

# The science is in: exercise won't help you lose much weight

We've been conditioned to think of exercise as a key ingredient — perhaps the most important ingredient — of any weight loss effort.

You know the drill: Join the gym on January 1 if you want to reach your New Year's weight loss goal.

But in truth, the evidence has been accumulating for years that exercise, while great for health, isn't actually all that important for weight loss.

To learn more about why, I read through more than 60 studies (including high-quality, systematic reviews of all the best-available research) on exercise and weight loss for a recent installment of [Show Me the Evidence](#). Here's a quick summary of what I learned.

## **Exercise accounts for a small portion of daily calorie burn**

One very underappreciated fact about exercise is that even when you work out, the extra calories you burn only account for a small part of your total energy expenditure.

There are three main components to energy expenditure, obesity researcher [Alexxai Kravitz](#) explained: 1) basal metabolic rate, or the energy used for basic functioning when the body is at rest; 2) the energy used to break down food; and 3) the energy used in physical activity.

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What's important to absorb is the fact that we have [very little control](#) over our basal metabolic rate, but it's actually our biggest energy hog. "It's generally accepted that for most people, the basal metabolic rate accounts for 60 to 80 percent of total energy expenditure," said Kravitz. Digesting food

accounts for about 10 percent.

That leaves only 10 to 30 percent for physical activity, of which exercise is only a subset. (Remember, physical activity includes all movement, including walking around, fidgeting, et cetera.)

The implication here is that while your food intake accounts for 100 percent of the energy that goes into your body, exercise only burns off less than 10 to 30 percent of it. That's a pretty big discrepancy, and definitely means that erasing all your dietary transgressions at the gym is a lot harder than the peddlers of gym memberships make it seem.

### **It's hard to create a significant calorie deficit through exercise**

Using the National Institutes of [Health's Body Weight Planner](#) — which gives a more realistic estimation for weight loss than the old [3,500 calorie rule](#) — mathematician and obesity researcher [Kevin Hall](#) created this model to show why adding a regular exercise program is unlikely to lead to significant weight loss.

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If a hypothetical 200-pound man added 60 minutes of medium-intensity running four days per week while keeping his calorie intake the same, and he did this for 30 days, he'd lose five pounds. "If this person decided to increase food intake or relax more to recover from the added exercise, then even less weight would be lost," Hall added. (More on these "compensatory mechanisms" later.)

So if one is overweight or obese, and presumably trying to lose dozens of pounds, it would take an incredible amount of time, will, and effort to make a real impact through exercise alone.

### **Exercise can undermine weight loss in other, subtle ways**

How much we eat is connected to how much we move. When we move more, we sometimes eat more too, or eat less when we're not exercising.

One 2009 study shows that people seemed to [increase their food intake](#) after exercise — either because they thought they burned off a lot of calories or because they were hungrier. Another [review of studies](#) from 2012 found that people generally overestimated how much energy exercise burned and ate more when they worked out.

"You work hard on that machine for an hour, and that work can be erased with five minutes of eating afterward," Hall says. A single slice of pizza, for example, could undo the benefit of an hour's workout. So could a cafe mocha or an ice cream cone.

There's also [evidence to suggest](#) that some people [simply slow down](#) after a workout, using less energy on their non-gym activities. They might decide to lie down for a rest, fidget less because they're tired, or take the elevator instead of the stairs.

These changes are usually called "[compensatory behaviors](#)" — and they simply refer to adjustments we may unconsciously make after working out to offset the calories burned.

## **We need to reframe how we think about exercise**

Obesity doctor Yoni Freedhoff has called for a [rebranding](#) of how we think of exercise. Exercise has staggering benefits — it just may not help much in the quest for weight loss:

By preventing cancers, improving blood pressure, cholesterol and sugar, bolstering sleep, attention, energy and mood, and doing so much more, exercise has indisputably proven itself to be the world's best drug — better than any pharmaceutical product any physician could ever prescribe. Sadly though, exercise is not a weight loss drug, and so long as we

continue to push exercise primarily (and sadly sometimes exclusively) in the name of preventing or treating adult or childhood obesity, we'll also continue to short-change the public about the genuinely incredible health benefits of exercise, and simultaneously misinform them about the realities of long term weight management.

The evidence is now clear: Exercise is excellent for health; it's just not that important for weight loss. So don't expect to lose a lot of weight by ramping up physical activity alone.

As a society, we also need to stop treating a lack of exercise and diet as equally responsible for the obesity problem in this country. Public-health obesity policies should prioritize fighting the over-consumption of low-quality food and improving the food environment.

### **Go deeper:**

- [\*\*Most of us misunderstand metabolism. Here are 9 facts to clear that up.\*\*](#)
- [\*\*Why you shouldn't exercise to lose weight, explained with 60+ studies\*\*](#)