-Body _____.
3. 22,000 litres of freshwater are used in the production of 1kg of this.
6. What kind of flavour are stinkbugs described as having?
9. A common overuse injury of the elbow.
10. The consumption of insects in our diet.
11. How many billion people already consume insects as part of their diet?
12. One of the major bones that meets at the elbow.

Down

2. RICE stands for Rest, Ice, Compression and _____.
4. Kidneys maintain the balance of these.
5. When swimming, water takes away 70% of your body _____ when compared to other forms of exercise.
7. What can form in the kidney from a build up of salts and minerals?
8. What type of matter has been shown to be reduced by chronic stress?



ANSWERS CAN BE FOUND
IN THIS EDITION OF
YOUR CHIROPRACTOR

SOLUTION IS ON THE BACK PAGE

The Kidneys - Our Two Magical Bean-like Organs

Our kidneys are vital for life. Let's look at why that is, and what the kidneys actually do to keep our bodies healthy.

Your kidneys are shaped like jellybeans and are each about the size of a fist. They are positioned next to your spine just below your ribcage. These organs may be small but they do a mighty job, filtering 150 - 180 litres of blood per day. As the blood enters the kidney, it is filtered by around a million filtration units, known as nephrons, and waste products and excess fluids are separated from the blood. Following separation, the fluids then get filtered again to return vital nutrients back to the blood stream and the waste is transferred as urine to the bladder.

Besides removing excess fluid and waste from your blood, the kidneys also maintain the balance of electrolytes such as sodium, potassium, and phosphate. In addition, the

kidneys produce hormones that perform various functions such as: regulating your blood pressure, stimulating production of new red blood cells, and even converting vitamin D to its active form to keep your bones and teeth strong by promoting calcium storage.

Sometimes a build-up of salts and minerals can cause crystals to form in the kidney, resulting in what we call kidney stones. If they get lodged in the bladder, they can create pain and sometimes infection. Signs of kidney stones can include: pain that comes and goes in your sides, lower back or abdomen, painful urination or a persistent need to urinate, discoloured urine, and nausea or vomiting.

Often the stones can be passed out of the body by increasing water intake and taking pain medication as needed. However, if it becomes severe and the stones are too

large to pass through, it is possible that surgery may be required. A high protein, high salt, and high sugar diet can contribute to stone formation, as do other factors such as certain medications, urinary tract infections, digestive disorders, excess body weight and family history. The best strategy to prevent kidney stones is by following general principles of a healthy lifestyle, including drinking plenty of water, being active and following a high-fibre diet.



The Elbow

What's So Funny About Your 'Funny Bone'?

The elbow is a fascinating, yet commonly overlooked part of the body. It consists of three individual joints held together by three major ligaments, a membrane capsule of synovial fluid, and several muscle groups including the biceps and triceps. This allows intricate movement at the elbow to both bend like a hinge and rotate allowing our hand to turn. Unfortunately, we often only appreciate this functionality when something goes wrong.

The elbow is used in virtually every activity involving your hands. There are three major bones which meet at the elbow: – the humerus, which connects shoulder to forearm; and the two bones which connect the forearm to the wrist, known as the radius and ulna. The radius gets its name from the Greek word for 'spoke' because the radius bone circles around the ulna when you rotate your hand. The bony bump at the tip of the elbow is called the olecranon, and if we hit this it can cause the ulnar nerve to send a funny tingling sensation down our arm which can make us want to laugh (or cry). This is why the olecranon is sometimes referred to as the 'funny bone.'

As the elbow is so frequently used, it is susceptible to overuse injuries. Two

commonly-known overuse injuries are colloquially referred to as 'tennis elbow' and 'golfer's elbow'. They are appropriately named as these common activities require repetitive motions that, over time, can lead to pain and injury. However, such injuries can also occur as a result of other repetitive movements such as those used in the workplace. Tennis elbow is also known as lateral epicondylitis because it affects the lateral or outside bump of the elbow. This condition normally causes pain when opening the fingers. Golfer's elbow, or medial epicondylitis, involves the inner side of the elbow. Pain in this case usually happens when making a fist.

To treat any of these conditions, arthritis.org first advises the use of the first aid approach known as RICE – Rest, Ice, Compression, and Elevation for the first 48 hours, and then consultation with a health professional for advice on activity modification and ongoing therapy. Your chiropractor may use special manipulation techniques and exercises to help assist with healing elbow complaints, and can also refer you elsewhere for the most appropriate treatment when necessary.

MEXICAN STYLE SUSHI BITES

INGREDIENTS

- 400g can four-bean mix
- ½ teaspoon sweet paprika
- 1 large avocado, mashed
- 1 teaspoon dried oregano
- 1 large cucumber, cut into long strips
- 1 capsicum – red or yellow, cut into strips
- 4 spring onions, roots removed
- 4 wholegrain tortillas (or wraps or other thin bread)
- 4 large lettuce leaves

METHOD

1. Blend beans with paprika. Set aside
2. Mix avocado and oregano. Spread onto each tortilla.
3. Cover with a lettuce leaf, then bean mixture.
4. Arrange cucumber, capsicum and spring onion along the full width of the tortilla.
5. Roll up tightly, refrigerate for a couple of hours then cut into 2cm pieces.



Is My Treatment Working?

How do I know that my pain treatment is working if I don't feel better in the first few visits?

Not yet feeling 100%? Understanding your treatment plan is important for reaching your health goals.

Sometimes it can be confusing to try and work out why pain is coming and going or symptoms are not resolving as fast as you'd like. However in certain instances, symptoms are not the best way to gauge your progress.

Many problems develop over a period of time, even if the pain is new and it can be easy to expect a quick fix because this is how pain relief is advertised. However, it is most important to treat the cause of pain rather than relying on symptomatic relief. Chiropractic treatment aims to not only calm nerve pain, but also to assist the body in correcting poor movement patterns that, over time, may lead to chronic pain.

Focusing on the underlying cause can take time because the body has a natural and individual rate of healing. This depends on many factors such as the level of physical or mental stress put on the body on a daily basis, how long problems have existed and how complicated the original issue has become. For example, a hip problem may over time affect the shoulder or neck as a

result of the body compensating through use of incorrect postures and patterns of muscle activation. In order to fix the shoulder problem the chiropractor may need to start by addressing the original problem in the hip even if there is no longer a pain pattern in that area.

To consider how much time the body needs to properly heal an injury, think about a broken bone. In this case, a plaster cast is usually required for a period of at least six to eight weeks to account for the healing time of the bone. In the same way, ligaments, tendons, muscles and nerves require time and consistent attention to heal properly. For this reason, it is important to complete the treatment course devised by your chiropractor. Ensuring treatment completion can also help to prevent recurrence of the issue in the future. The goal is to get the body functioning optimally so you will be performing well and may minimise pain in the long term.

In summary: it is important to remember that, while pain tablets may be a quick fix, addressing the cause of pain will lead to the best outcome. Dealing with the heart of the issue sooner may prevent years of pain for you in the future.



ON ARRIVAL AT THE PRACTICE

Please see the receptionist upon arrival. This eliminates the possibility of you being overlooked and enables us to have your information ready.

APPOINTMENTS

Your appointment schedule is designed specifically to obtain the best possible results. Should you wish to change an appointment, we would appreciate at least four hours notice so that other patients can be offered your time.

WAITING TIMES

Despite our best intentions, we sometimes run late! This is because someone has needed unexpected urgent attention. Be assured that when it comes to your turn your chiropractor will not rush to catch up but will give you the time you deserve.

FEES

Our fees are in accordance with recommended Association and Governing Body guidelines.

A schedule of current fees is available on our website, or from the receptionist.

We have concession rates, accept Enhanced Primary Care (EPC) plan referrals from GPs, and are registered with the Department of Veterans Affairs (DVA).

PARKING

Plenty of parking is available directly outside the clinic.

OUR COMMITMENT

This practice is committed to providing the best possible care to all patients. Our staff regularly attend short continuing professional education courses to update their information and techniques.

Benefits of Swimming

According to Health Direct, more than 80% of Australians live near the coast, and swimming in the ocean has become part of the national identity of Australians. If you're not a swimmer and you're looking for a low-impact activity that has an array of health benefits, you should consider taking up swimming.

Swimming is the only sport to be recommended in 80% of medical cases, according to a 2014 study published in Procedia – Social And Behavioral Sciences. This may be due to the fact that swimming is accessible to all individuals, regardless of age.

The main advantage that swimming has over other physical activities is that movement in the water requires little effort from your body, including your bones, ligaments, and tendons, due to the lack of gravity in water.

The water takes away 70% of your body weight and allows you to enjoy this activity, even if you have an injury or condition that doesn't allow you to participate in traditional types of exercise. Swimming also allows you to exercise for longer periods of time without increased effort or joint and muscle pain.

Swimming provides an extremely good cardiovascular workout and research has found that as little as two and a half hours of cardiovascular activity per week can decrease the risk of chronic diseases, and improve the health of people living with diabetes and heart disease. According to the Centers for Disease Control and Prevention (CDC), swimmers have about half the risk of death compared to individuals that are inactive.

Swimming also provides a full body workout – especially for your back, arms, shoulders, chest and legs, allowing you to tone your muscles and build strength. While the physical benefits of swimming may be obvious, there is a hidden benefit of swimming – it's good for your mental health too. Swimming helps to improve mental help by improving mood, and reducing mental tension and anxiety.

If you're looking to try a new sport and reap the health benefits that swimming has to offer, remember to practice safe swimming behaviours – read safety signs, speak to lifeguards for safety tips, swim with a partner, and try to stay calm and attract attention to yourself if you're in need of help.

CROSSWORD SOLUTION
Down
8. GREY
2. ELEVATION 4. ELECTROLYTES 5. WEIGHT 7. CRYSTALS
Across
1. INTERVENTION 3. BEEF 6. APPLE 9. TENNIS
10. ENTOMOPHAGY 12. HUMERUS

Take me home and give our healthy RECIPE a try!