Minerva

A study of Turkish girls aged 13 to 17 reports that those who wear concealing clothes for religious reasons had significantly lower levels of vitamin D than other girls, and that half of this group were actually deficient in vitamin D. The bone density measurements, however, were not significantly different, despite this age being critical for the laying down of bone mass. It remains to be seen whether health problems emerge later on. The authors say that vitamin D supplements may be useful for any religious groups that wear concealing clothes (Journal of Nutrition 2005;135: 218-22).

The restriction of sales of paracetamol in the United Kingdom since 1998 has been said to have reduced the number of cases of paracetamol poisoning, but the impact of pack size may not be the reason behind this reduction. The authors of an observational study in the *Journal of Public Health* (online publication 6 Jan; doi:10.1093/pubmed/fdh216) point out that mortality for paracetamol on its own was already on the decline in 1997, and that the two major dips seen over the next few years may be attributable to random variation rather than design.

From the restoration of sexual function to the possibility of mending a broken heart: a potential new use for Viagra (sildenafil) is described in *Nature Medicine* (online publication 23 Jan; doi:10/nm1175). Mouse models have been used to demonstrate that the heart failure caused by hypertrophy of cardiac muscle induced by sustained pressure overload can be reversed by sildenafil, returning the function of the heart's chambers to normal.

Doctors strive to reduce patients' blood pressure and thus reduce the risk of stroke, but a huge prospective study of adults aged 45 to 73 conducted over six years found that 12% of all strokes occurred in people with normal blood pressure. Multivariate analysis revealed the usual suspects of older age, smoking, established heart disease, and increased body mass index as risk factors for stroke. But a new risk factor emerged: a history of gastric ulcer. Another surprising finding was that the relation between stroke and diabetes became non-significant (*Stroke* 2005;36:234-8).

Children who undergo total body irradiation and receive haematopoietic cell transplants for conditions such as leukaemia are prone to growth impairment and growth hormone deficiency. A study of the adult heights of children who had been rendered deficient in growth hormone by their treatment found that children aged under

10 at the time of their transplant grew significantly taller with growth hormone treatment than older children and those who didn't receive treatment (*Blood* 2005; 105:1348-54).

Years of intense training involving the performance of repetitive complex movements make musicians prone to dystonia, a condition of sustained involuntary muscle contractions causing abnormal movements. Robert Schumann, the 19th century pianist, suffered from it. Leon Fleisher, a modern day performer, was restricted to playing pieces for left hand only for 30 years. He says he owes his eventual return to two handed playing in 1995 to botulinum toxin injections, but in line with others who've had the treatment, he still has weakness in the treated fingers (*Neurology* 2005;64:186-7).

Vaccination at a young age not only protects against infections but may well influence a person's susceptibility and response to cancer in later life. For example, malignant melanoma patients who had been vaccinated against tuberculosis or smallpox have a better prognosis than unvaccinated patients (*European Journal of Cancer* 2005;41: 104-17). To explain the growing evidence for such phenomena, the authors hypothesise that human endogenous retroviruses have a key role in malignant transformation.

An apple a day keeps the doctor away, and more specifically the gastroenterologist. Apple polyphenol extracts prevented both oxidative damage and indomethacin induced damage to human gastric epithelial cells in the laboratory and also in live rats. In addition to preventing oxidative injury, the extracts also brought about a fourfold increase in intracellular antioxidant activity (*Gut* 2005;54:193-200).

Six months after coronary artery bypass grafting, the single most useful predictor of health status is not age, history of a previous heart attack or heart failure, diabetes, or left ventricular function. It's a score of depression: higher levels of depressive symptoms at the time of the operation are a strong risk factor for poor functioning six months later (*Circulation* 2005;111:271-7).

A somewhat reassuring picture of what happens to older people in the United States who have injuries is reported in the American Journal of Public Health (2005;95: 273-8). Regardless of insurance cover, the hospital outcomes of people with injuries such as broken hips, spinal injuries, and head injuries are generally similar. Despite



A 50 year old woman who had had skin sparing mastectomy and immediate breast reconstruction with a latissimus dorsi flap for invasive breast cancer presented 10 months later with a petechial and purpuric rash over the reconstruction and lateral chest wall. Three weeks earlier she had started a regimen of vigorous daily sessions in a hydrotherapy pool. The innocuous trauma of high pressure jets and bubble massage to the insensate breast and back areas had caused the bruising seen in the picture. The skin and soft tissues recovered completely within four weeks. Problems associated with inadvertent chemical and thermal injury are well recognised, but any patient with a significant area of anaesthesia after reconstructive surgery should also be aware of the dangers of apparently trivial but repetitive trauma.

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controls for type and severity of injury, age and sex, and other health problems, insurance status did not affect mortality rates and discharge to long term care facilities. The single obvious difference was that people covered by Medicare had slightly longer hospital stays.

The response to our Christmas competition, to design a polymeal (BMJ 2004;329:1447-50), has been so great that we're still considering the many mouth watering submissions (see http://bmj.com/cgi/eletters/329/7480/0-f). Many submissions go beyond the basics and add other healthy ingredients—"egg yolks full of sulphur and good for joints" and "watercress full of iron," for example. Others add exercise (a walk to the market) into the menu. Getting the required nuts and chocolate, 68 g and 100 g respectively, into each portion seems to pose the greatest challenge.