



PROTECT YOURSELF FROM ONLINE HEALTH

A perfect storm
of factors makes
it easy for fake
products and
unproven cures to
go viral. Use this
expert-backed
guide to spot
hoaxes and protect
your health.

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Scams

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Maybe a friend told you she lost 10 pounds with a new herbal product and no extra effort, or you saw something about it while perusing your social media feed. The website looks legit, there's even a scientific study mentioned, and the product has a money-back guarantee. You order some, because why not? What do you have to lose?

As it turns out, more than you may imagine. When it comes to magical herbal remedies, cure-all supplements, and other miracle treatments marketed online, “losing money is probably the biggest harm,” says Deborah Cohen, D.C.N., R.D.N., an associate professor in the department of clinical and preventive nutrition sciences at Rutgers School of Health Professions. “But some of these products can be harmful because they could have prescription drugs in them.” Others have been found to contain contaminants like salmonella, heavy metals such as lead, or active pharmaceutical ingredients—including anti-depressants and blood pressure and anti-seizure meds—that aren't disclosed. This is scary, and a combination of factors are working against us as consumers to let this happen.

THE NONEXISTENT SAFETY NET

➡ If a product is on the market, it must be safe, right? Actually, supplements aren't regulated like prescription drugs are. “It's almost like the Wild West. These companies can claim a lot of things that we don't know are true,” says Kimberly Gudzone, M.D., M.P.H., an associate professor of medicine and director of the Healthful Eating, Activity & Weight program at Johns Hopkins Medicine. “The FTC is responsible for cracking down on companies for exaggerated statements, but it's not a scientific body examining the health claims. So products may remain in the marketplace for a long time.” And though the Federal Trade Commission's goal is to protect consumers from unfair marketplace practices such as deceptive advertising, it's not possible for it to police every item being sold.

In many cases, there's little oversight of quality control in manufacturing. “You really don't know what you're getting or how much, if any, of the active ingredient,” says C. Michael White, Pharm.D., a distinguished professor and chair of pharmacy practice at the University of Connecticut. “The burden is on the FDA to prove safety, but it has neither the funding nor the personnel to investigate every product.” And manufacturers aren't required to inform the FDA of new products.

THE POWER OF THE INTERNET

➡ Of course, the first thing most of us do with any health concern is to search online, because it's so much quicker than



scheduling an appointment with the doctor. But as you can probably guess, the Internet has fueled a boom in fake remedies. “The number of online health scams has increased 20% to 50% in the last few years, though the impact of social media is difficult to quantify,” says Bernie Garrett, Ph.D., R.N., a professor at the University of British Columbia School of Nursing in Vancouver and author of *The New Alchemists: The Rise*

of Deceptive Healthcare. “It's become a global marketplace. There's a whole continuum of deception out there, driven by the sophisticated use of advertising and manipulation techniques through social media platforms such as Tik-Tok and Facebook.” And if you click on a single ad, the algorithm will send you plenty more.

THE CELEBRITY FACTOR

➡ “The reality is that influencers can make money off their referrals or product promotions and placements.

They may claim they're just marketing affiliates and that they're not responsible for the quality of the product or if it's even sent,” says Tim Mackey, Ph.D., a professor in the global health program at UC San Diego and CEO of S-3 Research. “For example, early in the pandemic, before there were enough testing kits available, we observed influencers promoting COVID-19 testing products. They might have rationalized

that they were trying to help or that they weren't aware that these products were not approved or couldn't be imported into the U.S. We saw a lot of nutritional boosters and fake testing kits being sold online."

Celebrities often tout weight loss remedies, skincare solutions, and anti-aging therapies without knowing what they're selling. "These people have great power and influence, and they're stating things they're not well qualified to talk about," says Garrett. "They're actors, not doctors." And some physicians also have learned that endorsements are lucrative—even those for products that go beyond their areas of expertise, such as when heart health supplements are recommended by a dermatologist.

COMMON HEALTH HOAXES

These are the scams that pop up the most—here's what you need to know to protect yourself.

SUPPLEMENTS

➡ Name a disease or condition, and there's probably a supplement marketed for it. An industry survey revealed that about 80% of Americans now use supplements, for everything from treating acne to preventing dementia. Some of the most popular ones (which may be configured as pills, gummies, powders, teas, or shakes) claim to prevent or treat depression, arthritis, and skin

QUICK-FIX "HACKS" TO AVOID

Social media has spawned plenty of risky health fads that have no scientific basis. Here are a few of the most common that you (and your kids!) should steer clear of:

■ DRY SCOOPING

This advice suggests that ingesting protein powders dry helps you absorb them more quickly before a workout. "There's absolutely no evidence that the protein in powders is more bioavailable when consumed dry," says Cohen. "This

can be dangerous, as it would be like dumping a half cup of talcum powder down your throat. The chance of choking or aspirating powder into the lungs is high."

■ SAFFRON APPETITE SUPPRESSANTS

These lollipops, gummies, and teas promise to suppress hunger with Satiereal, or saffron, a "clinically studied ingredient." However, the study cited included just 60 mildly overweight women, who lost a whopping two pounds after eight weeks of use. Even more interesting:

"The study was funded by the company that produced the supplements," says Cohen.

■ APPLE CIDER VINEGAR DETOXES

Many products, including beverages and gummies, claim that vinegar can help you slim down or improve your skin. "People think that vinegar, since it is acidic, can flush the fat off the body, but it doesn't, no matter which celebrity endorses this," says Cohen. "It also doesn't help with your complexion, nor does it detox you; that's what your kidneys and liver do."

disorders. Muscle-building, anti-aging, sex-enhancing, and energy-boosting products are other popular categories, says Garrett.

Besides not knowing what's in these condition-specific supplements, you also don't know whether they really do what they claim. For most there are no peer-reviewed studies or ones of very poor quality, and for those with conflicting evidence, marketers simply cherry-pick evidence that supports their claims. "When you choose one or two studies and ignore the rest, you can justify just about anything," says Garrett. Plus, studies that are cited often were small or not done with humans. "If the data they're talking about are from a petri dish or a rodent study,

that's something to be concerned about," says White. "As long as these companies put a disclaimer on a product saying it hasn't been evaluated by the FDA, they can say it promotes health for any organ they want, even if their facts are shaky."

One way you can evaluate products: Look for third-party lab testing. "Independent labs certify that there's no fungus, bacteria, or heavy metals present, and that it actually contains what the label says," says White. It's important to remember that they don't evaluate effectiveness of products. Still, if you're seeking assurance that a product isn't tainted, look for the seal of the U.S. Pharmacopeia (USP) or NSF International (NSF), or review test results at

consumerlab.com, which offers subscription access to its reports.

Another way to protect yourself is to ask your doctor before starting a supplement. "Similar to medications, supplements can have side effects and interact with other medications," says Dr. Gudzone. "Your doctor can help you determine whether it's safe for you to take one based on your own health history and medication regimen." Also, make sure to mention supplements when asked what medications you're currently taking: Sometimes supplements are the cause of unexplained symptoms for which you're seeing your doctor. It's also reasonable to ask another trusted health care professional,



such as your cardiologist or allergist, to evaluate the science of a product if you'd like a second opinion.

WEIGHT-LOSS PRODUCTS

Weight loss is a perpetual money-maker for fraudulent health products. "Scams are pervasive across anything related to weight loss," Dr. Gudzone says. "Anything with extreme claims is questionable. They advertise rapid

weight loss that occurs in a short period of time, and you keep it off forever, or you take a pill and magically lose 50 to 100 pounds. But that's not reflective of anyone's experience, and these are unsubstantiated claims with no scientific studies backing them." Also, some weight-loss pills laced with a recalled prescription drug are no longer available in the U.S. because the drug posed a risk of heart attack and stroke.

The truth is, there's no magic solution to weight loss. "It's not a simple problem, but it's marketed that way by these companies. What we see over and over in clinical trials and in practice is that you have to choose something you can sustain long-term," says Dr. Gudzone. If you're struggling, ask your doctor for a referral to a registered dietitian or a certified obesity medicine physician who can help you achieve your goals in a healthy way.

UNPROVEN TREATMENTS

Many companies peddle bogus treatments or cures for conditions and serious

illnesses such as cancer, hepatitis, flu, and COVID-19. Some products focus on conditions for which we don't have good control even with prescription medications, such as acne. While many scams contain an element of truth ("Vitamin D is good for you!"), it's twisted ("Vitamin D can cure cancer!").

"These scams are especially dangerous for people with cancer who seek care at fake clinics, which deplete their funds and give false hope and take them away from conventional treatments that may help," says Garrett. Sham clinics, often advertised online, may even be run by licensed physicians or alternative health practitioners. But there are signs that organizations are dubious, says Garrett. First, they often state that they've made breakthroughs with unique therapies that conventional medicine hasn't yet discovered. They also use testimonials from patients instead of clinical research to support their claims.

Interestingly, these deceptions are not perpetuated just because we're gullible: Some people are willing to take a chance because their access to health care is limited. "Many people have high-deductible insurance plans, where

their insurance doesn't kick in until they spend \$2,500 or \$5,000," says White. "They're insured but can't afford care, so they're willing to spend \$25 instead of going to the doctor and paying for a visit plus lab work." Other people may not have a prescription plan, so they're willing to purchase an online product that's advertised to help.

There's little recourse if you've been burned by any of these swindles. Even if the FDA warns a scammer to desist, the company may just change the website, says Mackey. The smartest approach is to arm yourself with knowledge, ask a trusted health care provider if a product is legitimate, and examine "too good to be true" health claims with a great deal of skepticism. That way, you'll protect both your finances and your health.

SIGNS IT'S A SCAM

Watch for these red flags and look deeper if you see them:

- ▶ A product "in short supply" or "not available elsewhere"
- ▶ Detox promises
- ▶ Money-back guarantee
- ▶ Before-and-after photographs
- ▶ Free samples or gifts
- ▶ Only animal studies support the claims, or techno-babble says mechanisms can't be explained well
- ▶ Fast results or miracle cures
- ▶ Celebrity endorsements or testimonials from "real people"
- ▶ "Proprietary" blends





PROTECT YOUR HEALTH IDENTITY

■ “Medical theft occurs when an individual gets medical goods or services in your name,” says Eva Velasquez, president and CEO of the Identity Theft Resource Center (ITRC). “If they have enough information about you, they can use your medical benefits to get a doctor’s appointment, prescription medication, durable medical equipment, hospitalization, or dental work.”

You often don’t know your information has been stolen until you receive an Explanation of Benefits for an appointment you never had, an unexpected bill from a doctor, or a notice that you’ve met your benefits threshold, says Velasquez. Other signs include a medical provider sending a reminder for an appointment you

didn’t schedule or saying you’ve already had a specific service, such as a colonoscopy, that you haven’t had. More subtle indicators are that you receive mail about a condition you don’t have, or that you try to fill a prescription and records say you’re taking another drug that could interact (though you’ve never taken it).

Unfortunately, when a company experiences a data breach that exposes your data or you accidentally click on a phishing link, your information is out there. But here’s what you can do to prevent it from happening:

► When using a medical app or portal, **create a password with at least 12 characters** that you don’t use on other websites. If available, activate two-step verification to log in,

and sign up to receive alerts when info passes through the portal, says Velasquez.

- **Make sure your Explanation of Benefits and bills refer to your care.**
- **Don’t respond to unsolicited emails, texts, or calls asking for personal info;** contact your provider directly instead.
- **If you receive confusing information from medical providers, follow up.**
- **Get help immediately if your medical identity has been hijacked.** “There’s no shame if you’re a victim, even if you accidentally clicked on a link that stole your information,” says Velasquez. The ITRC offers free assistance regarding steps to take, such as filing a police report and contacting your insurance company, while the FTC offers self-service resources.