



# Getting the Goods on Science and Health

## – tip sheet

Two of the most important kinds of information we look for online are about health and science. These can have a big effect on decisions we make about our own lives and our opinions on controversial issues. Because most of us aren't experts on these topics, we rely on people and organizations who are experts for good information. But how do we know who we can count on?

Here are three tips to help you find good information about health and science topics.

### 1. Check credentials

If the source is a person, start by checking that they really exist and that they are a genuine expert on that topic. Both doctors and scientists are usually specialists, so make sure that the source has credentials in the right field. A surgeon won't necessarily be an expert in physics, for instance, and vice versa.

Don't take a site's "About Us" page at face value, since that's only going to have what a website's creator wants you to know. Instead, start by opening a new tab and finding out everything you can about the person or organization. A simple search for their name or web address can show you where their funding comes from and if there's any controversy connected to them. You can also find out if other people or groups that are known experts in the field endorse them or link to them.

If what you've learned about the organization isn't enough to make you trust them as an authority, see if you can find out who wrote the specific article you're looking at. If so, do the same research on them to see if they're an authority in the right field.

The [Health on the Net Foundation](#) has a code of ethics for online health information providers, and websites that participate and meet their standards display a HonCode certification. (Not all reliable sources participate, though, which means that a site without the certification is not necessarily unreliable.)



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## 2. Look for purpose and bias

If the source is an organization, do a bit of research to find out what you can about their purpose and funding. Are they trying to give you unbiased information, or trying to promote a particular theory or point of view? Watch for pseudo-scientific buzzwords like “quantum” or “detoxification.”

The biggest source of bias in science and medicine sources is when sites that claim to be informational are also selling products, such as pills, supplements or diet plans. Don't trust any site that will make money out of you believing them.

You can also look at the source's network. Are they connected mostly to:

- People and groups who all have similar opinions? (A legitimate source won't necessarily link to people who have the opposite opinion, but they will provide links to neutral sources like government agencies or legitimate news sources. See our tip sheet [News You Can Use](#) for steps you can take to tell if a news source is legitimate.)
- Advertisers?
- Other articles on the same site?

If the answer to any of these is “Yes,” be cautious!

Sometimes there really is only one side of a story in health and medicine, so you should also look for signs like using highly emotional language or images, or relying on a very small number of sources.

In particular, don't put too much trust in news stories that are based on a single source. New studies can make great news, but a lot of them turn out to be misleading.

## 3. Go beyond the top results

Don't assume that where something appears in search results tells you anything about its reliability. Each search engine and social network has its own way of deciding which results to show you and in what order, and placement in search results isn't necessarily a sign of reliability. (For example, a search for “should I vaccinate my children” produced four anti-vaccination sites among the top results on the day this tip sheet was written.)



Don't click on search results too quickly: Look over at least the first page of results and read the snippets under each one before clicking on any of them, and open them in a new tab so you can go back to your original search easily. If you're not getting good results, try putting phrases in quotation marks so that you only get results where those words appear together in that order. You can also search within a website by adding the word "site:" and its Web address, as in "site:www.mediasmarts.ca" or leave out results from a website by adding the minus sign and its Web address (as in "-www.mediasmarts.ca"). This can be useful when advocacy sites try to flood the Internet with articles on a particular topic.

Also, keep in mind that search results will usually mix different types of content together: news, research, advertising, entertainment, opinion and so on. Each of these might be valuable sources of information, but knowing their purpose is essential to knowing how to use and interpret them.

Instead of starting with a web search, it's often more useful to go to a source that you know is reliable and search there. For example, [MedLine Plus](#) (a site run by the U.S. National Library of Medicine), the [Canadian Paediatric Society's Caring for Kids](#) website, and the [Health Canada](#) website all have reliable general health information. To search them, either use their own search tools or search within the sites from a regular search engine by adding "site:" and then the site's Web address; for example, to search for information on vaccines inside the Canadian Paediatric Society site you would search "vaccines site:www.caringforkids.cps.ca".

The Health on the Net Foundation also offers [HONsearch](#), a dedicated search engine that only searches sites it has certified, while [WorldWideScience](#) is an international collaboration that searches scientific sites and databases from around the world.