

IN BRIEF

NUTRITION

Antioxidant supplements might impede some of the positive effects of exercise, new research indicates. Ristow *et al.* examined the influence of vitamin C and E intakes on the effects of exercise in 39 healthy young men. Exercise-induced oxidative stress, thought to have some harmful effects, nonetheless led to improved insulin sensitivity and glucose metabolism in participants; however, these beneficial effects were blocked during antioxidant supplementation. The researchers propose that increased levels of oxidative stress during exercise could potentially prevent type 2 diabetes mellitus.

Original article Ristow, M. *et al.* Antioxidants prevent health-promoting effects of physical exercise in humans. *Proc. Natl Acad. Sci. USA* **106**, 8665–8670 (2009).

BONE

A link between bone and heart health has been identified in a new study that reports an increased risk of cardiovascular events in men with high bone resorption. Szulc and colleagues prospectively followed up 744 men (aged ≥ 50 years) for 7.5 years, while measuring their BMD, bone turnover markers and recording cardiovascular events. Relative to men in other quartiles, those in the lowest quartile of BMD (at the spine, forearm and whole body) or highest quartile of bone turnover markers were twice as likely to experience myocardial infarction or stroke. Szulc and co-workers recommend that men with osteoporosis should undergo screening for cardiovascular disease.

Original article Szulc, P. *et al.* Increased bone resorption is associated with increased risk of cardiovascular events in men—the MINOS Study. *J. Bone Miner. Res.* doi:10.1359/jbmr.090531

DIABETES

Urinary albumin excretion is associated with diabetic kidney disease. Babazono and co-workers investigated whether an albumin:creatinine ratio in the high-normal range was linked with the rate of decline in glomerular filtration in 5,449 Japanese patients with diabetes mellitus. The researchers observed the most rapid declines in estimated glomerular filtration rate in patients who had elevated baseline albumin:creatinine ratios, even if values remained within the normal range. This relationship was stronger in men than women, which suggests that the threshold albumin:creatinine ratio that indicates a high risk of diabetic kidney disease is lower in men than in women.

Original article Babazono, T. *et al.* Higher levels of urinary albumin excretion within the normal range predict faster decline in glomerular filtration rate in diabetic patients. *Diabetes Care* **32**, 1518–1520 (2009).