Is the Internet a reliable source of medication information?

The Internet is a remarkable source of information. Through many different search engines, you can get answers to almost any question. While the Internet makes accessing information easy, one problem is that there are no rules or regulations controlling who places information on the Internet or, more importantly, ensuring the accuracy of that information. Thus, the available information can be well balanced, up-to-date and easy to understand, but also misleading and inaccurate. The challenge is not to find information, but rather to find information that is helpful to you.

The Internet has improved access to information about medical conditions. If the diagnosis is not established, the usefulness of this information is less certain. Searches based on symptoms can be difficult to interpret simply because many diseases can cause the same symptom(s). Before investing a lot of time in Internet research, make sure your physician has diagnosed the cause of your symptom(s). With the diagnosis established, you can, in most cases, find a very large amount of information -- typically more than you care to get. Your challenge will be to restrict your searches and separate what is factual and accurate from slanted promotional information.

What Internet information can be trusted?
Surveys conducted over the past decade have been mixed regarding the quality of medical information on the Internet. A study published in the journal *Pediatrics* in 2000 assessed the quality of information present to manage coughing in children by parents at home. The study concluded that “parents navigating the Internet for information on the home management of cough in children will no doubt find incorrect advice among the search results.” Arthritis information on the Internet found using popular search engines such as Yahoo! and Google varied widely. This study found that sites with Universal Resource Locators (URLs) having suffixes of .gov and .edu were ranked higher than other types of sites.

Recent systematic reviews of health information on the Internet confirmed a marked variation of quality. The immediate problem for someone seeking information is sorting through the enormous number of Web sites. Only a small proportion of the sites are “high quality.” The limitations include readability (requires advanced reading level), sponsorship (commercially
oriented), and timeliness (how up to date the information is). There are strong recommendations to regulate Web sites through the establishment of an accreditation system.

On its home page, the FDA gives consumers advice on how to evaluate health information appearing on the Internet (www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/BuyingMedicinesOvertheInternet/ucm202863.htm). Listed below are the 11 questions you should ask:

1. Who runs the Web site?
2. What is the purpose of the Web site?
3. What is the original source of information on the Web site?
4. How is the information on the Web site documented?
5. How is information reviewed before it is posted on the Web site?
6. How current is the information on the Web site?
7. How does the Web site choose links to other sites?
8. What information about its visitors does the Web site collect, and why?
9. How does the Web site manage interactions with visitors?
10. Can the accuracy of information received in an e-mail be verified?
11. Is the information discussed in chat rooms accurate?

Where do I find information on specific medications?
The most reliable information can be obtained from independent Web sites (see Chapter 3). User-relevant information can be found on Web sites run by patient organizations, though you should be aware that some of these are sponsored by pharmaceutical companies and, thus, may be promotional. Many major pharmacies have Internet sites that offer consumer drug information, though this information is unregulated and may also be promotional. Finally, the pharmaceutical companies have their own Web sites which present information on their products from a company perspective. This information may not be totally balanced.

Key messages

- If you know your diagnosis, the Internet may be a good source of information on your condition and its treatment.
- Anyone can place information on the Internet, which means that quality can vary widely.
- The FDA has issued advice on how to critically review Internet information on medications.