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Get fit to stay healthy?

The UK government wants people to lose weight to reduce their risk of severe covid-19, but slimming down is no simple task, reports Clare Wilson

HOW can countries become more resilient to the coronavirus? You may have heard about face masks, hand-washing and avoiding crowds. But as UK Prime Minister Boris Johnson was recovering from covid-19 in May, he announced another tactic: targeting the nation’s waistlines.

People who are overweight are certainly at a higher risk of developing severe covid-19, especially if they also have type 2 diabetes, which is linked to obesity. Around a third of UK adults are overweight, and roughly another third are obese. Johnson has blamed his own weight for how severely he was affected by coronavirus when he was admitted to hospital in April.

England’s deputy chief medical officer, Jenny Harries, also said this month that losing weight would reduce people’s chances of a severe case of covid-19 if there is a second wave in the country this winter and advised that people should get “as fit as possible”.

There is just one problem: we don’t actually know the best way for people to lose weight and keep it off. Many initiatives have been tried, but very few have been shown to work. “There’s no country in the world that has solved this,” says Michael Lean at the University of Glasgow, UK.

People in most countries have been getting gradually heavier over the past few decades, with the UK one of the heaviest countries in Europe. This seems to be exacerbating the severity of the covid-19 outbreak, researchers argued in a recent editorial in the medical journal BMJ.

The UK government hasn’t yet released specifics of how it plans to reverse this trend, but it is unlikely to be as simple as people getting fitter, as Harries implied.

While exercise seems to help prevent weight gain, studies have shown that it doesn’t cause people to lose weight, perhaps because it is hard to achieve the levels necessary to burn off a significant amount of fat. It may also make people hungrier. Physical activity seems to have a host of health benefits, including protecting against heart disease and boosting mental health, but weight loss isn’t one of them.

“People who are no longer young and have become heavy find it enormously difficult to exercise enough to have any meaningful effect on weight,” says Roy Taylor at Newcastle University in the UK.

Going on a diet may seem the obvious way to lose weight, but while losing weight this way is possible, if unpleasant, keeping it off is much harder. Most people who lose weight through dieting regain most if not all of it within a year or two and some end up heavier than when they started.

Figures are hard to come by, but one large and respected health-tracking survey in the US found that the number of overweight or obese adults who succeeded in losing 10 per cent of their weight and keeping it off for at least a year was just one in six.

Hard to shake

People who attend weight-loss clinics that offer intensive support have somewhat better outcomes, but results are still disheartening. For instance, Taylor ran a programme based in Tyneside, north-east England, and Scotland that won recognition for helping people with diabetes lose enough weight to put their condition into remission. The programme offers a low-calorie shake-based diet for three months followed by monthly appointments for support in weight maintenance.

Yet even here, just a third managed to keep their diabetes in remission for two years.

Disillusionment with mainstream dietary advice to cut out fat may be contributing to the growing popularity of controversial low-carb diets. Instead of avoiding fat and counting calories, these involve limiting starchy foods like bread and pasta.

Some low-carb weight-loss clinics have reported impressive short-term results, but as yet there is little data on how many people manage to keep up this type of diet and maintain their weight loss long term, perhaps because these diets haven’t been popular for very long. It is a troubling gap in our knowledge if the aim is to avoid deaths from covid-19, since low-carb diets seem particularly helpful to people with diabetes and pre-diabetes, who are at an increased risk of severe covid-19.
increased risk of covid-19, probably because starchy foods raise blood sugar.

Although it may seem extreme, the most effective way to lose weight is to undergo one of the various forms of weight-loss surgery, which shrink the stomach or redirect the gut. Such surgery makes it harder to overeat, and also means nutrients aren’t absorbed as well. Increasing access to weight-loss surgery is one of the options Johnson is reportedly considering in response to the coronavirus.

Randomised trials have shown that such surgery does help people lose significant weight and that type 2 diabetes often goes into remission. But it is a major operation that carries additional risks to the normal concerns about surgery. For example, one study estimates that one in 10 people who have it develop some kind of addiction, such as alcoholism—as if people are transferring a previous “addiction” to food to something else once they can no longer eat the same quantities.

There were long waiting lists for weight-loss surgery in the UK before the pandemic hit. During lockdown, all non-urgent operations were stopped. While services are now resuming, that backlog has increased. It is hard to see how the UK’s health service would be able to ramp up its provision of weight-loss surgery before this winter. “Is surgery for 30 per cent of the population really what we should be tilting at?” says Lean.

For Linia Patel, a diettian and spokesperson for the British Dietetic Association, the only solution is to make societal changes to put the obesity epidemic into reverse. In public health parlance, we are living in an “obesogenic” environment, which makes it hard for people to resist eating more and expending less energy. “There should be far more emphasis on educating people to eat better and creating an environment that encourages them to do so,” says Patel.

Yet it would take years for these sorts of changes to have any effect on the population’s weight. And even here, there are few strategies proven to be effective at reducing levels of obesity.

**Obesity mysteries**

There are many differences between how people live their lives today and how they did before obesity rates started climbing, and we don’t know which are the most important in causing obesity (see “Why are we getting heavier?”, below).

One option would be to run state-funded long-term randomised trials to answer the question of whether we should discourage people from eating fat or carbohydrates. Advocates of each at least agree we should be trying to steer people away from highly processed foods, like fast food, ready meals and snacks, which tend to be high in fat, sugar and salt. “The food industry has been riding all over us,” says Graham MacGregor at Queen Mary University of London, who co-authored the BMJ editorial.

The question is how to do that steering. Countless school-based programmes that aim to teach children about exercise and healthy eating have failed to reduce obesity. Public health doctors have long called for tougher measures, like restricting junk food advertising and the number of fast food restaurants allowed near schools.

There are also calls to change the way food is taxed, so that highly processed food becomes more expensive. The UK government has just done the opposite, however, temporarily slashing taxes for restaurants in the opposite, however, temporarily slashing taxes for restaurants in an effort to encourage consumer spending post-lockdown.

Ultimately, if Johnson’s recent brush with death has made him rethink the importance of tackling obesity, that is probably a good thing for the UK’s health that will bring benefits beyond the pandemic. But with many firms struggling as the country enters a deep recession, a cut in consumption to help people slim down may be hard to swallow.

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**Why are we getting heavier?**

In nearly every country in the world, average weight is on the increase. This trend will be hard to reverse unless we know which aspects of life are responsible, and there are many suspects:

- People are eating more. Average daily calorie intake has gone up in high-income countries, from around 3000 calories a day in the 1960s to 3400 in 2015, according to the World Health Organization.
- We may be eating the wrong sorts of food. For a long time, the chief villain was seen as too much fat in our diet. More recently, public health doctors have turned their attention to sugar.
  - Highly processed food is often high in fat, sugar and salt. There has certainly been a major shift from eating home-cooked meals to snacks and fast food in many countries. But there is very little evidence from randomised trials to show that eating less processed foods leads to weight loss, apart from one study, which only involved 20 people for two weeks.
  - People do less manual labour, walk less and spend more time sitting down in front of screens. Some believe this is the real explanation for rising obesity rates.