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Intermittent fasting: the next big weight loss fad

Should you go with the grilled chicken or the baked salmon? The arugula salad or the sweet potato fries? The veggie chili or the carrot-and-ginger soup? Or perhaps, if improving health is your goal, you should make a different choice: none of the above.

Intermittent fasting — alternating between periods of eating and fasting during the week — is on the cusp of becoming the latest weight loss fad, according to many in the health and fitness field. There have been several recent documentaries on the topic in North America and Europe. A book called *The Fast Diet*, already popular in the United Kingdom, just hit bookstore shelves in the United States.

Some advocates recommend fasting every day for up to 16 hours and consuming food only during a short “eating window.” Others suggest going without food once or twice a week for 24-hour periods — having dinner one night, for example, and skipping breakfast, lunch and snacks the next day, then eating a normal dinner (no gorging).

But many nutritionists, physicians and medical researchers are skeptical. Sure, obesity is a major problem and leads to a host of health problems, and cutting down on weekly calorie intakes would be a smart move for many people. Nobody disputes that.

But getting people to eat healthier is difficult enough, many of them note. Getting people to stop eating altogether for stretches of up to 24 hours? Yeah, good luck with that.

Yet according to Ontario fasting expert Brad Pilon, author of the popular book *Eat Stop Eat*, periodically going without food offers many advantages over traditional dieting techniques.

“The actual act of dieting is very difficult because you still have to eat every day. So every couple of hours you are making a decision about food. The thing I like about fasting is you do not have to do that,” says Pilon. “I like to use the analogy of an on–off switch instead of a dimmer.”

Almost all diets focus on the “what” rather than the “when,” suggests Pilon. Problem is, the “what” gets confusing. One diet guru suggests dropping wheat products, another says avoid fats. One says eat more fruits, another says many fruits are too high in sugar. And on and on it goes.

Even people who make healthier choices tend to eat too much. If they become less active as they age, that will still lead to weight gain, albeit more slowly than for buffet connoisseurs and fast-food aficionados. Despite the benefits of giving your digestive system the occasional vacation, says Pilon, health professionals are reluctant to suggest that patients put down their forks.

“Health care practitioners across the board are so afraid to recommend eating less because of the stigma involved in that recommendation, but we are more than happy to recommend that someone start going to the gym,” says Pilon. “If all I said was you need to get to the gym and start eating healthier, no one would have a problem with it. When the message is not only should you eat less, you could probably go without eating for 24 hours once or twice a week, suddenly it’s heresy.”

Of course, when it comes to weight loss, there are few absolutes, suggests Dr. Stephen Freedland, associate professor of urology and pathology at the Duke University Medical Center in Durham, North Carolina.

“There are a lot of different schools of thought on how to lose weight,” says Freedland, who has studied the effects of intermittent fasting on prostate cancer tumour growth in mice. “In talking to nutritionists, I’ve only found two things that everyone agrees on. One, we shouldn’t be eating trans fats. And the second thing is, we shouldn’t be eating simple, refined carbohydrates or simple sugars. Once you get beyond that, there is almost no consensus.”

Caloric restriction, however, has been shown in research to produce many health benefits, says Freedland. Reducing obesity alone could prevent or slow the progress of a number of diseases, including cancer. The goal is to reduce what he calls “global caloric intake.” If someone can fast two days a week and then eat normally for the other five days, that goal could be achieved. Yet data on fasting suggests that people who practise periodic intense caloric restriction tend to overeat later.

“If you put your foot off the gas one day a week but then, six days a week, you have it pounded to the metal, you are not necessarily doing yourself a whole lot of good,” says Freedland.

A more sensible approach, he suggests, might be to compensate for the occasional indulgence by eating slightly less during the remainder of the week. “You want to have cake on Friday night because it’s your birthday? Have the piece of cake. Just eat slightly less the other six days to compensate. That’s very reasonable,” he says.

“The one thing I tell patients all the time is that life is short,” adds Freedland. “Eating perfectly and exercising like crazy doesn’t mean you will live forever. So we need to make our time here on earth enjoyable. If that means you enjoy having a sundae, by all means, have a sundae. Just have it on Sunday. And not also on Monday and Tuesday and Wednesday and Thursday.”

Research on reducing overall calorie intake, mostly in animal models, has indicated it can increase lifespan by as much as 30%, according to Mark Mattson, a senior investigator for the National Institute on Aging, part of the US National Institutes of Health. In addition, he says, it can improve glucose regulation, reduce markers of inflammation and increase the production of ketones — which are released into the blood when the body is burning fat rather than glucose for energy. Ketones have been shown to preserve learning and memory functions and slow disease progression in the brain, says Mattson.

Intermittent fasting can also produce similar effects as intensive exercise, says Mattson, including increasing heart rate variability while reducing resting heart rate and blood pressure. “All of these three changes are exactly what you would see in trained athletes,” he adds. “We are starting to understand some of the underlying mechanisms whereby fasting may benefit animals and possibly humans. We are now moving to testing some of these things in humans.”

There are potential harms to fasting, too. If one already has a diet poor in vitamins and protein, eating less food could lead to vitamin deficiency and muscle loss. Of course, this can be offset by taking multivitamins and doing strength training. Fasting can also lead to malnourishment if taken to an extreme. The biggest problem, though, is that it

simply isn't practical for most people, says Richard Bloomer, chair of health sport sciences at the University of Memphis in Tennessee.

"For most people a pure fast, long-term, is not going to be a good thing, but modifying the diet and or cutting calories can be health-enhancing for most individuals. Most people don't need what they are getting, that's pretty clear," says Bloomer, who has studied a 21-day vegan diet called the Daniel Fast.

"I know, from working with many hundreds of people in this area, that most people aren't going to be able to do it," Bloomer says about fasting. "Wake up tomorrow and try not to eat until three in the afternoon. And then do that every day. Most people need to have a life, too. If you have kids and you wake up and want to have breakfast with them, are you going to say, 'Sorry guys, I'm not eating until three so I can lose 1% body fat.'"

Even Pilon acknowledges that fasting can be tricky to integrate into your life, and that it is best done in private. "Because of the social norms and conventions about eating, you have to take part. It's rude not to. You would be throwing the fact that they are eating and you are not right in their face. You need a diet that you can keep private. If you and I were to go out for dinner, I wouldn't not eat with you. That's rude," says Pilon.

"I've been at weddings where people have brought their own chicken breasts and broccoli," he adds. "People also skip work Christmas parties because they were dieting. You can't do those things without winning the ire of people." — Roger Collier, CMAJ

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