

from the National General Manager

**Graham Menary**



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## Creating an environment of progress

As we commence our programme for 2008 and look to prioritise our activities and targets, we realise that while we achieved a great deal over the past year, the challenges and additional tasks grow rapidly. I guess for many of us that becomes the satisfaction in what we do - we enjoy creating an environment of progress and improved opportunities for all those we serve.

For my part, I am looking forward to working on a range of new options with exciting outcome potential and many of those will be through linking and working collaboratively with many other key organisations. There is something powerful in a unified approach when you work in areas of disability.

Due to our task expansion, we have arrived at a point where we need additional staff and I have now appointed Karen Culmer as an Executive Assistant / Administrator who will commence on 14 January 2008.



Originally from Cairns, Australia, Karen moved to New Zealand five years ago, and in that time made New Zealand her home and married a 'very lovely kiwi'.

Karen has worked in a significant variety of roles in both Australia and New Zealand, and brings with her a wealth of experience. She has had some personal experience

with brain injury, and was particularly interested in working with the Brain Injury Association of New Zealand.

We look forward to having Karen on our team.

On another note, I must say that we have been absolutely delighted with the feedback we have received from so many sources about the new look **Brainlink**.

We think we are on the right track and already we have decided to expand it a further two pages with this edition and it is likely to increase a further two pages again in the middle of the year.

Those of you who have asked to contribute articles, please feel free to contact me when you are ready to submit your article for consideration.

**Brain Injury Awareness Week** is likely to be a significant event for this organisation this year. To be held from the 3rd through to the 10th of June 2008, it will focus on concussion with particular emphasis on sport. We are in discussion with a number of high profile sporting identities and the intention is that they will be the faces to a campaign around 'Knocking out Concussion'.

More detail will be published in the next issue.

As always, your input or feedback on **Brainlink** or any publication matters for consideration is appreciated.

**Graham Menary**

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## Cameron Calkoen: Carabiner Mentoring Programme

Striving towards a pinnacle (goal) fulfils my understanding of life - but every climber needs their Carabiner. A Carabiner is the link which attaches a climber to their rope, giving them the security, guidance, support and confidence required to reach the pinnacle of their mountain. During my teenage years my pinnacle was to represent New Zealand in athletics to the best of my ability, and while the passion lay within, it was support which encouraged me to push the limits. It was through striving towards this goal that my self-belief increased, that new opportunities arose and that I am excited about my future. The North Shore LIFE Centre wants to support youth to reach the pinnacle of their lives by acting as the Carabiner, or link, between disabled youth and adult mentors in their common area of interest.

Starting as a pilot in 2008, Carabiner is a motivational mentoring programme which aims to encourage youth with disabilities (aged between 16 and 26) to take charge of their own situations, set aspirational goals and realise their own potential.

Do you demonstrate vision, passion and perseverance towards a specific goal or know of someone who demonstrates these qualities? We would love to be the Carabiner that links you, or them, to a Mentor and help create an environment where that Mentee (youth) can reach their pinnacle. Applications for the pilot programme are currently open to both youth and mentors living in the Auckland region.

*helping to contribute towards a society where young people with disabilities are optimistic about the future and are supported and encouraged to take up challenges*

### The key objectives of Carabiner are to:

- Empower youth with disabilities
- Foster leadership skills
- Assimilate our youth with disabilities into the mainstream environment
- Build networks which aid people to achieve their goals
- To develop relationships between adults and youth which promote: personal growth, self-esteem, self confidence, disability awareness, goal setting and enhancement of lifestyle.

We visualize that through entering the Carabiner programme, youth with disabilities will have the capacity to build networks and friendships that will enrich their personal development.

Through the development of Carabiner the North Shore LIFE Centre wants to contribute towards a society where young people with disabilities are optimistic about the future and are supported and encouraged to take up challenges. It is often through the process of attempting the seemingly impossible that the most extraordinary outcomes are achieved.

If you know of anyone that could benefit from taking part in Carabiner or you would like to take part in it yourself as a mentor or a mentee please contact Cameron Calkoen on 09 414 5360 or email [cam@nslc.org.nz](mailto:cam@nslc.org.nz)

# Rest vs Exercise

## Treatment of Post Concussion Syndrome

Barry Willer, Professor of Psychiatry and Rehabilitation at the University at Buffalo (UB) in the United States and his colleagues Dr John J. Leddy and Karl F. Kozlowski in UB's Sports Medicine Institute are currently undertaking research into the treatment of post-concussion syndrome (PCS). After concussion, approximately 10% of people experience symptoms such as headaches, dizziness, fatigue, irritability, insomnia, concentration or memory difficulties which last longer than three weeks and this is known as PCS.

The researchers at UB have developed a new method for treating athletes who sustain PCS, which challenges the conventional approach to treatment of rest and medication. Instead they are suggesting treatment of 'regulated exercise'. This allows athletes to maintain conditioning while recovering from injury. A tailored exercise program is determined for each athlete based on their exercise threshold, which is the point at which exercise induces or exacerbates symptoms of concussion.

Until recently the focus of concussion has been on the brain but current research suggests that concussion causes an array of metabolic and physiological changes to the body as well as the brain. These changes include temporary alteration of the auto-regulatory system causing irregular heart rate and sleep disturbances.

This pro-active treatment suggests the use of non-contact exercise (e.g. aerobic exercise) be tested to reveal the individuals exercise threshold and then prescribe a low level workout program, just below this threshold / limit for three weeks. The individual is reassessed after this period to see if there has been any change in physiology. The exercise programme is regulated to the individual changes and the exercise threshold increases as symptoms improve. It is very important not to exercise above the individuals limits as this will bring on symptoms and may delay recovery.



*Exercise Specialist Karl Kozlowski directs the Exercise Performance Lab, and supervises the balance and exercise testing*

Their study to date has seen two professional athletes return to sport after six weeks of beginning the treatment and most others in the study were no longer diagnosable with PCS nine weeks after treatment commenced.

Research has shown that exercise in general improves mood and overall health and wellbeing in individuals, therefore these recent findings will be a source of empowerment and encouragement to those suffering with PCS.

Professor Barry Willer is a frequent visitor to New Zealand and has been the key speaker at the Level 1 & Level 2 Brain Injury Rehabilitation courses held annually at Massey University in Palmerston North. On his most recent visit to New Zealand earlier this year he presented at seminars nationwide on the subject of Concussion in Sport, where he spoke of his recent findings. He advises that the initial treatment for concussion should be cognitive and physical rest for up to three weeks post injury but if symptoms do not improve after this period that the controlled exercise approach is an option once it is effectively managed.

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*this allows athletes to maintain conditioning while recovering from injury*  
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*We would like to thank Professor Barry Willer for his input into this article, and his ongoing collaboration with BIANZ.*

## Dunedin - Wellington - Auckland

**Dr Barbara Wilson** is a qualified clinical psychologist and a leading British neuropsychologist who has specialised in brain injury rehabilitation for over 26 years and currently works as a senior scientist at the Medical Research Council's Cognition and Brain Sciences Unit. In 1996 she established The Oliver Zangwill Centre for Neuropsychological Rehabilitation which has since become one of the top cognitive neuro-rehabilitation units in the Western World.

Barbara has published 16 books, 8 widely used neuropsychological tests, and over 250 journal articles and chapters. She has also received a host of awards.

Dr Wilson will be presenting three workshops in February on the following topics:

### **Neuropsychology – Developments, Directions and Practical Applications**

**Two day workshop, Otago Museum, Dunedin  
19 & 20 February 2008**

This workshop will look at the theoretical and clinical developments in neuropsychology over the past twenty years and consider the main directions taken as a result of these developments as well as to what extent these developments have influenced clinical practice. In particular it will address issues of assessment, imaging and rehabilitation, new assessment procedures resulting from models of cognitive functioning and observational procedures.

Visit [www.psychology.org.nz](http://www.psychology.org.nz) for a full workshop description & registration form or contact [Lucy@psychology.org.nz](mailto:Lucy@psychology.org.nz)

### **Neuropsychological Rehabilitation: The Past Twenty Years**

**One day workshop, Massey University, Wellington  
22 February 2008**

There have been a number of changes in the practice of neuropsychological rehabilitation over the past twenty years. This workshop will consider the 6 major changes and present illustrative clinical examples and data to support why they have been particularly influential to neuropsychological rehabilitation.

### **Cognitive Rehabilitation**

**Two day workshop, Auckland University  
25 & 26 February 2008**

This workshop begins with a discussion about the nature and purpose of rehabilitation followed by consideration of how to distinguish between different cognitive problems and between cognitive, emotional and behavioral problems. Following this is a description of some general principles to help those with cognitive deficits, including the management of emotional and psychosocial problems and fatigue. The issues of restoration versus compensation is also addressed as are memory (executive, attentional, visuospatial and visuo-perceptual) difficulties, and consider ways to remediate these problems. On day two we look at group versus individual therapy and how to design a treatment programme for people with cognitive impairments. Clinical examples are provided together with evidence for the effectiveness of cognitive rehabilitation.

## Amazing Discovery at the Papatoetoe Stewart Centre

For the past eight months the Papatoetoe Stewart Centre staff have been using a Playstation Eye Toy as an exercise method for adults with severe physical limitations as a result of their brain injury, and those more mildly affected. The toy is an interactive computer game. A camera placed on top of a TV screen translates the movements of the clients as a 'player' in the game and the game begins! You can play tennis, boxing, cricket, dancing, window washing – over 30 different games and activities. There is usually one that spikes a past or present interest for any client and any amount of movement is recordable.

Papatoetoe coordinator, Ben Hall, was the first to suggest this idea. Ben read about an American \$2 million dollar study where a glove was used to enable disabled people to mimic hand and arm motion to complete tasks in a virtual world. No strength in the limb was required and

this promoted movement and strengthened ability for the individual. Ben's idea was that an eye toy game, of which he appears to have considerable expertise (!), would do the same, only far more fun. When the game was first tried, the response was amazing. Normally withdrawn people began to interact. Those who did not easily take part in physical activity were now working up a sweat. Those in wheelchairs were boxing and those on their feet were dancing. Many of clients love the race driving game for which there is a steering wheel and pedals. Not too far from the reality of driving in Auckland!

The very best part was the delight (and perspiration) on the faces of people, regardless of disability while they whoop and move to the game. Every one can enjoy this workout and interaction either in groups or as individuals.

**Go on. Try it. We dare you!**



# Avocados and a healthy brain

There is a common misconception about avocados – a lot of people think they shouldn't eat

avocados because they are high in fat. And while avocados are high in fat and should be enjoyed in moderation, they are also a surprisingly complete food with 14 minerals, a variety of vitamins, and good monounsaturated fats.

The minerals stimulate growth, including iron and copper for your blood. The sodium and potassium in avocados (they are the highest fruit source of potassium!) keep your body chemically balanced. Potassium is fundamentally involved in nerve and impulse conduction and your brain cannot work properly without it.

Vitamins in avocados include A, several B-complex, C and E, the last two being important antioxidants protecting your body through the aging process. Of all the tissues and organs in our body, the brain is most susceptible to damage from free radicals which are involved in the aging process. The antioxidants in avocados neutralise these free radicals, and according to CNN.com, researchers from Ohio University recently discovered that eating avocados with salsa or salad allows for better absorption of antioxidants in those foods.

Importantly, avocados contain the good monounsaturated fatty acids, Omega 3 and Omega 6 fatty acids, which cannot be manufactured by the human body, but are important for eyes, hair, skin, brain, heart, nerves, joints and hormone and immune systems.

Omega 3 fatty acids are vital components of our nervous system. They are needed to make the neurotransmitter serotonin. Depression and other brain diseases show decreased levels of Omega 3 fatty acids. A baby's brain needs optimum Omega 3 fatty acids for proper development and it seems that infants love avocados when they are added to their food. The monounsaturated fats in avocados help to promote a healthy blood flow that will lead to a better brain function.

Avocados also lower blood pressure, and as hypertension is a risk factor for the decline in cognitive abilities, a lower blood pressure should promote brain health.

In addition, avocados are the perfect food for pregnant women. The folic acid in one avocado per day provides almost 30% of the recommended daily dosage and helps prevent life threatening birth defects of the spine and brain.

## Did you know?

- Avocados are called alligator pears because of their shape and the colour of their skin
- After planting an avocado tree, you will have to wait two to three years for it to bear fruit
- Brazilians add avocados to ice cream
- Filipinos puree avocados with sugar and milk for a dessert drink
- Avocado orchards help renew our air supply and keep it fresh by absorbing carbon dioxide and producing oxygen

## Smoked Chicken and Avocado Salad with Ginger Dressing

**Serves:** 4-6

**Preparation Time:** 30 Minutes

### Ingredients:

- 1 whole smoked chicken
- 4 avocados
- 1 small rock melon, halved and deseeded
- 1 small honeydew melon, halved and deseeded
- 1 medium-size lettuce
- Ginger Dressing
- Grated rind and juice of 3 limes
- 1 tblsp Ginger
- 2 tblsp Manuka Honey
- 4 tblsp Extra Virgin Olive Oil

### Method:

1. Pull the meat from the smoked chicken and cut into bite sized pieces. (Discard the bones and skin).
2. Halve, stone and peel the avocados and slice thickly. Cut the melons into thick pieces. Cut the lettuce into thick slices.
3. Arrange the smoked chicken, avocados, melons and lettuce in a bowl and pour over the dressing just before serving.

### Ginger Dressing:

Put all the ingredients into a screw top jar and shake to combine. Season well with salt and pepper.

*Recipe courtesy Pam's Foods NZ*

food  
brain

# Q&A

## Q: I have been hearing a lot in the media recently about alcohol causing brain injury - is this true?

**A:** Yes it is true. Alcohol use is so acceptable in today's culture that people forget or are unaware of its harmful effects to the body and mind. Alcohol related brain injury (ARBI) is highly prevalent yet largely preventable.

The Acquired Brain Injury Assessment and Consulting (arbias) Group recently held a two day seminar on ARBI in Auckland. ARBI affects as many as one in eight people in Australia. Research done for the arbias group says that the drinking habits of as many as two million Australian people places them at risk of permanent brain damage. They suggest that 200,000 people in the workplace have alcohol related brain damage and don't know it.

Arbias indicates that men who have six drinks a day for 8 - 10 years and women who have three drinks a day over the same period are at risk of alcohol-related brain damage. It is also interesting to note that there are approximately 8 standard drinks in a typical a bottle of wine.

Research on the effects of alcohol on the young adolescent brain is ongoing and indicates that using alcohol once a week or more or binge drinking (which is more than 6 standard drinks at one time for men and more than 4 standard drinks for women) puts them at a higher risk of ARBI.

Martin Jackson, Clinical Psychologist and key speaker at the two day seminar also described how alcohol affects an unborn child. Fetal alcohol spectrum disorder (FASD) is a term for describing a range of physical, mental, behavioural and learning disabilities that are a direct result of alcohol use during pregnancy. A child with FASD has similar symptoms as someone with ADD/ADHD and therefore is commonly misdiagnosed. When alcohol is consumed in pregnancy the unborn baby will have the same blood alcohol level as the mother. Researchers do not know how much alcohol, if any, is safe to drink during pregnancy but they do know there is no safe time therefore no alcohol is the safest choice for a healthy baby.

Many people are unaware of the early warning signs of alcohol related brain damage or the level of alcohol consumption that places an individual at risk. Alcohol mainly affects the frontal lobes which control our executive functioning. Signs include blackouts, problems with impulse control, difficulty with interpretation, memory problems, difficulty forming new memories and mood swings.

**Do you have a question you would like an answer to?**

We have a team of professionals who can help. Send your question to BrainLink, PO Box 83, Albany Village, Auckland 0755.

**90** people a day in New Zealand **sustain some form of brain injury** and that is an incredible number

*you don't have to lose your freedom*



## BRAINlink

A Newsletter of the Brain Injury Association of New Zealand

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