

NEW SKIN

Eight children with serious burns have gained very high quality skin in a short time without any need for further grafting — courtesy of fetal skin. Swiss researchers developed a skin-cell bank from one fetal skin biopsy (4 cm² skin) taken after a pregnancy termination at 14-weeks' gestation. They then developed fetal skin-cell constructs from collagen sheets. Paediatric patients who were candidates for autologous skin-grafting had successive constructs applied to their burn sites at every change of dressing for up to 3 weeks. Complete skin closure was rapid, occurring in about 15 days. There was little hypertrophy and no retraction of the new skin. Further, over time, total recovery of mobility was documented, especially in the hands and fingers. The skin-cell bank developed by the researchers is capable of producing several million skin constructs.

Lancet online

BEST FOOT FORWARD?

Which patients with diabetes should receive ongoing podiatry care? Australian researchers have challenged the traditional teaching that it should be every patient. McGill and colleagues say this ideal is impossible in the real-life setting as no health care system is sufficiently resourced for such a universal approach. They suggested podiatry should instead be provided to those patients at highest risk of foot ulceration, and estimated the number needed to treat (NNT) in order to prevent one ulcer per year in a cohort of 250 patients with diabetic neuropathy compared with 222 patients with diabetes but no neuropathy, followed for an average of 2 years. In order of risk: history of previous ulceration or amputation: NNT=7; decreased pressure sensation: NNT=18; decreased vibration sensation: NNT=45; and, no neuropathy: NNT=367.

Intern Med J 2005; 35: 451-456

TAKE TWO MARS BARS?

Mars (the “chocolate” company) is seeking pharmaceutical partners to help it develop compounds synthesised from natural cocoa flavanols into prescription drugs, according to an editorial in the *Lancet*. Although preliminary research with cocoa flavanols had indicated several potential beneficial health effects — including reduced platelet aggregation, enhanced endothelial function, and antioxidant effects — variations in cocoa processing and flavanol content have made it hard to translate these early findings into tangible clinical benefits. Further, most chocolate confectionery products do not contain doses that are even likely to be beneficial.

Lancet 2005; 366: 608

**GREEN CITIES ARE LEAN CITIES**

A clean, green environment could help to promote physical activity and weight loss, suggest European authors. They drew upon data about the health, housing and the surrounding environment of 6919 city-dwellers in a range of European countries. Compared with people living in clean, green environs, people living in areas with more graffiti, litter and dog mess, and less visible vegetation and greenery, were less likely to be physically active and more likely to be overweight. The authors say that as well as considering individual factors that facilitate or hinder increased physical activity and weight reduction, we should also pay attention to environmental ones.

BMJ online

YOUNGER AND YOUNGER

Mayo clinic researchers warn that, as our young adult population ages, there may be an exponential increase in the overall occurrence of non-melanoma skin cancer. They examined the incidence of basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) between 1976 and 2003 in people younger than 40 years of age living in one county in Minnesota, USA. The overall age-adjusted incidence of BCC was 25.9 per 100000 young women and 20.9 per 100000 young men; the incidence of SCC was similar for men and women at 3.9 per 100000. Over the time period studied, there was an increase in BCC diagnosed in young women. Further, the proportion of BCCs found on the torso increased from 18.9% in 1976–1979 to 50% in 2000–2003 — an increase related, possibly, to outdoor tanning and tanning bed use. The researchers also found an increase over time in SCC in both women and men. We may need to redouble our efforts in preventing skin cancer in the very young.

JAMA 2005; 294: 681-690

SMOKING TEENS

Which teenager is going to take up smoking cigarettes? Canadian researchers say it is more likely to be an adolescent who had an enhanced susceptibility to environmental tobacco smoke in childhood. They measured salivary cotinine levels, a measure of the amount of nicotine entering the bloodstream, in nearly 200 young schoolchildren with an average age of 9 years. At follow-up at least two years later, 44% of these children (now with an average age of 13 years) had become smokers. The smoking teens were more likely to have had higher concentrations of nicotine when first studied. It was suggested that efficient absorption of nicotine from second-hand tobacco smoke may have rendered these adolescents susceptible to nicotine-seeking behaviour.

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