Are Antibacterial Products Overkill?

In a typical 10-hour shift, bartender Jeff Dame washes his hands twice an hour with soap and water.

In between, he banks on a quick-fix hand sanitizer gel to keep his hands clean. "I shake so many hands and am always handling money," says the Rockville, Md., mixologist. "Nothing beats good old soap and water, but there isn't always time."

Hand sanitizers are a type of *antibacterial*, designed to destroy disease-causing organisms. Antibacterial products are common in the home as soaps and household cleaners. And they've become more common in public places — supplied in gyms to wipe down equipment and in grocery stores to clean cart handles. But do antibacterials, with advertising claims such as "kills 99.99 percent of germs," really have any health benefits? Some antibacterials can be useful germ fighters, experts say. But some may also have a dangerous downside, actually helping some of the bad bacteria they mean to annihilate.

WEAPON #1

For preventing disease under normal circumstances, Mr. Dame is wise to rely on standard handwashing as his first line of defense. "The most important weapon against illness is washing your hands often with soap and water, including every time before you eat and every time you use the bathroom," says Thomas Fraser, MD, staff physician with Cleveland Clinic's Department of Infectious Diseases. But people don't wash their hands nearly long enough to get the full hygienic benefit. "The 15 to 30 seconds required seems like an eternity, and most people don't get to five," adds Hermann J. Stubbe, MD, a family and geriatric medicine physician at Cleveland Clinic in Florida.

When time is short or soap and water aren't available, hand-sanitizing gels and wipes — often referred to by their brand names such as Purell or Wetnaps — can be a useful alternative. "Hand sanitizers are effective," Dr. Stubbe says, "and they're sometimes more practical than soap and water because they work much faster, in just a few seconds."

LONG-TERM CONCERNS

When using soap and water, don't bother with soaps labeled "antibacterial," Dr. Stubbe says. "They're probably no better at destroying bacteria than standard soaps." Also, antibacterial soaps, including most liquid soaps and many bar soaps, are "residue-producing" antibacterial products that scientists warn could lead to a health problem in the future. Unlike hand sanitizers, which contain alcohols or other active ingredients that promptly disappear by evaporation or breakdown — no rinsing required — residue-producing antibacterials leave traces of their active components (commonly triclosan, triclocarban or benzalkonium chloride) on hands and surfaces.

The concern is that these residues may in time cause bacteria to change their genetic structure to survive and become resistant to available antibiotics, according to Stuart Levy, MD, Tufts University professor and President of the international nonprofit organization Alliance for the Prudent Use of Antibiotics. — Tamar Nordenberg

KEYS TO A HEALTHIER KITCHEN

Clean hands and a clean kitchen go, well, hand-in-hand. These simple tips will make for a healthier you.

- Good enough for hands, soap and water are also good enough for kitchen surfaces.
- Clean before, during and after preparing food.
- Use paper towels that can be thrown away or disposable sanitizing wipes; reusable cloths or sponges can carry and spread germs.
- For an extra level of protection, choose disinfectant cleaning products with alcohols, bleaches, peroxides or vinegar, which kill bacteria without the residue that might lead to new and dangerous strains of bacteria.

Source: Centers for Disease Control and Prevention (www.cdc.gov)

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