

For healthy spring cleaning, think NEAT (and dust carefully), says heart specialist

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As traditions go, spring cleaning probably doesn't bring the thrills that come from watching a college basketball tournament, taking a break at the beach or spying the first robins outside your window.

But no matter how you approach it, cleaning might affect your health in ways you haven't considered. The American Heart Association asked experts about a few.

NEATness counts

NEAT sounds like a spring cleaning goal, but it's something that could help your heart.

It stands for Non-Exercise Activity Thermogenesis, a heavy-sounding term for light-intensity [physical activity](#), said Dr. Jacquelyn Kulinski, an associate professor at the Medical College of Wisconsin, where she directs the Preventive Cardiology Program.

Kulinski, who has studied the [health risks](#) that come with being sedentary, said NEAT can include household tasks. And it's important.

Federal physical activity guidelines advise adults to get at least 150 minutes a week of moderate-intensity aerobic activity, 75 minutes a week of vigorous aerobic activity, or an equivalent combination of the two. Few people hit those levels.

But physical inactivity actually has two components, she said. "The first is not getting enough exercise, and the second is too much sitting."

Many people spend most of their work time sitting. There's no official level for how much sedentary time is too much, but a [2016 review](#) of research published in *The Lancet* suggested it takes 60 to 75 minutes of moderate-intensity physical activity every day to offset the effect of eight hours sitting.

Federal guidelines say that for inactive people, adding a little light-intensity activity is a first step toward better health.

That's where NEAT comes in. Kulinski has studied the effects of using [a standing desk](#) and found that simply standing instead of sitting for just 90 minutes a day improved several health indicators in people who are overweight but otherwise healthy.

Applying that to spring cleaning, she said that standing up to fold laundry would be better for your health than sitting on the couch.

What chores burn more?

The exact amount of energy you burn while cleaning would vary based on factors such as age, gender and body composition, Kulinski said. And doing the dishes will not provide the same benefits as a brisk stroll.

But data from the [American College of Sports Medicine](#) leads to these estimates for how many calories a 170-pound adult would burn in 15 minutes:

- Sitting quietly while watching television: 26 calories per 15 minutes
- Loading a washing machine or folding laundry: 41
- Light-duty sweeping; dusting or polishing furniture: 47
- Making the bed; moderate-effort vacuuming; cooking; washing the dishes: 67
- Heavy-duty cleaning such as washing the windows or cleaning the garage: 71
- Doing a variety of household tasks at once vigorously: 87
- Painting a fence; polishing floors with an electric polishing machine: 91
- Laying sod; cleaning gutters: 101
- Moving furniture or carrying boxes: 118
- Jogging: 142

The real dirt on dust

Now that you're energized to tackle your home's [dust](#) and dirt, let's look at what they're made of.

Dr. Gabriel Filippelli, executive director of the Environmental Resilience Institute at Indiana University, is a geochemist. His lab has been collecting donations of vacuum cleaner dust and has analyzed about 800 of them from North America so far.

Some of what Filippelli and his colleagues found in their ongoing work is no surprise. If the home has a pet, "there's a ton of hair and dander." Filippelli said he can tell if a home recently had a birthday party for a young child, "because invariably, they'll have a lot of little microplastic sparkles."

Dust also contains irritants such as mold, pollen and dust mites, he said, which can pose problems for people with allergies. One older study, published in 2002 in *Environmental Health Perspectives*, identified skin cells, soil, starch, hair, cotton and plant materials as the [most common ingredients in dust](#).

Filippelli's interest in dust originated from studying lead in soil, so his lab focuses on that and other heavy metals, such as cadmium and arsenic, which are known risks for cardiovascular health.

Lead can accumulate in soil around a home because of industrial pollution or from the era when it was added to gasoline and paint. Arsenic and cadmium are components of air pollution, which itself has been linked to cardiovascular health issues.

Filippelli said dust also often contains chemicals known as PFAS, which are commonly used in consumer products but have been linked to health

issues such as high blood pressure in women as well as increased risk of obesity and high cholesterol.

How to bust the dust

Don't use a feather duster or anything similar that stirs up dust, Filippelli said.

He recommends using a slightly dampened cloth to clean horizontal surfaces and sees no need for fancy cleaning products. "Just a cloth and maybe a very weak vinegar solution," he said.

For rugs, he recommends a vacuum with a HEPA filter. A [case study](#) by his lab backed earlier findings that suggested vacuuming once a month lowered lead levels in homes compared with less-frequent vacuuming.

For hard floors, he prefers a sweeper that uses an electrostatic cloth. "I try not to use a broom, if I can avoid it, because that just stirs dust quite a bit. You can get big stuff, but it doesn't deal with the dust."

To clear the air, air purifiers can be "really effective," said Filippelli, who has advised the U.S. Embassy in Pakistan about air pollution. For portable units, look for models that can move enough air to fit your room. For homes with centralized systems, he suggested opting for heavier, pleated filters over open-weave fiberglass ones.

What about masks? "It's always a good idea to just put on a basic mask while dusting so you minimize how much of the dust you inhale," Kulinski said. Even if you don't have a history of allergies, some of what you stir up could potentially irritate your lungs.

Shoes on or off?

Filippelli estimated that about half of the dust inside your home is coming from outside. So, the first line of defense is to limit what you bring inside.

Think of what you step in outside: Shoes can carry all kinds of nasties, including pesticides and bacteria such as E. coli.

Filippelli has become well-known for telling people to take their shoes off before coming in. "That'll be on my gravestone," he said, laughing. "After 30 years of fundamental research and publications in all these journals, I will be known for yelling at you to leave your shoes at the door."

He's seen people take passionate stands on both sides of this issue, he said, but the science caused him to become a shoes-off person himself.

The concept also applies to pets. He pointed out that in some countries, it's common to use a towel to wipe a pet's paws after they've been out.

Cleaner thoughts

Kulinski suggested that when using cleaners, consider those that can be applied with a sponge instead of sprayed in the air.

Cleaning sprays can linger in the air and affect airways when inhaled, studies have shown.

"It's like when you go to the beach and someone is using spray sunscreen, and you watch where the spray is going," Filippelli said. "A teeny bit is going on the body, and most of its going in the air. It's the same with spraying an aerosolized cleaner."

He also said to avoid antibiotic soaps when cleaning up, because excess

use of them helps create drug-resistant bacteria. A surgeon about to do an operation needs an antimicrobial soap, he said, but for the rest of us, ordinary soap works great.

The Environmental Protection Agency maintains a list of products considered safer for human health and the environment as part of its [Safer Choice](#) program.

And on a cheerful note

Cleaning shouldn't leave you down in the dumps. To the contrary: A [2014 study](#) in the journal *Mindfulness* concluded that college students who approached even a few minutes of dishwashing "with intentionality and awareness" boosted positive feelings and lowered negative ones.

So, would we all be healthier if we took a cue from Snow White and just whistled while we worked? "I don't know off the top of my head if there's any published data on that," Kulinski said.

But she has actually done research on the health benefits of singing, which counts as a light-intensity activity. "So, I guess extrapolating data from singing, I would say it probably is beneficial."

Kulinski takes a more active approach when she's doing her own chores, though. "I turn on music, and I kind of dance," she said. "It's more enjoyable to move a little to the music."

Provided by American Heart Association

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