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Obesity can be fought with the Mandometer, a new talking scale

New technology that monitors portion size and how fast people eat is helping obese adolescents to change their behaviour

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New technology that encourages you to eat smaller portions, more slowly, has helped young people to lose weight more quickly. Photograph: David Levene

New technology that monitors portion sizes and how fast people eat could be instrumental in fighting [obesity](#), a new study reveals today. Obese adolescents who monitor the speed at which they clear their plates learn to lose weight far more effectively, the dietary study has shown.

Tests in which patients were given instant feedback on their eating habits – using a computerised, talking scale known as a Mandometer – enabled them to modify their behaviour, researchers in Bristol discovered.

The portable weighing scale, slipped under the plate of food, is connected to a small screen that plots food removal over time – and compares it to a rate of consumption recommended by a food therapist.

By tracking portion size and how fast people eat, the youngsters, aged between nine and 17, managed to lose more pounds than those merely following standard dietary advice, according to the article published on [bmj.com](#) today.

The Mandometer was developed at the Karolinska Institutet in Stockholm. It encourages individuals to eat less, more slowly and to develop a more normal pattern of satiety. If the patient starts gulping a meal too quickly, the device tells them to slow down.

"Childhood obesity is an increasing global problem and there is little evidence to support one specific treatment programme," the paper observes. "While it is unknown whether specific eating patterns are common in all obese people, in this study patients ate large portions very quickly."

Researchers at Bristol Royal Hospital for [Children](#) and the [University of Bristol](#), led by Professor Julian Hamilton-Shield, carried out a randomised controlled trial of 106 obese patients aged nine to 17.

One group of adolescents received Mandometer therapy to lose weight, while the other patients were provided with standard care. Both groups were encouraged to increase their levels of physical activity to 60 minutes of exercise a day and to eat a balanced diet based on the Food Standards Agency's "eatwell plate".

Participants were assessed after 12 months and followed up at 18 months. During research they were regularly monitored and offered telephone support and encouragement.

"After 12 months, the Mandometer group not only had a significantly lower average body mass index and body fat score than the standard care group, but their portion size was smaller and their speed of eating was reduced by 11% compared with a gain of 4% in the other group," it was revealed. "Levels of 'good cholesterol' were also significantly higher in the Mandometer group."

The improvement in body mass index was maintained six months after the end of treatment, suggesting an element of longer-term behavioural change, the authors added.

"Our study provides additional evidence that interventions specifically addressing eating behaviours might be useful in obesity therapy," they concluded.

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