# **IN BRIEF**

# RESEARCH HIGHLIGHTS

#### BONE

Current tobacco smoking was associated with low BMD, incident fractures and prevalent vertebral fractures in a cohort of Swedish men aged 69–80 years. Jutberger and colleagues found that the BMD of current smokers was 6.2% and 5.4% lower at the total hip and lumbar spine, respectively, when compared with individuals in the control group. This association remained even after adjustment for variables, such as age, height, weight, calcium intake and physical activity.

Original article Jutberger, H. et al. Smoking predicts incident fractures in elderly men: Mr Os Sweden. J. Bone Miner. Res. doi:10.1359/jbmr.091112

## NUTRITION

A gene–diet interaction between the functional *APOA2* –265T>C polymorphism and food intake on BMI and obesity has been successfully replicated in three independent populations in the US, say researchers in the *Archives of Internal Medicine*. Corella *et al.* could show that consumption of a high-saturated fat diet seems to increase the susceptibility to increased BMI and obesity in individuals with the *APOA2* CC genotype, which ranged in prevalence in study participants from 10.5 to 16.2%.

**Original article** Corella, D. *et al. APOA2*, dietary fat, and body mass index: replication of a gene-diet interaction in 3 independent populations. *Arch. Intern. Med.* **169**, 1897–1906 (2009)

Weight loss after diet is known to improve mood states in individuals with obesity. Australian researchers have now discovered that, after 1 year, an energyrestricted, low-fat, high-carbohydrate diet has greater beneficial effects on psychological mood states than a high-fat, low-carbohydrate diet, despite similar weight loss. Changes in cognitive function, however, were not affected by the two diets in this study which enrolled 106 participants with overweight or obesity (mean BMI 33.7 kg/m<sup>2</sup>).

**Original article** Brinkworth, G. D. *et al.* Long-term effects of a very lowcarbohydrate diet and a low-fat diet on mood and cognitive function. *Arch. Intern. Med.* **169**, 1873–1880 (2009)

## DIABETES

Lactation could have persistent beneficial effects on women's cardiometabolic health, suggest the findings of the 20-year prospective observational CARDIA (Coronary Artery Risk Development in Young Adults) study. Researchers investigated the association between the duration of lactation and incidence of the metabolic syndrome among 1,399 women of reproductive age. Increasing duration of lactation (from 0–1 month through >9 months) was associated with lower crude incidence rates of the metabolic syndrome.

**Original article** Gunderson, E. P. *et al.* Duration of lactation and incidence of the metabolic syndrome in women of reproductive age according to gestational diabetes mellitus status: a 20-Year prospective study in CARDIA (Coronary Artery Risk Development in Young Adults). *Diabetes* **59**, 495–504 (2010)