

# Exercise vs. counting calories as weight-loss strategy

Actually, both are important.

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By Judy Foreman

As a nation, we are obviously getting fatter and fatter. Not only are we ever more confused about how to lose weight, we're particularly fuzzy on the question of how big a role exercise plays and whether we just have to count calories.

So, here's the deal. Yes, you can count calories or weigh yourself every day. If your weight is up today compared with yesterday, you ate more calories than you burned. If it's less, you burned more than you ate -- provided you didn't drink gallons of liquid the day before, which could throw the scale off.

It comes down to simple arithmetic, and you've heard it before: Calories in, calories out. You will absolutely, inevitably, sadly, this-could-not-be-clearer gain weight if you eat more calories than you expend in basic metabolism -- breathing, digesting, sleeping, etc. -- plus whatever else you do, such as chasing the kids, walking, vacuuming or going to the gym.

But most of us can't, or won't, do the math, probably because it's so depressing.

We routinely overestimate the number of calories we spend in physical activity and underestimate the calories from food. For instance, when I swim hard for an hour, which I do regularly, I probably use up 400 to 600 calories. But when I eat a blueberry muffin, which I'm afraid I also do regularly, I take in nearly 400 calories. So I have to swim pretty fast for 40 minutes just to offset one lousy muffin. If my only goal were weight loss, it'd be easier to just not eat that muffin.

## The benefits

So if it takes an awful lot of exercise to make a dent in the calories in-out equation, is exercise pointless? No. It's essential for good health. Regular physical exercise reduces the risk of early death, coronary heart disease, stroke, high blood pressure, Type 2 diabetes, colon and breast cancer, and depression, according to the 2008 Physical Activity Guidelines for Americans (Visit [www.health.gov/pa](http://www.health.gov/pa) guidelines.)

Moreover, even if exercise doesn't help much in the battle to *lose* weight, it is essential to *maintain* weight loss, says Dr. Timothy Church, director of preventive medicine research at the Pennington Biomedical Research Center in Baton Rouge, La.

"This whole thing is not rocket science," he says. "You can take weight off through a whole variety of strategies. But people don't lose weight and keep it off unless they are physically active. There are tons and tons of studies on this."

Among them is a series of studies by researchers at the University of Pittsburgh who showed last year that it takes a considerable amount of exercise -- expending 2,000 calories, which requires four or more hours of exercise -- per week to maintain a 10% weight loss, even on a low-calorie diet.

If your goal is weight loss, as opposed to overall health, does it matter what you eat?

No. And yes, of course.

It's well-known that a diet high in fresh fruits and vegetables, with reasonable portion sizes of all foods, can be key to weight loss or healthy-weight maintenance.

But it still comes down to calories.

### **Calories count**

In February, a two-year study of more than 800 overweight adults showed that people can lose weight if they reduce calories, regardless of the percentages of fat, protein and carbohydrates in their diets. The study, by researchers from the Harvard School of Public Health, the Pennington Biomedical Research Center and the National Institutes of Health, was published in the *New England Journal of Medicine*.

Some foods are more "addictive" than others because they have a bigger effect on the brain chemicals that control the "reward" circuits in our brains. From a neurobiological point of view, sweets, fats and salty foods make us want to eat more of the same, as Dr. David S. Kessler, the former head of the U.S. Food and Drug Administration, makes clear in his book "The End of Overeating." Obviously, eating more leads to weight gain.

And what about the question of whether exercise increases or decreases appetite?

Exercise can suppress appetite, says Dr. George Blackburn, associate director of the Division of Nutrition at Harvard Medical School, because it triggers not only the chemical dopamine, which governs the brain's reward system, but also endorphins, those feel-good brain chemicals. These substances act on the hunger and satiety areas of the brains for as long as four hours afterward. "You don't need cigarettes or drugs or food, all those things in the pleasure areas of the brain, because exercise has already activated them," says Blackburn.

A review article in 2007 from researchers at Tufts University also concluded that there is a "spontaneous reduction in hunger associated with participation in exercise."

Psychologically, as opposed to biochemically, some experts theorize that exercise might lead people to believe they can reward themselves with treats afterward or that they may be tempted to be less active for the rest of the day. And some studies, says Evans, do suggest that if you exercise, say, for 40 minutes a day, you will "then compensate by decreasing how active you are at other times of the day, leaving total energy expenditure unchanged" or that you might reward yourself with food. But other studies say both of those theories are wrong.

### **Take your time**

What we should be focusing on is eating slowly, which does control intake. "It takes about 20 minutes for food to get digested and formulated into hormones for your brain to know what you did, to get that signal to the brain," says Blackburn. If you wolf your food, you'll finish your second helping before your brain has registered your first.

An important caveat is that even rigorous diet and exercise may not work for everyone. If you're seriously overweight or obese, the hormones that stimulate appetite can work against you when you diet severely. Bariatric surgery -- such as the "stomach stapling" operations -- may be considered.

Boiled down, my personal mantra is this: You have to do both -- diet to keep caloric intake under control and exercise for fitness (and fun).