In February’s Topic of the Month, **Health Halos and Horns**, we explored how we can come to believe that something is either good or bad for us — even if we have little or no evidence to back up this opinion. This month we’ll look in more detail at how health halos are generated and how you can protect yourself from being blinded by their sparkle!

Imagine for a moment that you’ve come from a visit with your primary care provider where you found out that your LDL cholesterol is high. Your provider suggests some dietary and lifestyle changes and prescribes a medication called statins.

**How do you feel about all this?**

If you’re like a lot of people, you might feel a mix of things — worried about what this means for your future well-being, irritated about the changes you need to make, and confused about what statins are and how they work.

**What would you do next?**

Again, if you’re like many people, you’ll hit the internet. This is an logical response! You probably do need to learn more about how your body works and how the prescribed interventions can help.

While diving into the internet to find out more is understandable, it’s also potentially risky. How can you tell the difference between high-quality educational resources and impressive-looking sales pitches?

It can be difficult. Putting the term “high LDL cholesterol treatment” into the Google search bar yields over 32,000,000 results. Some of the links that appear will provide you with information from reputable sites, some are links to sources of misinformation, and some are actually ads designed to look like regular links. Companies have paid lots of money to get links to their websites in front of viewers that are using specific search terms. Look closely - the only visible difference is the bolded word “Ad” that appears at the far left of the first line.

**Notice anything new now?** You’re not imagining it. Since you’ve searched for cholesterol information, you’ll probably start seeing similar health-related ads everywhere, including your social media accounts. “Ad tracking” or “surveillance advertising” allows organizations to gather data about your behavior and interests. That way they can show you news, recommendations, and ads that are individually chosen for you. By showing you things that you’re interested in, they can keep you online longer - that way you’ll see more advertisements. Part of the problem is that not all ads look like ads. Some of them will appear to be news, education or opinion pieces, or personal essays, but they all have something in common: health halos around what they want you to buy.

**Buyer Beware!**

As Americans, we are fortunate in so many ways. For instance, we’re able to walk into a grocery store, choose what we want to eat, and feel safe doing so. However, we can’t let this confidence over-generalize to everything that we can put on, or in, our bodies. There are “health” products available in grocery stores, specialty shops, convenience stores, and online that are contaminated, are not what they say they are or don’t do what they claim to do. So, put on your “halo filtering shades” and:

1. Learn to **spot misinformation** and the health halos (or health horns) that they can create.
2. Stay up-to-date with the latest recalls, market withdrawals, and safety alerts, by visiting: [https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts](https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts)
3. Remember that **supplements** are not reviewed for safety or effectiveness. If you buy them, notice where they were made: in the US or in a country with weaker regulations? Always look for the USP or NSF seal to make sure they’re 3rd-party verified.
4. Tell your doctor about any supplements that you take. Trust the person that’s been trained to care for you instead of the advertisements that have been targeted at you.
Avoiding health halos and making well-informed purchases is the first part of being a smart shopper. The second part is knowing how to safely take medications that we get. At one point or another, most people have taken over-the-counter (OTC) medicines to treat common health problems such as pain, allergies, colds, flu, or nausea. While they can be helpful for minor issues, they can also:

- Have side effects
- Have drug-drug interactions
- Have food-drug interactions
- Cause allergic reactions

### Side effects
Side effects are the impacts that a medicine has on your body that don’t help your symptoms. Some side effects are unwelcome, but some side effects can actually be helpful, such as antihistamines that cause sleepiness. The can help you to both breathe better and to rest at night.

### Drug—Drug Interactions
Our bodies all process different drugs in different ways. If multiple medicines are taken at the same time, their combined effects can sometimes be problematic.

### Drug—Food Interactions
Some foods or beverages can change the way that our bodies process medicines. That’s why some drugs need to be taken on an empty stomach, and why other foods, such as grapefruit, need to be avoided altogether while taking certain medications.

### Allergic Reactions
It’s rare, but some people are allergic to certain medicines. Allergic reactions are different from side effects. If you’ve ever had an allergic reaction (itching, hives, difficulty breathing) when taking a medicine, avoid other drugs that have the same ingredients. Seek medical help if you think you’re having an allergic reaction.

### Over-The-Counter Caution
Here are some tips to help you to use OTC medications in the safest, most effective ways:

- If you take prescription medications or dietary supplements, talk to your doctor or pharmacist before taking OTC medications. This will help avoid drug—drug interactions.
- Take the medications exactly as instructed. Don’t increase the dose, take it more often, or take it for a different number of days than instructed.
- Use the correct measuring device when taking liquid medicine. This ensures proper dosing. For instance, the spoons in your silverware drawer probably don’t measure accurately. Using them, instead of the measuring device that comes with the medication, could cause under or over-dosing.
- Don’t dissolve pills or capsules into food or liquid, unless your doctor or pharmacist says it’s okay. Doing this could keep the medicine from working correctly.
- Check the drug facts labels and avoid taking multiple OTC medications that have the same active ingredients. This prevents you from taking too much of the same drug.
- If you don’t understand something about a medicine, ask your doctor or pharmacist. They’re here to help!

### Keep In Mind
If you are generally healthy and use OTC medications only occasionally and correctly, there’s a low probability that you’ll experience adverse effects. However, some people are at greater risk: young children, people with ongoing health conditions, older adults, and people that take multiple medications.

There are two reasons that older people are more susceptible to adverse effects: their bodies process drugs differently than younger peoples’ bodies do, and they are more likely to be taking more than one kind of medication. This means they must be especially careful about all drugs, OTC meds, and supplements that they take.

At least once a year, older users should go over everything they take with their primary care provider or pharmacist. This process can alert patients and care providers to any possible drug—drug interactions that could result from their unique combination of medications.