One month into 2007 -- and therefore just in time for when we officially admit defeat on the New Year's resolution front -- science is offering one last chance. That heavy-lifting of lattes you do? Excellent strength training. Running for the elevator? Aerobic. Tidying up around the house? Good for the cardiovascular system.

Keep telling yourself this, and you may reap some of the benefits of exercise even if you have never used your gym membership.

Everyday activities do count toward the 30 minutes of daily exercise the surgeon general recommends. But according to a new study, the mere belief that you are getting a workout affects physiology much as the workout itself does. That is, exercise may affect health in part through the placebo effect: You believe you are doing your body good, and that belief leads to some of the well-documented benefits of exercise.

Psychology researcher Ellen Langer of Harvard University has long been intrigued by mind-over-body effects. She and student Alia Crum therefore invited 84 women, ages 18 to 55 years old, who worked as housekeepers at seven Boston hotels, to participate in a study. Those in four hotels were told that their regular work was good exercise and met the guidelines for a healthy, active lifestyle. After all, the women cleaned about 15 rooms a day, taking 20 to 30 minutes for each, so they did get a bit of a workout. Those in the other three hotels were told nothing.

Questionnaires established that the actual amount of work the women did, at work as well as off duty, didn't change over the four weeks of the study. Yet the so-called informed group told the scientists that their life was healthier. They had taken to heart the information about the fitness value of stripping beds and scrubbing bathrooms.

More surprising, the women in the informed group lost an average of two pounds, saw their systolic blood pressure (the first number) drop 10%, lost about 0.5% of their body fat, and reduced their body-mass index by .35 of a point. The other women showed no such changes.

True, these weren't "I dropped 20 pounds in a month!!" results. But considering that the women made no changes in how they lived or ate (the informed group didn't start dieting, for instance), it was nothing to sneeze at. The only change for the women who reaped these benefits was in their heads: They now believed that their cleaning work was a fitness routine.
"If you can put the mind in a healthy place, you can have dramatic physiological consequences," says Prof. Langer, whose study will appear in the February issue of Psychological Science.

The findings would seem more outlandish were it not for the fact that the placebo effect is showing up in other unexpected places. The power of belief has long been known to play a role in ailments that have a strong mental component. A 1998 analysis of 2,318 clinical trials of antidepressants, for instance, showed that half of the therapeutic responses came from the placebo effect: Believing that the pill would relieve depression caused it to do so. (This is why the placebo effect drives drug companies crazy: A drug has to be really good to come out better than the placebo.)

The power of the mind also shows up in conditions that involve the immune system. Exposing people to what they thought was poison ivy caused them to develop a real rash, a 1998 study found, and giving people what they thought was a caffeinated drink (but was decaf) raised their heart rates just as real caffeine does. The mere sight of a doctor can raise blood pressure.

More striking is when the placebo effect shows up in ailments that seem not to have much mind-over-body potential. Parkinson's disease, for instance, is marked by aberrant firing of neurons in a brain region called the subthalamic nucleus. There is no obvious way for thoughts and beliefs to affect the subthalamic nucleus.

But in a 2004 study, scientists reported that injecting a salt solution that patients thought was a real drug didn't only relieve the rigidity of Parkinson's for some. It did so by altering the firing patterns of the haywire neurons: They fired more normally after the sham drug, just as they did after the real one.

As for exercise, believing that you are working out may reduce stress, which would lower blood pressure. The weight loss is harder to explain, but it may reflect a rise in the women's baseline metabolic rate.

Exercise physiologists are skeptical, to say the least. Decades of studies show that working out lowers your levels of lipids, glucose, triglycerides and other bad things, and how that happens is well documented.

Even the best studies, though, do not examine whether the benefits of exercise reflect a placebo effect, with belief in its healthfulness bringing physiological improvements, says exercise physiologist Arlette Perry of the University of Miami. "But if something that accompanies exercise, whether it is better sleep or belief, brings those benefits," she asks, "who cares?"

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