

Mental fatigue 'tires' the body

Recent research from the UK has shown that performing a mentally strenuous task before undertaking exercise can have the effect of increasing feelings of exhaustion.

The researchers from Bangor University, Wales found that mental fatigue did not cause muscles or the heart to perform differently, and that the point at which participants reached exhaustion was more closely linked to 'perceived effort' than actual physical effort.

In the study, 16 participants were instructed to ride a stationary cycle to the point of exhaustion under two different conditions, firstly when they were mentally fatigued, and secondly when they were mentally rested. The researchers tracked a variety of physiological measures during both exercise sessions, such as heart rate, oxygen consumption, blood pressure, cardiac output, ventilation and blood lactate levels.

The study findings showed that when they were mentally fatigued, the participants ceased exercising 15 per cent sooner than when they were mentally rested. Study authors Samuele Marcora, Walter Staiano and Victoria Manning concluded that mental fatigue impairs physical performance in humans and speculated that this fatigue may lower the brain's inhibition against quitting, or affect levels of dopamine, a chemical in the brain which contributes to motivation and effort.

Source: Journal of Applied Physiology

Vitamin D to fight colds and flu

The curse of the common cold and flu may be able to be warded off with vitamin D according to new US research.

While vitamin C is often cited as the vitamin for battling the sneezes and shivers, the latest study suggests that a daily dose of vitamin D will do the job. In the study of 19,000 people, nutritional habits and respiratory infection rates were assessed, along with levels of vitamin D, which can be found in tinned tuna, cereal and fortified milks and juices. Sunlight can also cause the body to naturally produce vitamin D.

Study author Dr Adit Ginde, from the University of Colorado Denver School of Medicine, said 'We don't want to jump ahead of ourselves, but our study provides support that lower levels of vitamin D are associated with an increased risk for respiratory infections, such as the common cold and the flu. And people who have pre-existing respiratory disease – like asthma and emphysema – appear to be at an increased risk for this association'.

Vitamin D has recently also been positively linked to protection for the body against colon cancer, multiple sclerosis, heart attack and stroke.

The participants were aged from 12 upwards, with an average age of 38, and the data for the study was collected from the Third National Health and Nutrition Examination Survey, which was collected between 1988 and 1994.

It was discovered that participants who had less than 10 nanograms of vitamin D per millilitre of blood displayed a 40 per cent increased likelihood of having had a respiratory infection, compared to participants with levels of 30ng or more. The researchers noted that this trend was consistent in all ages and ethnic groups, but also noted that those with asthma or chronic obstructive pulmonary disease (COPD) had a higher likelihood of having a vitamin D deficiency (asthma patients exhibited up to five times the risk of respiratory infection, and some COPD patients twice the risk).

Ginde said, 'We still need to do the clinical trials that we already have planned to definitely say whether supplementation with vitamin D would actually reduce the risk we found. But I think we can say that most Americans probably do need more vitamin D for its effects on bone health, as well as for its general benefits with respect to the immune system'.

Spokeswoman for the American Dietetic Association, Lona Sandon, said, 'There does seem to be a link because, when we're not getting enough vitamin D, our immune system appears not to function at its best. The best sources are salmon

with the bones, or three cups a day of milk, but not many people get that. So I would say, get outside and expose some skin to the sun. Dermatologists don't always like that advice because they're concerned with skin cancer, but just 15 minutes a day at the sun's peak – roughly 11 to 1 – does the trick. However, if you live north of Atlanta, in the middle of winter, it's hard to get enough vitamin D that way, even if you're out in the middle of the day. So that leaves us with supplements in some form. And in that case, a general multivitamin typically has about 200 IUs [international units] of vitamin D, which is considered adequate.'

Source: Archives of Internal Medicine

McNeighbourhoods linked to stroke risk

A recent US study has shown what appears to be a link between the prevalence of fast food outlets and the occurrence of stroke.

Study author Dr Lewis Morgenstern, a professor of neurology at the University of Michigan School of Public Health, reported a 13 per cent increased risk of stroke among people who lived in neighbourhoods with a high density of junk food restaurants.

Presenting his study, which was funded by the US National Institutes of Health, at the International Stroke Conference in San Diego, Morgenstern said that whether the link was causal or not, has not been determined, and commented, 'The only thing we are certain about is, if you live in a neighbourhood with a high fast-food restaurant concentration, you are at increased risk'.

Looking at data related to stroke incidences in Nueces County, Texas, Morgenstern and his team found 1,247 cases of ischemic stroke (whereby blood vessels become clogged) between January 2000 and June 2003.

The researchers then established that there were 262 fast food restaurants in Nueces County, and then further narrowed these down to determine how many were in each area. With this information they compiled a list of areas, ranked according to the number of outlets. The neighbourhoods in the 'top' 25 per cent of this list had 33 restaurants, and those in the bottom 25 per cent had 12.

When compared with the data relating to the incidence of stroke, analysis showed 'a 13 per cent increased risk of stroke in the top 25 per cent compared to the lowest 25 per cent' said Morgenstern.

Commenting on the findings, Dr Ralph Sacco, spokesman for the American Stroke Association, said 'It's interesting, but we don't know if it is causal'.

Drawing on the fact that fast food is often associated with obesity, which in turn is linked to increased stroke risk, Dr Dean Johnston, a clinical assistant professor of neurology at the University of British Columbia, said 'This suggests that diet and lifestyle factors are important for stroke prevention'.

Source: HealthDay News

Record industry tries to impose a \$100m tax on fitness

In a desperate money grab, record industry bosses are trying to hike up the fees fitness centres pay for music – in many cases by more than a staggering 4,000 per cent – to plug a hole left in their pockets by declining CD sales. The proposal will see the fees the fitness industry pays for the use of music rise from \$1.5 million per year to a possible \$100 million per year, and will almost certainly mean an increase in gym membership fees.

This is a huge threat to Australia's fitness industry and we're going to fight it in the courts, but we really need you to show your support by registering a protest at www.taxonfitness.org

Spread the word – get your friends involved, talk about it online – anything that will help us tell the record industry bosses that you're not going to accept this unwarranted and unfair cash grab.

<http://fitnessaustralia.e-newsletter.com.au/link/id/BEeLzTNiPKHwOLnUoIOwP900cdb23dd6f5975fab/page.html>

Don't think that you can't make a difference – EVERY voice of support needs to be heard, otherwise it will be too late. Support your industry, and protect your career, by registering a protest at www.taxonfitness.org

Yoga improves mental wellbeing of cancer patients

The findings presented in a new US study have suggested that patients with breast cancer may be able to improve their emotional wellbeing through the practice of yoga.

Lead researcher Suzanne Danhauer, from the Wake Forest University School of Medicine, said 'Given the high levels of stress and distress that many women with breast cancer experience, the opportunity to experience feeling more peaceful and calm in the midst of breast cancer is a significant benefit'.

Forty-four women with breast cancer took part in the study, about a third of whom were receiving treatment for the disease for the duration of the study. The other participants had completed their treatment prior to the start of the study. Half of the group then proceeded to take part in a yoga program for ten weeks, while the other half was placed on a waiting list for the program.

Over the 10-week period the yoga group participants took part in regular 75-minute restorative yoga classes, utilising blankets and cushions for support and comfort. At the outset and conclusion of the study all of the women, in both the yoga and the 'waiting' groups, filled in questionnaires relating to their quality of life.

At the end of the study period, the yoga practitioners displayed bigger improvements in mental health areas such as depression, positivity and feelings of calm and peacefulness, than their non-practising counterparts. The results of the questionnaires revealed a 50 per cent reduction in depressive feelings, a 12 per cent increase in positive and peaceful emotions and decreased feelings of fatigue.

Danhauer described the findings as 'very promising' and said that they would enable the instigation of a considerably larger scale study. 'Evidence from systematic reviews of randomised trials is quite strong that mind-body therapies improve mood, quality of life and treatment-related symptoms in people with cancer. Yoga is one mind-body therapy that is widely available and involves relatively reasonable costs' she concluded.

Source: *Psycho-Oncology*

Share a bite to help fight Diabetes

More than 3 million Australians have diabetes or pre-diabetes, and worldwide 246 million people have diabetes (according to IDF Atlas). This April, why not join thousands of people across NSW to share food, fun and friendship by taking part in the 'Great Australian Bite' to help raise money for those living with diabetes in Australia?

Hosting a bite is as easy as **1, 2, 3 ...**

- A. Register** to host a 'bite' anytime during April.
- B. Invite** workmates, friends or family to share a 'bite' to eat.
- C. Donate** – ask your guests for a donation.

A 'bite' can be held anywhere, at any time – in your club or training studio, a picnic in the park, a sausage sizzle at your local social club, a BBQ with friends or coffee and cake in the office – you choose.

0423 721 941



TAMARA'S HERBAL &
www.herbalist.net.au
NATURAL THERAPIES

Phone:
4365 0123

Mobile:
0429 436 508

Whether your bite is with colleagues and clients, a few mates or the whole town, you'll be making a donation to Diabetes Australia-NSW and doing your bit to support people with diabetes and help fund research.

With the ongoing support of our sponsor, Pinnacle Print Management, all funds raised from the Great Australian Bite will directly support Diabetes Australia-NSW's awareness, research, education and advocacy programs.

To help the fight against diabetes, register today by calling 1300 136 588 or visiting www.greataustralianbite.com.au

Source: *Diabetes Australia-NSW*

Use pedal power to help children in poverty

In conjunction with Inspired Adventures, ChildFund Australia is offering Australians the chance to take part in an exciting and unique fundraising program – the ChildFund Australia Cycle Cambodia Challenge 2009.

ChildFund Australia has just seven spots now left on this adventure of a lifetime, giving you the opportunity to be a part of an enjoyable cycle challenge and to experience, first-hand, the development work which ChildFund Australia implements in Cambodia.

ChildFund Australia is an independent and non-religious international development organisation that works to reduce or eliminate poverty for children in the developing world. Using a child sponsorship approach, as well as public donations and government grants, ChildFund Australia directly implements programs in Vietnam, Papua New Guinea and Cambodia and manages projects delivered by partner organisations in Asia, Africa and the Americas. ChildFund Australia is a member of ChildFund Alliance – a global network of 12 organisations which assists five million children in over 50 countries. ChildFund Australia is a registered charity and is fully accredited by the Australian Agency for International Development (AusAID).

On this 11 day adventure, which takes place from 12 to 22 September 2009, participants will cycle through stunning Cambodian countryside, as well as taking in the palaces, pagodas and French-inspired architecture of Phnom Penh. Riders will cycle through unspoilt Cambodian villages, visit the magnificent Angkor Wat and spend a day at ChildFund Australia program areas in the remote Svay Rieng province, close to the Vietnam border.

To take part in Cycle Cambodia, participants will need to fundraise \$6,500 to cover travel costs and donation to ChildFund Australia. Approximately half of this amount goes to ChildFund Australia and will be used to fund the building of a new five-room primary school in Chouk Meas.

Over 500 primary age and at least 50 kindergarten-age children located in surrounding villages will benefit from this construction. The school building will be equipped with basic classroom resources (such as desks, seating and blackboards) and a school garden will be established as a model for children to improve their nutrition knowledge and awareness.

Currently, many students must walk up to 3kms to reach their school. As such, ChildFund will also be providing children with bicycles, especially girls who are more vulnerable and at greater risk when travelling long distances.

Funds can be raised in a variety of imaginative and fun ways, from trivia nights, cinema evenings, online sponsorship pages, restaurant evenings and company sponsorship – the list is endless. If you register to take part in the challenge through Inspired Adventures' website at www.inspiredadventures.com.au/childfund09 you'll receive a full information pack including a detailed itinerary, fundraising tips and a schedule of key dates before the trip. To find out more, contact Belinda on 02 9262 7882 or Belinda@inspiredadventures.com.au.

Source: *ChildFund Australia*