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Plate that tells you to 'slow down' may aid weight loss

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A computerised plate that tells you to slow down when you're eating too fast can help overweight children and teenagers to reach a healthier weight, a new study has found. The technique is based on the theory that eating more slowly means you need fewer calories before you start feeling full.

What do we know already?

The numbers of children and teenagers who are overweight or obese has been rising alarmingly in recent years. Programmes to encourage healthier eating, more exercise, and better habits can help. But they've had only limited success, particularly in older children.

Research has found that overweight people tend to eat much faster than people of a healthy weight. And eating fast may encourage people to eat more food. Studies have shown that people feel full after eating a smaller amount of food, if they eat it slowly. If you eat quickly, you eat more food before you feel full.

This new study compared a standard weight-control programme for overweight children and teenagers (aged 9 to 17 years) with a programme that included a device called a mandometer. This device is a plate that incorporates weighing scales and is linked to a computer. The computer records the weight of food on the plate, and how quickly it disappears.

A monitor shows the child a graph of how fast they are eating. The device also displays a 'training curve' – a graph of the speed they should be eating. When the child is eating faster than the training curve, the computer tells them to slow down. Children also record on the computer how hungry or full they feel during the meal, while eating. The idea is to slow down eating, and get children used to feeling full after eating less.

What does the new study say?

All the children in the study ate very fast (compared with the average) at the start of the study. Those who used the mandometer device moved closer to a healthy weight during the year-long study, compared with children on the standard programme. The difference between the groups was still apparent when they were checked after another 6 months, suggesting that using the mandometer device made a lasting difference.

Researchers don't tend to look at how much weight children lose in absolute terms, because it may not be appropriate for children to lose weight, for example while they are growing taller or going through changes to their body shape in puberty. So we can't say how much weight the children lost during the study. Instead, researchers compare changes to a child's body mass index (BMI) against a standard BMI for their age.

Both groups of children in the study moved closer to the standard BMI for their age, but the change was greater for the children using the mandometer. For comparison, the

results were similar to results of a study of children taking the weight-loss drug sibutramine.

These children also reduced the amount of food they ate in an average meal by 45g (1.5 ounces).

How reliable are the findings?

The study was large and well conducted, so the results should be fairly reliable. However, there are a couple of points that should make us cautious. Firstly, the children who used the mandometer had more contact with clinical staff during the study, because they needed to learn how to use the device. We know that more intensive contact with professionals can improve people's success in a weight-loss programme, so some of the difference between the two groups might be explained by this.

Secondly, several of the researchers have financial links to the company that makes the mandometer device. This doesn't mean the study is unreliable, but it means we should take into account that they have an interest in the success of the product.

Where does the study come from?

The study was done by researchers at a children's hospital in Bristol, and published in the British Medical Journal (BMJ). It was funded by the private health company BUPA.

What does this mean for me?

The study shows that this particular device may help train overweight children to eat more slowly and reach a healthier weight. However, you don't need a computerised plate to try to eat smaller portions more slowly. There are plenty of ways to reach a healthy weight through eating sensibly and exercising.

What should I do now?

If you need to lose weight, you need to eat sensible amounts of healthy food and take regular exercise. If you're finding it hard, talk to your GP or practice nurse. They may be able to refer you to a dietician, or recommend a local weight-loss programme that can help.

If you're worried about the weight of your child, the first step is to see a doctor. The doctor will be able to tell you if your child is overweight, and help him or her to reach a healthy weight. It's a good idea to get advice about the sort of changes you should make to your child's diet, because it's important that children get all the nutrients they need to grow.

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