In patients with type 2 diabetes mellitus, what is the efficacy of pharmacotherapy for weight loss?

**METHODS**


Study selection and assessment: published and unpublished studies that used pharmacotherapy as the primary strategy for weight loss in adults with type 2 diabetes mellitus and had weight as an outcome. The drugs evaluated were centrally acting appetite suppressants, drugs with a peripheral effect on appetite, drugs that affect nutrient partitioning, and drugs that increase thermogenesis. Drugs withdrawn from the US market or unavailable in the US, investigational drugs and dietary supplements, and metformin and acarbose were excluded. Studies were assessed for quality.

Outcomes: changes in weight and glycated haemoglobin concentrations.

**MAIN RESULTS**

59 studies met the inclusion criteria. 14 randomised placebo controlled trials (n = 2231) had sufficient data for meta-analysis: 6 of fluoxetine (n = 296, mean age 55 y, 51% women, follow up 8–52 wks), 4 of orlistat (n = 1475, mean age 55 y, 52% women, follow up 52–57 wks), and 4 of sibutramine (n = 460, mean age 53 y, 99% women; follow up 12–26 wks). Fluoxetine, orlistat, and sibutramine led to modest reductions in weight; and fluoxetine and orlistat led to modest reductions in glycated haemoglobin (table).

**CONCLUSION**

In patients with type 2 diabetes mellitus, fluoxetine, orlistat, and sibutramine modestly reduce weight and fluoxetine and orlistat improve blood sugar control.

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