



Surgery and drugs alone are not enough to combat obesity

A review of research examining the effectiveness of different obesity treatments has concluded that no matter what other forms of therapy are offered, changes in lifestyle are imperative if patients want to maximise and maintain their weight loss. This review, presented at the annual Society for Endocrinology BES meeting in Harrogate, shows that lifestyle interventions provide benefits at all stages of obesity management and should be encouraged no matter what other forms of therapy are offered.

Dr Rob Andrews from the University of Bristol carried out a review of the research on weight loss methods published in international peer reviewed journals. He examined how successful different lifestyle interventions (such as exercise, diet and behavioural therapies) are in the treatment of obesity when carried out alone or in combination with other treatments such as bariatric surgery and weight loss drugs.

He found that when weight loss drugs are given on their own, with no other changes in lifestyle, they produce an average weight loss of 5 kg, the same amount of weight you lose if you go on a calorie-controlled diet and take regular exercise. However, if weight loss drugs are offered in combination with behavioural therapies, their effectiveness can be increased by over 100% (from 5 kg to 12 kg average weight loss). He found that the story was the same with bariatric surgery. Patients who exercise and lose weight prior to surgery are less likely to have postoperative complications and lose more weight at a quicker rate after surgery than those who didn't.

Overall, this review indicates, that when treating obese patients, weight loss drugs and bariatric surgery are significantly more successful if they are offered in conjunction with improvements to diet and exercise.

Full results of the review are:

- Exercise alone produces an average weight loss of 1.8 kg. The more you exercise the more weight you lose.
- Diet alone produces an average weight loss of 5.0 kg. This effect peaks 6-12 months following the start of the diet and wanes after this point. No diet is better than any other in the long term but the greater the reduction in calories, the greater the initial weight loss.

- Behavioural therapies (e.g. cognitive therapy, psychotherapy, relaxation therapy, hypnotherapy) produce an average weight loss of 2.3 kg.
- Exercise plus diet result in an average weight loss of 10.7 kg and helps to maintain weight loss for a longer period.
- Exercise plus diet plus behavioural therapies result in the greatest average weight loss of 12-15 kg.
- Taking weight loss drugs with no changes in lifestyle result in an average weight loss of 5kg. Taking weight loss drugs, in combination with behavioural therapies, leads to an average weight loss of 12 kg.
- Patients that lose more than 10% of their body weight prior to bariatric surgery are 2.12 times more likely to achieve a 70% loss of excess body weight.

Researcher Dr Rob Andrews said:

“People often forget is that there is no quick fix to obesity. Overeating and decreased activity are the fundamental problems underlying the development of obesity. Any therapy aimed at helping obese patients must have a dietary and exercise component in order to be successful. This review shows that patients who are taking weight loss drugs or have bariatric surgery lose significantly more weight if they combine these treatments with regular exercise and a calorie-controlled diet. Maintaining a healthy, balanced lifestyle is the key to maximising and maintaining weight loss.”

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Notes for editors

The paper will be presented at the Society for Endocrinology BES meeting at 14:15 on Wednesday 9 April 2008. The abstract for this work is reproduced below: see <http://www.endocrine-abstracts.org/ea/0015/ea0015S50.htm>

The Society for Endocrinology BES 2008 is Britain’s biggest scientific meeting on hormones, and is taking place at the Harrogate International Centre, Harrogate, from 7-10 April 2008. For the full programme, please see <http://www.endocrinology.org/meetings/2008/BES2008/prog/prog.aspx>.

Please mention the Society for Endocrinology BES meeting in any story.

The Society for Endocrinology is Europe’s largest national organisation promoting endocrinology and hormone awareness. For general information, please visit our website: <http://www.endocrinology.org>

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ABSTRACT

Managing the obese patients: lifestyle intervention and prescriptive exercise

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Overeating and decreased activity are the fundamental problems underlying the development of obesity, thus any therapy aimed at helping the obese patient must have a dietary and exercise component.

In general three forms of lifestyle interventions are used; exercise, diet and behavioural therapy. Exercise alone produces an average weight loss of 1.8 kg (0-4kg) with a higher intensity of exercise leading to a greater weight loss. Diastolic blood pressure, triglycerides, HDL and glucose also significantly improve independent of weight loss. Diet alone is more effective than exercise, producing an average peak weight loss of 5kg (0.5-12.5kg) at 6-12 months, with this effect then waning with time. No diet is better than any other. The greater the reduction in calories and the more contact, the greater the weight loss. Behavioural therapies produce a similar weight loss to that seen with exercise, with an average loss of 2.3 kg (1.4-3.1 kg). The more frequent the contact and the longer the program the greater the benefit.

Addition of exercise to a diet results in greater weight loss (average 10.7 kg), and also helps to maintain weight loss. The combination of diet or exercise with behavioural therapy results in a similar weight loss. Combination of all three interventions results in the greatest weight loss of 12-15kg.

All studies that have examined the effect of weight loss drugs have used these in combination with lifestyle intervention. If given alone they are no more effective than the combination of diet and exercise. In combination with group lifestyle programs or behavioural therapies their effectiveness can be increased by 100% (5kg vs 12kg).

Individuals who exercise and lose weight prior to bariatric surgery are less likely to have postoperative complications and lose more weight at a faster rate. Continuing to exercise post operatively results in greater loss of fat mass and higher gain in lean body mass than the non-exercising individuals.

In summary lifestyle intervention provides benefits at all stages in the management of patients with obesity and should be encouraged no matter what form of therapy is being offered.