

A summary of the Cochrane review:

Interventions for preventing weight gain after smoking cessation

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Can smoking cessation interventions and interventions designed to limit weight gain actually reduce weight gain when smokers quit?

Background

When giving up smoking, most people put on weight. Many smokers are concerned about this and say it may put them off making a quit attempt. Some studies show that weight gain also leads to people resuming smoking after an initially successful quit attempt. On the other hand, there are good reasons to believe that trying to limit weight gain may reduce the chance of stopping smoking. The aim of this review was to investigate the effect of interventions targeting post-cessation weight gain and interventions designed to aid smoking cessation on weight change and smoking cessation.

Study characteristics

We searched for trials published up to September 2011 and found 16 trials testing interventions designed to limit post-cessation weight gain (pharmacological interventions to placebo, multi component behavioural interventions added to usual smoking cessation support, a very low calorie diet (VLCD), CBT to reduce concern about weight gain) and 53 trials of smoking cessation interventions not specifically designed to limit weight gain (exercise, antidepressants, NRT, varenicline).

Key results

Of the drug treatments, naltrexone showed most promise, but there were no data on its effects on weight once treatment stopped and there was not enough evidence to judge its effects on long term quitting. Weight management education alone did not limit weight gain and may undermine cessation. Weight management education with personalised support (feedback on personal goals and personal energy prescription) limited weight gain and there was no evidence that it undermined cessation. Intermittent use of a VLCD improved cessation success and weight gain in the short term but not the long term.

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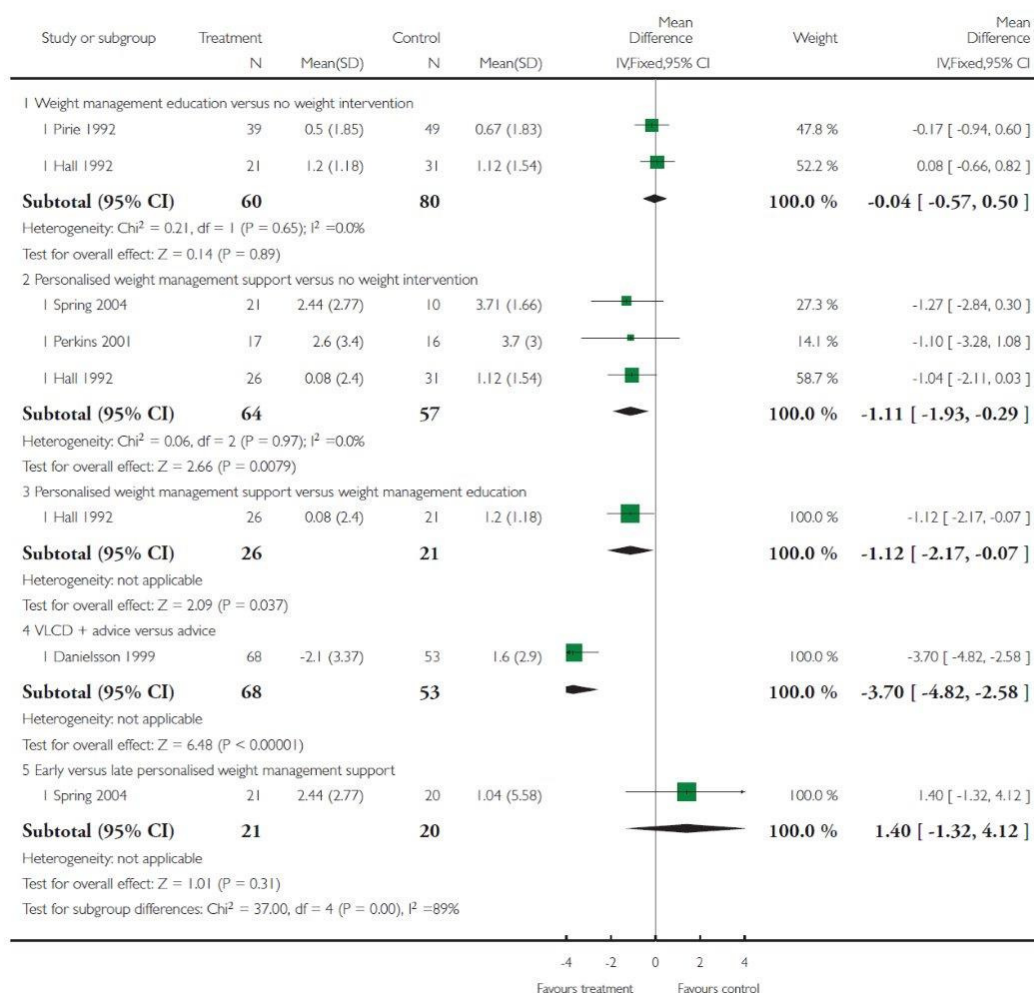
Bupropion, fluoxetine, NRT and varenicline (smoking cessation treatments) all limited weight gain during treatment; however effects were smaller when treatment stopped and there was insufficient evidence that effects persisted long-term. There was some evidence to suggest that exercise reduced post cessation weight gain but more studies are needed to see whether this was a chance finding. The effects of all interventions were modest relative to the weight gain which occurs after stopping smoking.

Quality of the evidence

A potential bias in the group of 'behavioural treatment' studies is that six of the seven studies recruited women concerned about post-cessation weight gain. Therefore, it is feasible that women allocated to control interventions where they received no help were more likely to drop out.

The data are not sufficient to make strong clinical recommendations for effective programmes to prevent weight gain after cessation.

A forest plot illustrating the effect of behavioural weight management interventions versus advice or no intervention on weight change at end of treatment



Citation:

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