

# In other journals

18 JUNE

## AN ASPIRIN A DAY ...

Daily intake of aspirin appears to reduce the risk of developing colorectal cancer (CRC), according to UK researchers. The findings are based on the results of two large previously performed randomised controlled trials involving over 7500 participants with post-trial follow-up of over 20 years. The results indicate that 300 mg of aspirin a day for about 5 years is effective in the primary prevention of CRC, with a 10-year latency of effect. A concurrent systematic review of relevant observational studies suggested a similar effect of daily aspirin use on CRC incidence, with more evidence supporting a minimum daily dose of 300 mg in order to achieve the protective effect. The authors comment that previous studies may have missed the association due to the long lag time involved, which is probably secondary to the adenoma-carcinoma sequence.

*Lancet 2007; 369: 1603-1613*

## SLEEP MAGNET

It may be possible to assist insomnia sufferers to achieve deeper, more satisfying sleep by using weak magnetic stimulation, US sleep researchers have claimed. Transcranial magnetic stimulation (TMS) is a non-invasive method of exciting neurones by inducing weak electrical currents in the brain by rapidly changing magnetic fields. The authors were able to reliably induce slow waves on the electroencephalogram recordings of sleeping subjects by stimulating the brain with TMS. Slow wave activity is greatest in the later stages of deep, non-dreaming sleep, and is thought to be associated with the restorative and memory-enhancing effects of deep sleep. Although it is not possible to predict the effectiveness of slow wave induction as a treatment for insomnia, the authors suggest that TMS might be used to enhance the restorative power of short periods of sleep under conditions of sleep deprivation.

*Proc Natl Acad Sci U S A 2007; 104: 8496-8501*

## MORE IS MORE

There appears to be a dose-response relationship between exercise and fitness, a US randomised controlled trial has suggested.<sup>1</sup> The trial studied the effects of increasing amounts of physical activity on 464 sedentary overweight or obese postmenopausal women over a 6-month intervention period. Participants were randomly assigned to four groups; a non-exercise control group, and three exercise groups with increasing energy expenditure per week. Target training intensity was set at the heart rate associated with 50% of each woman's peak absolute oxygen consumption. Exercise took the form of walking and cycling. Diet was unchanged. The intervention groups showed increased aerobic fitness that rose in a linear fashion with the amount of energy expenditure per week. Other cardiovascular risk factors, including blood pressure, lipid profile and weight, did not improve over the study period. An accompanying editorial<sup>2</sup> comments on limitations of the trial, particularly that it was not able to predict the effect of different physical activity patterns, including vigorous exercise, on cardiovascular risk factors.

1. *JAMA 2007; 297: 2081-2091*

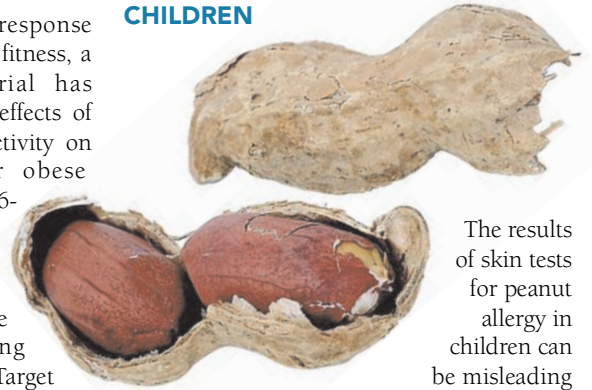
2. *JAMA 2007; 297: 2137-2139*

## PRIMARY CARE ACROSS THE WORLD

A tri-national study of primary care physicians has revealed remarkably similar aspects of clinical practice across the three countries, despite differences in supply and financing. Researchers in the United States, Australia, and New Zealand completed questionnaires on patient demographics, diagnoses, and duration of visit for over 110000 office visits. Visits in the US were of longer duration, but there were higher rates of visits per year in Australia and New Zealand. Correlations in the frequency of managed health problems and the type of problems managed was high between the three countries.

*BMJ Online, 15 May 2007*

## PEANUT ALLERGY IN CHILDREN



The results of skin tests for peanut allergy in children can be misleading and may result in

overdiagnosis, according to Australian researchers. The authors suggest that although some individuals may experience systemic allergic reactions with ingestion of very small amounts of peanut butter, contact sensitivity may not predict the outcome of a food challenge. A total of 84 children presenting to an allergy clinic with a positive peanut skin prick test (SPT) were included in the study. All children had an immediate skin application food test (I-SAFT) and specific IgE measurement performed. The results of SPT, I-SAFT and specific IgE levels were combined to determine if the combination resulted in improved sensitivity and specificity compared with the individual tests. The combination of tests was not found to be more useful than individual tests. In-hospital peanut challenges were also carried out on most children. Results indicated a larger weal size on skin testing is predictive of a positive food challenge, which the authors regard as the "gold standard" of testing. The weal size was larger than that used to indicate positivity in many centres around the world. This may be due to the large variability in clinical settings and types of tests used. In conclusion, the investigators state that previously reported high specificities of skin tests for peanut allergy are not strictly reproducible and that allergists need to know how to interpret skin test results in their individual practices.

*Pediatr Allergy Immunol 2007; 18: 231-239*

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