

Patients with diabetes already have an increased risk of fracture, so women who use thiazolidinediones might be particularly at risk. The authors call for randomized clinical trials designed to reveal the effect of thiazolidinedione use on BMD.

Original article Schwartz AV *et al.* (2006) Thiazolidinedione (TZD) use and bone loss in older diabetic adults. *J Clin Endocrinol Metab* **91**: 3349–3354

Overweight and normal-weight people estimate calorie intake in the same way

Overweight people have been observed to consistently underestimate the calorie content of their meals to a greater extent than normal-weight people do. New research suggests, however, that this difference might have more to do with portion size than with body size.

Wansink and Chandon conducted an empirical study ($n=105$) and a laboratory study ($n=40$). In the empirical study, overweight people underestimated the calorie content of the fast-food meals they had just eaten by 33%, whereas normal-weight people underestimated their calorie intake by only 16.2% ($P<0.041$). Overweight participants, however, tended to have chosen larger meals than normal-weight participants had chosen. In the laboratory study, all participants estimated the calorie content of the same 15 fast-food meals. There were no differences in the estimations of overweight and normal-weight participants: the estimated calorie content of small meals was accurate, but the calorie content of large meals was underestimated by approximately 22%.

These results indicate that overweight people consistently underestimate the calorie content of their meals only because they consistently choose large meals. Wansink and Chandon suggest clinicians' advice to overweight patients should focus less on calorie estimation and more on portion control. Alternatively, as these results show that people can accurately assess the calorie content of small amounts of food, overweight patients should be encouraged to assess the individual items in their meals.

Original article Wansink B and Chandon P (2006) Meal size, not body size, explains errors in estimating the calorie content of meals. *Ann Intern Med* **145**: 326–332

Metformin use during pregnancy does not increase the risk of major malformation

Metformin has been approved by the FDA for the treatment of type 2 diabetes. Metformin is also used off-label to treat infertility in women with polycystic ovary syndrome (PCOS). There is commonly a delay in the diagnosis of pregnancy in women with PCOS because oligomenorrhea is a common feature of this disorder. It is, therefore, not unusual for women with PCOS to be exposed to metformin during the first trimester of their pregnancy.

Gilbert *et al.* conducted a systematic review and meta-analysis to determine whether treatment with metformin during pregnancy increases the risk of major fetal malformations. Their analyses included data from eight controlled and five noncontrolled studies that examined metformin use in pregnancy, included a disease-matched control group, and were published on MEDLINE or EMBASE between 1966 and September 2004.

Treatment with metformin during the first trimester was not associated with an increased rate of major fetal malformation. The overall malformation rate in the 496 pregnancies exposed to metformin was 1.01%, compared with 7.50% in the disease-matched control groups.

This meta-analysis included data on only a few pregnancies because there are only a limited number of published studies that have examined the effects of metformin on pregnancy outcomes. The authors, therefore, state that metformin cannot be assumed safe until further studies are carried out that investigate all adverse pregnancy outcomes such as stillbirth, spontaneous abortions, intrauterine growth retardation and minor anomalies.

Original article Gilbert C *et al.* (2006) Pregnancy outcome after first-trimester exposure to metformin: a meta-analysis. *Fertil Steril* **86**: 658–663

High BMI does not increase overall mortality in patients with coronary artery disease

A systematic review of cardiovascular-disease cohort studies has found that, contrary to expectations, elevated BMI is not associated with increased overall mortality in patients with coronary artery disease. Romero-Corral and colleagues