



Hi all, it was a busy end to last year with many clients keen to see me in the New Year. This month it has been a hectic combination of soft tissue work, exercise prescription and everything in between.

Once again this year, I have been fortunate enough to be able to utilise the gym facilities of UC Fitness Centre, Energy Fitness, Clublime and CIT. In addition to this I will also be conducting my soft tissue work at The Canberra Complementary Health Practice.

I have started working with the Canberra Raiders again as they prepare for the 2011 Season. The year looks promising, as the younger players are now more confident and ready for the challenges ahead of them. When you walk into the Raiders HQ at Bruce you can feel the enthusiasm and energy the players give out.

Hopefully in March, Katherine Meade will be joining me by taking on some exercise therapy. Katherine has first hand experience in regards to chronic pain management and how regular exercise and massage can help.

Also in March, I will be attending an Anatomy Trains workshop presented by Tom Myers for 6 days. This workshop will expand my skills in soft tissue work and body reading.

I have submitted my manuscript on Fascial unloading and Kinesiotape to an International Journal. Unfortunately it looks like it wont be published until the second half of the year, I will keep you posted.

At the moment I am reading 'Spark' written by John J Ratey, MD. This book emphasises the importance of exercise not only for cardiovascular health and general physical conditioning but also how exercise help the circuits in the brain develop and the effects exercise has on depression, anxiety and your memory.

I will be adding some articles on Hip pain and Kinesiotape soon, however below are some general articles summarised by The Fitness Network.

Take Care

Dan

Weightlifting prevents lymphedema in breast cancer survivors

The painful limb swelling condition lymphedema, a common side effect of breast cancer treatment, could be prevented with the aid of weightlifting, according to recent research.

Following its previous research, which found that weightlifting could limit the progression of lymphedema in patients who already had the condition, a team from the University of Pennsylvania School of Medicine recruited 154 participants who had survived breast cancer within the previous five years, but who did not have lymphedema. The women were divided into weightlifting and non-weightlifting groups.

They found a 35 per cent reduction in occurrence of lymphedema in subjects who undertook a progressive weightlifting program over a one-year period. In the non-weightlifting group, 17 per cent of the women developed lymphedema, compared to 11 per cent in the weightlifting group. The findings appear to completely contradict the previous advice, long given to breast cancer survivors, that they should not lift much more than a couple of kilos.

Lead study author Kathryn Schmitz, PhD, an associate professor of epidemiology and biostatistics and a member of Penn's Abramson Cancer Centre said, 'Lymphedema is a dreaded, common side-effect of breast cancer treatment. Women worry that they will recover from their cancer only to be plagued by this condition that often limits their ability to work, maintain their homes, and care for their children or grandchildren. Our study shows that they now have a weapon to reduce their risk of developing lymphedema, and at the same time, reap the many other health rewards of weightlifting that they have missed out on due to decades of advice to avoid lifting so much as a grocery bag or their purse.'

Source: Journal of the American Medical Association

Stop running into danger

A recent study has shown that runners who push themselves to continue when feeling exhausted are placing themselves at increased risk of injury.

Research led by assistant professor of physical therapy at Indiana University, Tracy Dierks, showed that runners tended to exhibit increased motion in the hips, knees and ankles towards the end of a 'normal' duration run.

'Our study showed that at the end of a normal run, when they were getting tired, their mechanics were beginning to change. When you notice fatigue, you're most likely putting yourself at increased risk for injuries if you continue because it's more difficult to control the motion ranges' Dierks said.

Excessive range of motion in the joints is associated with overuse injuries in runners, such as patellofemoral pain syndrome and iliotibial band syndrome at the knee and plantar fasciitis. The additional motion makes it more difficult for the muscles, tendons and ligaments to cope with running-related forces.

For the study, 20 fit recreational runners wore neutral running shoes and tracking markers. They ran on a treadmill until they reached 85 per cent HR Max, or 17 out of 20 on the rating of perceived exhaustion (RPE). Upon completion of their runs, each study subject reported an RPE of at least 15. An RPE rating of between 13 and 15 is generally considered to indicate fatigue.

Dierks noted a 'complete breakdown of mechanics' in the rearfoot region and said that RPEs of between 15 and 17 could represent the point at which the body's mechanics change, placing the runner at greater risk of injury.

Source: Journal of Biomechanics

Purple vegies and green tea?

Diseases such as Alzheimer's, Multiple Sclerosis and Parkinson's can be fought with the power of purple fruit and vegies, according to a recent study.

Research from the University of Manchester in the UK has found that a contributing factor to many serious diseases is poorly-bound iron, which causes dangerous toxins called hydroxyl radicals to be produced. These can, in turn, react with the components of living systems.

These toxins, however, can be protected against by consuming nutrients called 'iron chelators' which bind the iron tightly. Iron chelators are found in green tea and brightly coloured fruit and vegetables, with purple fruit reported to be the most effective.

So, which fruit and vegetables fit into the purple category? You may be hard pressed to think of more than a couple off the top of your head, unless you subscribe to Homer Simpson's belief that purple itself is a fruit ('This donut has purple in the middle, purple is a fruit'), but actually the list is pretty extensive, and includes blackcurrants, blackberries, blueberries, plums, eggplant, beetroot, elderberries, grapes, pomegranates, prunes, figs and raisins – and then you have purple variations of common produce such as purple potatoes, purple asparagus, purple cabbage and purple carrots.

The study is the first to link the presence of poorly-bound iron with so many diseases, and highlights the important role it plays in helping other supplements fight disease. For example, vitamin C will be most effective when the iron is suitably chelated.

Study author and Professor of Bioanalytical Science at the University of Manchester, Douglas Kell said, 'Much of modern biology has been concerned with the role of different genes in human disease. The importance of iron may have been missed because there is no gene for iron as such. What I have highlighted in this work is therefore a crucial area for further investigation, as many simple predictions follow from my analysis. If true they might change greatly the means by which we seek to prevent and even cure such diseases.'

Source: *Archives of Toxicology* & www.disabled-world.com

Eat garlic to ward off hip osteoarthritis (as well as vampires)

Women who eat diets rich in garlic, onions and leeks may be protecting themselves against hip osteoarthritis says new research.

The study, funded by Arthritis Research UK, the Wellcome Trust and Dunhill Medical Trust, is the first to explore in-depth how dietary factors can influence the development of osteoarthritis.

Approximately seven per cent of the Australian population (1.3 million people) suffers from osteoarthritis, with the condition being common in those aged over 45 and particularly prevalent in women.

In their study, teams from King's College London and the University of East Anglia in the UK assessed the dietary habits of over 1,000 healthy female twins, and analysed x-ray images showing any signs of early osteoarthritis in their hips, knees and spine.

The results of the study showed that those who consumed a higher proportion of allium vegetables exhibited a lower incidence of early osteoarthritis of the hip.

Investigating this key finding, the researchers explored further the compounds found in garlic and discovered the cartilage damage-limiting properties of a compound called diallyl disulphide.

Lead study author, Dr Frances Williams, from the Department of Twin Research at King's College London, said, 'While we don't yet know if eating garlic will lead to high levels of this component in the joint, these findings may point the way

towards future treatments and prevention of hip osteoarthritis. It has been known for a long time that there is a link between body weight and osteoarthritis. Many researchers have tried to find dietary components influencing the condition, but this is the first large scale study of diet in twins. If our results are confirmed by follow-up studies, this will point the way towards dietary intervention or targeted drug therapy for people with osteoarthritis.'

Professor Ian Clark of the University of East Anglia commented 'Osteoarthritis is a major health issue and this exciting study shows the potential for diet to influence the course of the disease. With further work to confirm and extend these early findings, this may open up the possibility of using diet or dietary supplements in the future treatment of osteoarthritis.'

Source: BMC Musculoskeletal Disorders & A picture of osteoarthritis in Australia published by Australian Institute of Health and Welfare

Positive mind a tool in fat loss

By targeting the mental aspect of what is sometimes seen as a symbiotic relationship between obesity and depression, we may be able to positively transform both states, according to recent research.

Researchers led by Gregory Simon, M.D., of Group Health Research Institute in Seattle, measured weight, physical activity, depression levels and food consumption in two hundred women classified as obese (average BMI 38.3).

The women were divided into two groups – one targeting weight loss, and the other targeting both weight loss and depression. Over the course of a year, both groups had 26 group sessions and were followed up after six, 12 and 24-months.

It was found that in women who exhibited a decrease in depression levels, 38 per cent lost at least five per cent of their body weight. In the women who showed no improvement in depression levels, a significantly lower 21 per cent lost the same amount of body weight (at least five per cent).

Simon noted 'I expect that the relationship between depression and physical activity goes in both directions. Increased physical activity leads to improvement in depression and improvement in depression leads to increased physical activity. We see in our study that they go together, but we can't say which causes which.'

Commenting on the findings, Babak Roshanaei-Moghaddam, M.D., of the psychiatry and behavioural sciences department at the University of Washington, Seattle, said 'Most weight loss programs do not pay enough attention to screening and treatment of depression. This study further underscores the importance of screening for depression in such programs that can potentially lead to both physical and psychological well-being.'

Source: General Hospital Psychiatry

Wake up to the power of sleep

Backing up what many of us suspect, recent research says that a good night's sleep could be the key to looking healthy and beautiful, says new research.

Exploring the connection between sleep and perceptions of health and attractiveness, John Axelsson and a team from the Karolinska Institutet in Sweden recruited 23 non-smoking subjects to take part in the study. The participants, aged between 18 and 31, were photographed between 2pm and 3pm on two separate occasions; once after normal sleep and once after sleep deprivation.

The photographs were taken in identical conditions, and study participants wore no make up, wore their hair down, did not consume alcohol prior to the shoot and generally 'prepared' in the same way before each image was captured. They were directed to assume neutral, relaxed facial expressions.

A group of 65 people, who were unaware of the sleep status pertaining to each photograph, proceeded to rate the images of the study participants, according to attractiveness, healthy appearance and tiredness. Sleep-deprived study participants were judged to be less attractive, less healthy and more tired looking, suggesting that those who cling to the notion of beauty sleep may not be dreaming.

Source: British Medical Journal

Massage eases pain of knee osteoarthritis - <http://www.terrarosa.com.au/news.htm>

A study conducted by a team of Medical doctors in the US found that people who suffer from osteoarthritis (OA) of the knee appear to gain lasting relief from Swedish massage. The findings suggest that doctors may want to advise arthritis patients to add massage to the treatments they are already using, like anti-inflammatory drugs. Massage may even be able to take the place of drugs for people who have mild arthritis or whose health does not allow them to take the medications. The researchers said it was not clear how massage, which generally focuses on the muscles, helps people with a disease that affects joint tissues and bones. The authors are now embarking on larger studies to confirm the findings and see if massage is a viable alternative or adjunct to drugs and other existing treatments.

The study, led by Dr. Adam J. Perlman of the University of Medicine and Dentistry of New Jersey, reported in the December issue of Archives of Internal Medicine. "We're really thinking there are a couple of things going on," said the senior author of the study, Dr. David L. Katz of the Yale University School of Medicine. Part of the benefit may come from attracting more blood to the knee, Dr. Katz said. Massage may also reduce pain in the same way rubbing injured areas often does, by sending out sensory stimuli that compete with the pain stimuli. Massage also seems to make arthritic knees more limber, encouraging patients to walk more, in itself a treatment for the disease.

"The very significant therapeutic response over eight weeks of therapy persisted eight weeks later," Katz said. "Two months after the last massage, they were still significantly better than baseline and significantly better than the control group. That exceeded our expectations." There are two possible explanations for the improvements. In the immediate time frame, Katz explained, "sensory input [the massage] competes with pain input in the spinal cord, travels faster and blocks pain symptoms." Massage may also enhance blood flow to the region affected by osteoarthritis. "Since the acute pain of osteoarthritis is related to inflammation, increased perfusion brings an influx of cells to clean out the debris and facilitates, to whatever extent possible, bone and cartilage remodelling". More studies are needed before doctors, patients and insurance companies can be persuaded to accept this as common practice, he said. "The end game would be that this would be something people with osteoarthritis would be able to access routinely," Katz said. "We ultimately want to change the standard of practice, but we don't do that with one study."

Conventional treatments include pain medication, exercise, hot and cold therapy, corticosteroid injections and, possibly, surgery. The medications used for osteoarthritis, however, are problematic. Non-steroidal anti-inflammatory drugs (NSAIDs), such as aspirin, can cause serious gastrointestinal side effects. The cox-2 inhibitors such as Vioxx that were developed to bypass those side effects are now known to cause cardiovascular problems, and some, including Vioxx, have been taken off the market. "Primarily therapy is NSAIDs, but the target population is the very group that is least tolerant of those drugs," Katz said. "The cox-2s were developed as alternatives to NSAIDs to offer less toxicity, and look at how that turned out. We've kind of left folks high and dry." While massage has been shown to relieve chronic lower back pain and musculoskeletal disorders, there has been no research on massage to help osteoarthritis sufferers. At least until now.

The study involved 68 patients with knee OA assigned either to treatment (twice-weekly sessions of standard Swedish massage in weeks 1-4 and once-weekly sessions in weeks 5-8) or to control (delayed intervention). Primary outcomes were changes in the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) pain and functional scores and the visual analog scale of pain assessment. After eight weeks, the group receiving massage therapy demonstrated significant improvements in the WOMAC global scores, pain, stiffness, and physical function domains and in the visual analog scale of pain assessment, range of motion, and time to walk.

Source:

- Adam I. Perlmán, MD, MPH; Alyse Sabina, MD; Anna-Leila Williams, PA-C, MPH; Valentine Yanchou Njike, MD; David L. Katz, MD, MPH. 2006. Massage Therapy for Osteoarthritis of the Knee, A Randomized Controlled Trial. Archives of Internal Medicine 2006;166:2533-2538. <http://archinte.ama-assn.org/cgi/content/abstract/166/22/2533>
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