**MAIN RESULTS**

Only trials of orlistat and sibutramine met the selection criteria. 16 RCTs (11 of orlistat and 5 of sibutramine) were included. 14 RCTs (11 of orlistat and 3 of sibutramine) were weight loss trials in which drug therapy was used in conjunction with a weight loss diet for 1 year. 2 RCTs of sibutramine were weight maintenance trials with 12 to 18 month follow up.

11 weight loss trials (n = 6021, mean age 49 y, 71% women, mean BMI 35.7 kg/m²) used standard doses of orlistat (120 mg, 3 times/d). 3 weight loss trials (n = 929, mean age 47 y, 80% women, mean BMI 33.4 kg/m²) used sibutramine, 10 to 20 mg/day. Patients who received orlistat had a 2.7 kg (95% CI 2.3 to 3.1 kg; 11 RCTs) greater weight loss than placebo group patients. More orlistat and sibutramine group patients achieved 5% and 10% weight losses than placebo group patients (table).

2 sibutramine weight maintenance trials (n = 627, mean age 49 y, 83% women, mean BMI 37 kg/m²) used a 10 mg/day dose of sibutramine. Results from these 2 trials were not pooled, but both showed greater weight loss in participants who received sibutramine than did those who received placebo.

**CONCLUSION**

Orlistat and sibutramine are modestly effective for weight loss at 1 year.

Abstract and commentary also appear in ACP Journal Club.

---

**Commentary—continued from previous page**

Although orlistat and sibutramine undoubtedly produce weight loss, the effect is modest and is less than can be achieved with intensive lifestyle interventions. Combining increased physical activity and calorie restriction has been shown to reduce the risk of incident diabetes by as much as 58% in 2 similar studies. Lifestyle interventions have been poorly studied but are the preferred treatment option for most individuals, although many persons who are overweight or obese are unable to undertake or adhere to intensive lifestyle interventions, especially over the longer term. Until effective methods of obesity prevention are introduced, a role for pharmacological treatment of obesity remains. Further research is required to establish cost effectiveness and to identify subgroups of patients who are most likely to benefit from different approaches to weight loss.

Christopher D Byrne, FRCP, FRCPath, PhD
Southampton General Hospital
Southampton, UK
Sarah Wild, MRCP, MRCPG, MFPHM, PhD
University of Edinburgh
Edinburgh, UK


---

**Orolistat (Orl) or Sibutramine (Sib) v placebo for weight loss at 1 year**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Number of trials</th>
<th>Weighted event rates</th>
<th>Orl (5% weight loss)</th>
<th>Sib (10% weight loss)</th>
<th>Placebo (5% weight loss)</th>
<th>Orl (95% CI)</th>
<th>Sib (95% CI)</th>
<th>Placebo (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% weight loss</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>75% (53 to 100)</td>
<td>31%</td>
<td>31%</td>
<td>5 (5 to 6)</td>
</tr>
<tr>
<td>3%</td>
<td></td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
<td>256% (132 to 446)</td>
<td>15%</td>
<td>15%</td>
<td>3 (3 to 4)</td>
</tr>
<tr>
<td>10% weight loss</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>93% (66 to 125)</td>
<td>13%</td>
<td>13%</td>
<td>9 (7 to 13)</td>
</tr>
<tr>
<td>3%</td>
<td></td>
<td>52%</td>
<td></td>
<td></td>
<td></td>
<td>345% (168 to 639)</td>
<td>5%</td>
<td>5%</td>
<td>4 (2 to 5)</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; weighted event rates, RBI, NNT, and CI calculated from data in article using a random effects model.*
Review: orlistat and sibutramine are modestly effective for weight loss at 1 year

Evid Based Med 2005 10: 13
doi: 10.1136/ebm.10.1.13

Updated information and services can be found at:
http://ebm.bmj.com/content/10/1/13

These include:

References
This article cites 3 articles, 1 of which you can access for free at:
http://ebm.bmj.com/content/10/1/13#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Topic Collections
Articles on similar topics can be found in the following collections

- Clinical trials (epidemiology) (1596)
- Health education (374)
- Obesity (nutrition) (143)
- Drugs: cardiovascular system (754)
- Hypertension (403)
- Diabetes (365)
- Liver disease (55)
- Pancreas and biliary tract (37)
- Degenerative joint disease (110)
- Diet (262)
- Ischaemic heart disease (419)
- Musculoskeletal syndromes (219)
- Osteoarthritis (51)
- Sleep disorders (neurology) (48)
- Sleep disorders (respiratory medicine) (48)
- Stroke (546)

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/