



## Eight/12 challenge

We're always being told that diet and exercise is the key to keeping our weight under control, but does that have to mean spending endless hours slogging away in the gym? Well, we've been let in on a little secret and if it's true, it's an exercise revolution. It goes something like this: spend less time training and in the process you can lose more weight.

Sound too good to be true?

Professor Steve Boutcher from the University of New South Wales is the man with the exercise plan.

So what's this study all about? "We're trying to find out what's the least amount of exercise you can do to reduce the greatest amount of fat," says Professor Boutcher.

It's similar to doing a spin class on the gym bike — but you have to know the magic formula to make it work. One part is that you only have to get on your bike for 20 minutes at a time, three times a week, which is great for our busy lifestyles, right?

"It's the biggest reason why people say they don't exercise and with this sprinting exercise you do a lot less. It's about half the exercise -20 minutes versus 40 minutes for example, and it seems, at least initially, there's a lot more fat loss," says the professor.

Julia Thompson and Louise Tamayo both took part in Professor Boutcher's exercise trial. Julia was 65.5kg while Louise weighed 80kg at the start of the study — neither girl went on a diet. The point of the research was only to look at the effects of exercise on weight loss. So they ate what they'd normally eat.

"My diet was pretty bad back then, with lots of sweets, lots of junk food. So just eating the same things, doughnuts and sugar — it was awful," says Louise.

Both girls were part of one of the two larger groups doing the trial. Both groups got on their bikes three times a week.

The difference was in how long and how hard their cycling was:

- Julia's group did 40 minutes at a steady pace.
- Louise's group did half that 20 minutes, but they had to alternate between sprinting and slow pedaling.

So, who lost the most weight? Louise and her 20-minute group. After starting at 80kg her end weight was 72kg.





"I was so surprised. I lost eight kilos in 15 weeks, so I'm ecstatic, very ecstatic," Louise says.

Julia, in the 40-minute group, started off with a weight of 65.5kg but finished up a kilo heavier at 66.5. "My weight stayed pretty steady. I didn't lose any weight."

The 20-minute group also improved their aerobic fitness faster and reduced their insulin sensitivity which is great news for diabetics. But the big result was the sprinters in the 20-minute group averaged three times the weight loss of the steady cyclists, doing 40 minutes.

Triple the fat loss in half the time — that's pretty amazing. But why does interval exercise burn off more fat?

"It significantly elevates a hormone called catecholamine and these are important messengers to tell the cells to burn fat," says Professor Boutcher.

Catecholamine are produced in the adrenal gland — the hormones which circulate though the body. When you sprint, the catecholamine stimulate beta receptors in fat cells, the fat cells release free fatty acids to be used by other cells — this burns fat.

But it's not as easy as just jumping on the bike and sprinting away. You have to time the intervals precisely. To do that, you'll need to know the magic formula.

The secret is to sprint for eight seconds almost flat out and then slow pedal for 12 seconds. Build up to doing this for 20 minutes, three times a week and you'll go from slug to slim.

How did the professor come up with these numbers? "If you do it much longer, 20 seconds, it's very painful. Normal people won't stick to it. If you do it much shorter, two to three seconds, you don't seem to get the same benefits. So by trial and error and prior research we've established what seems optimal for most people at least on the bike — eight seconds sprint, 12 seconds recovery.

Professor Boutcher says spinning to music is one of the best methods of doing the eight/12 rule. But the rower and cross trainer are probably equally effective and so is skipping — walking won't get your heart rate up high enough, though.

So that's it, four little numbers to change your life. So, if you've got a few kilos to lose why not take the eight/12 challenge — you can try it at home or in the gym. Twenty minutes a day, three times a week — that's not too much to ask is it? But a warning, if you're really out of shape or over 30 and unfit, it might be too big a step to take straight away, so first seek the advice of your Naturopath or GP or exercise physiologist and build up slowly.

Good luck!

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