

February 2017

WRAP Newsletter

The results are in...



Last year the WRAP study completed our 2-year follow up visits. WRAP is now the largest UK trial of weight management programmes that has measured outcomes at 2-years. This week we will publish our findings in *The Lancet*, one of the world's leading medical journals. Thanks to your participation, we can provide practitioners and policy makers across the world with important information about which of the weight management programmes we studied is most effective over a 2-year period and which one offers best value for money for the NHS. We cannot thank you enough for taking part in this important trial and we'd like you to be among the first to know our key findings. **On pages 2-4 you can find a summary of what we found.**

THE WRAP STUDY HAS MOVED!

From the 1st March 2017 responsibility for the WRAP study, will be transferring from the MRC Human Nutrition Research Unit to the MRC Epidemiology Unit, University of Cambridge. This is because the Chief Investigator, Dr Amy Ahern, has taken up a new position there as Deputy Programme Leader for the Prevention of Diabetes research group.



What this means is that the storage of all personal information, data and samples that you provided during the study will be transferred from MRC Human Nutrition Research to the MRC Epidemiology Unit at the University of Cambridge. The University of Cambridge will become the organisation responsible for ensuring that these are processed and stored fairly, securely and lawfully. The University of Cambridge will continue to fulfil the obligations under the Data Protection Act, 1998 for the research study data, as the MRC did prior to transfer. Data security processes at the MRC Epidemiology Unit are compliant with the MRC Information Security Policy, which means your data will continue to be stored and used according to the highest standards of research governance. If you have any questions about this transfer or would like further clarification about what the transfer will mean with regards to the data we hold, then please contact the Chief Investigator Dr Amy Ahern on 01223 769138.

You can read more about plans for this data and next steps for WRAP on page 5.



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CONTACT US

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WRAP In Numbers

23 GP practices took part

1267 participants enrolled

856 participants attended the 2-year visit

4012 study visits were conducted

4859 kg of weight were lost



A QUICK REMINDER.....

WHY DID WE DO THIS STUDY?

Overweight and obesity greatly increase the risk of chronic diseases such as diabetes, heart disease and some cancers. Increases in the number of people with overweight and obesity place considerable strain on health care resources. There is good evidence that referral to a group-based weight management programme can help people lose weight, but it is not clear what the optimal duration of these programmes is, and how cost effective they are in the long term.

In the UK the National Institute for Health and Care Excellence (NICE) recommends that these programmes last at least 12 weeks and in practice, this is the standard referral length. However, obesity is a chronic condition that may require longer intervention. We investigated whether increasing the duration of a weight management programme from 12 weeks to 52 weeks (one year) would lead to greater weight loss over two years. We also examined whether investing in this 52-week programme was cost-effective (value for money) in the longer term.

HOW DID WE DO IT?

We recruited 1267 adults who were overweight or obese from GP practices in England, and randomly allocated them to one of three weight loss programmes:

- 1) **a brief intervention** - participants received a booklet of “self-help” strategies that have been shown to help people lose weight on their own
- 2) **a 12-week group-based programme** - participants could go to Weight Watchers for free for 12 weeks.
- 3) **a 52-week group-based programme** - participants could go to Weight Watchers for free for 52 weeks.

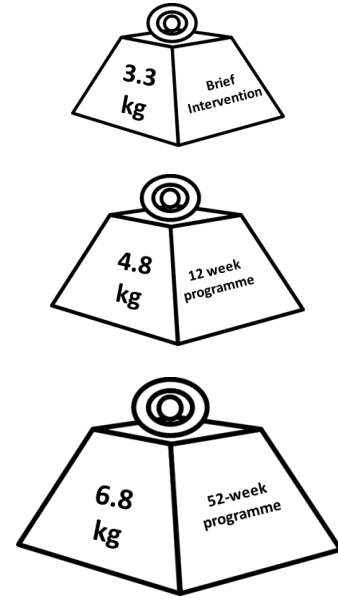
We weighed and measured participants when they started the study, and again at three months, one year and two years. We measured other important markers of health risks like blood pressure, waist circumference, fat mass, and blood glucose levels. We also asked participants to report their use of other NHS resources.

First, we evaluated whether referring participants to one of these programmes was more effective than a brief intervention. Then we evaluated whether the 52-week programme was more effective than the 12 week programme. Then we modelled the impact of the three programmes over 25 years to see which option was the most cost-effective in the long term.

WHAT DID WE FIND OUT?

YEAR ONE

At the end of one year, participants in the 52-week programme had lost an average of 6.8 kg each (that's 15 pounds or just over a stone), compared to 4.8 kg in the 12-week programme, and 3.3 kg in the brief intervention. On average, participants in the behavioural weight loss programmes lost more weight than those in the brief intervention group. Participants in the 52-week programme group lost 2.1 kg more than participants in the 12-week programme. Compared to participants in the other groups, those in the 52-week programme also had significantly greater reductions in fasting blood glucose and glycosylated haemoglobin, which are important markers of the future risk of developing diabetes. There was no significant difference in these diabetes risk markers between the 12-week programme and the brief intervention groups.

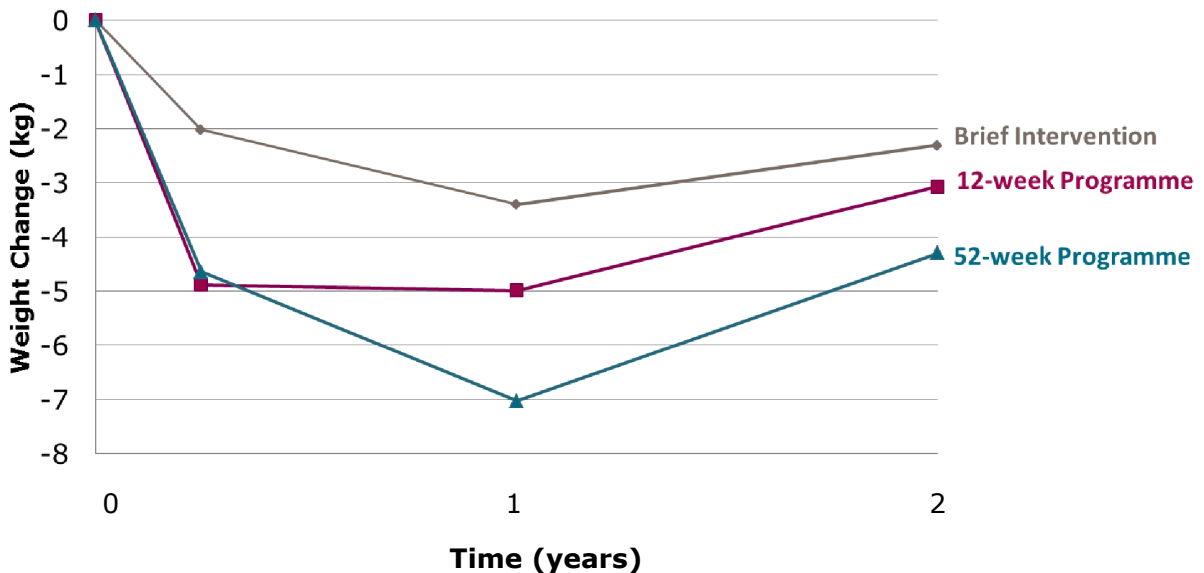


The 52-week programme was more effective than the other programmes at helping people lose weight and reducing risk factors for diabetes and cardiovascular disease.

YEAR TWO

During the second year of the trial, participants in all groups regained some of the weight lost, but there was still a 1.3 kg difference between those in the 52-week programme and those in the 12-week programme at the two year follow up. In contrast, there was no significant difference between weight loss in the 12-week programme and the brief intervention groups at the two year follow-up.

In the graph below you can see average weight loss over time for each group



VALUE FOR MONEY

The 52-week programme is the most effective of the three programmes, but it also costs more. To understand whether it is cost-effective (value for money) we used modelling and statistics to estimate the likelihood of developing weight-related illnesses (such as diabetes, heart disease and cancer) over the next 25 years. We also calculated the NHS resources needed to treat these illnesses.

We modelled health outcomes and associated costs for each programme over 25 years. We summed the costs of the weight loss programme and the cost of treating weight related illnesses. We also considered how many additional quality-adjusted life years (QALYs) each intervention resulted in. When the National Institute of Health and Care Excellence consider whether an intervention is cost-effective, they consider the cost per QALY. Interventions that cost less than £20,000 per QALY are usually considered cost-effective.

We found that referring people to the 12-week



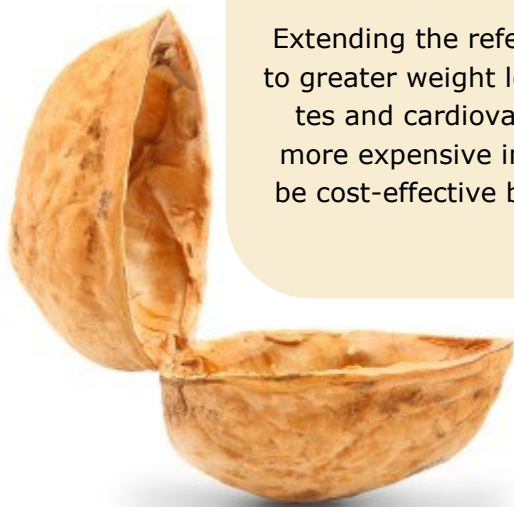
group-based weight loss programme is cost-saving compared to the brief intervention. We estimated that for every 100,000 people referred to the 12-week programme, we could achieve 642 additional quality adjusted life years and save £68,000.

Referring people to the 52-week programme would be more expensive. We estimate that it would cost £4.9 million per 100,000 people compared to the 12-week programme. However, it would result in 1786 fewer incident cases of disease and 1282 additional quality-adjusted life years. We calculated that the 52-week programme cost £3,804 per QALY compared to the 12-week programme (and £2,498 per QALY compared to the brief intervention). This is well below the £20,000 per QALY benchmark, suggesting the 52-week programme is cost-effective.

FINDINGS IN A NUTSHELL

Referral to a group-based weight loss programme for 12 weeks is an effective treatment option and could be cost-saving for adults in the general population in the long term.

Extending the referral length from 12 weeks to 52 weeks would lead to greater weight loss and greater reductions in risk factors for diabetes and cardiovascular disease. While the 52-week programme is more expensive in the short term, in the longer term it would likely be cost-effective because of greater reductions in disease incidence.



WHAT'S NEXT FOR WRAP?

We can't thank you enough for taking part in the WRAP trial over the past two years. You have been an important part of one of the largest weight loss trials carried out in the UK. This research is incredibly important in helping us to understand which weight loss programmes work best and how they affect people's health. We hope you have enjoyed taking part.

Over the next few years, we will be carrying out more analyses of the data you provided. We'll be trying to find out more about what worked, for whom, and how we can make these programmes work better. We want to keep you updated with all our new findings and will send more newsletters like this when we have new findings.



This trial has already provided important information that can help the NHS decide how to help people with obesity. Keep in touch and help us find out more!



Year Follow Up

The National Institute of Health Research has recognised the importance of the WRAP trial and its potential to provide important information to the NHS. They

have given us funding to do a 5 year follow up study to look at the long term impact of these weight loss programmes on illnesses such as diabetes and cardiovascular disease. In the analyses we described earlier, we used statistics to calculate the long term effects on health and value for money, based on estimates about what would happen over time. We want to test whether those estimates were accurate. But to do that we will need your help!

Next year, we will start inviting WRAP participants to take part in a follow up study, 5 years after they joined the trial. It does not matter which intervention you were in or if you lost any weight. We would like everyone to take part. You don't have to follow a diet or take part in another weight loss programme. You don't even need to come to the research centre. You can take part by simply going to your GP surgery to have your weight and blood pressure measured and to give a blood sample. As always, you can choose whether you do this or not, and which measurements you have taken. We will send you more information about this soon. If you are interested, please make sure we have your current contact details.



MEDICAL NOTES REVIEW

If you decide not to take part in the 5 year follow up study, you could still help us with this research in other ways. One way that we can find out what happens to our participants in the longer term is to look at your medical records to see what your latest weight is, and to see if you have had any illnesses like diabetes, heart disease or cancer. At the start of the trial you agreed to let us look at your

medical notes after the trial had finished. We would like to review your notes on two occasions: at 5 years after you joined the trial and at 10 years after you joined the trial. To do this, we will look at the routine notes held by your GP. We may also request data from the Health and Social Care Information Centre or other central UK NHS bodies to give us information about your health status.

To take part in the notes review you don't need to follow a diet or come to the research centre. You just have to allow us to access your notes. In this pack is a leaflet telling you more about the notes review, why we are doing this, and how it will be done. If you have any questions about it, you can call us using the contact details below, and we will be happy to discuss this with you. If you decide you don't want us to look at your medical records, you can withdraw your consent using the enclosed form or just call us or email us and we will withdraw you.

KEEP IN TOUCH!

If you have moved house or GP practice, or changed your phone number or email address, get in touch and let us know. We will update our records and make sure you continue to hear about the study results. An easy way to do this is to fill in the form we sent with this newsletter and send that back to us.

And of course if you prefer not to receive these updates, you can let us know that too.

Remember you can call, email or write to us at any time.

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