

Medical Information on the Internet

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**QUALITY OF
INFORMATION
ON THE
INTERNET**

Medical information on the internet, despite its appearance, requires heightened scrutiny.

Professional graphics, official sounding organizational names, and advanced web technology can create a look and feel of authority.

Although no studies have concluded that medical misinformation from the Internet has led to actual injury or death, it seems wise to exercise great care when searching and evaluating sources of medical information.

- **Outdated information**

There are numerous out-of-date sites on the Internet. Information providers lose interest, funding, or are unable to maintain pages for various reasons. Always check the date of creation, dates of webpage updates, currency of citations, and other publication data on the webpage.

- **Non-US institutions**

- Find the source of information that appears in English. Recommendations for Americans can vary from recommendations from overseas.

- **Unproven remedies**

- A report by the Federal Trade Commission, as early as 1998, identified over 400 sites promoting unproven treatments and remedies for cancer, AIDS, It is easy to assume that sites of this type have increased.

- **Dubious research**

- Numerous medical information sites refer to dubious research performed overseas at relatively unknown institutions or contain no references at all.

- **Biased authority**

- Websites funded by corporations of almost any kind will have commercial bias. Websites of this kind may be a good source of information about a certain product, but they generally lack objectivity.



JAMA GUIDELINES

In response to the proliferation of misinformation on the Internet, the Journal of the American Medical Association compiled the following guidelines. Although published in 1997, they remain a good set of criteria for website evaluation.

- **Name, affiliation, and credentials of the author**
 - Look for articles that clearly state the author's academic and professional affiliations. This information may not be as obviously displayed in a web-based article as in a print article.
- **Reference to health claims**
 - Check that all health claims contain a reference to a legitimate, documented study at an institution that is familiar to you.
- **Conflict of interest**
 - Articles published in print sources contain possible conflict of interest statements. Expect the same disclosure from web-based medical information.
- **Date of most recent update**
 - Again, check the date of creation of the article. Always check that updates have been done recently on the site.

SEARCH STRATEGY

I use the following template to find a well-rounded variety of sources on a particular health topic.

- **“Gateway” sites**

- Start here. Gateway sites provide a general index of health information, sometimes at a professional level, sometimes at a consumer level. Resist the urge to start your search at a search engine; take advantage of these excellently organized sites and browse through their content first.

- **Federal and state government sites**

- Research institutions at the federal and state level perform a variety of research on health conditions and diseases. Their websites... Identify listings of these sites through the Gateway sites listed above. The NLM MEDLINEplus maintains a great listing of these organizations. Their links are also updated regularly.

- **Associations Sites**

- Medical associations are organized independently of federal and state governments. The American Lung Association, the American Heart Association are well-known and maintain excellent sites; less well-known associations can maintain the same level. Again, listings of these organizations can be found in the Gateway sites, especially NLM's MEDLINEplus.

- **Online publications**

- Publications may be available in full text specifically for your health concern. Newsletters published online can offer the most current information.

- **Print resources**

- Check the bibliography of print resources. Most, if not all, currently published books on medical information contain a listing of reputable web sources. These sites are often carefully chosen by the author. Print resources take a great deal of time to reach the market; their content may become slightly outdated. These sites are often carefully chosen by the author.

- **Blind searches in Google or Yahoo.**

- Perform blind search in Google or Yahoo as a last resort. These search engines canvass millions and millions of web pages, but do not evaluate the quality of resources, making them less appropriate for searching for medical information compared to more mundane topics. Start with

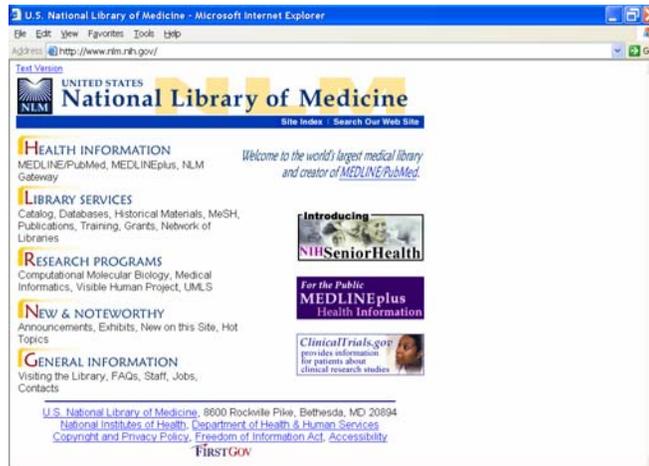


	definitive sources before resorting to blind internet searches.
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GATEWAY SITES

Some sites are just really good places to start. I chose these general sites as good “starting points” because of their clarity, currency, comprehensiveness, and friendliness to the general reader.

- **National Library of Medicine (NLM)**



- <http://www.nlm.nih.gov/>
- The “Library of Congress” of medical information. It is difficult to summarize the range of content in this site; despite the size, it is beautifully organized. General consumers may want to skip to NLM’s MEDLINEplus, below, for quicker and easier access.

- **NLM’s MEDLINEplus**



- <http://www.nlm.nih.gov/medlineplus/>
- Best gateway site for general medical information. Click on “Health Topics” for a comprehensive directory of specific health topics. Drug Information, links to excellent and free online medical dictionaries, links

to directories of medical providers, and a guide to medical-related databases, online publications, organizations, and libraries.

- **MedLine (PubMed)**

- **[illustration in Appendix 1]**

- **<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>**

- MedLine is the most comprehensive database of citations of medical-related resources in the world. The database can be searched for free by the general public, but tracking down the journal items from tens of thousands of medical journals that this databases indexes can be difficult. A small number of articles are available for free in full text. See Appendix 1 for a sample search that I performed on “peanut allergies.”

- **New York Public Library Choices in Health Information**



- **<http://www.nypl.org/branch/choices/>**

- Good listing of authoritative sources. Click on “Events” for a listing of local health classes at NYPL branches. Most are listed as free.



<p>Misc. RESOURCES</p>	<ul style="list-style-type: none">• Merck Manual http://www.merck.com/pubs/mmanual/- The updated 17th edition of this reference work is available free on the web. Inteded for use by medical professionals but the text is not beyond the reach of the general reader.
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**NEW YORK
SOCIETY
LIBRARY:
PRINT
RESOURCES**

The Library is updating its collection of both general science and popular medicine. Acquisition and cataloging takes priority over weeding out-of-date materials from the Library; new and old materials are shelved together. Check the date of print sources carefully before using these.

Books on specific medical topics are located on Stack 11 in the call number range from 600 to 618.97.

Popular medicine texts published since 1998 almost always include an extensive biography of web resources.

USEFUL ADDRESSES

Useful addresses

Allergy and Asthma Products
Tel: (800) 221-6483

American College of Allergies, Asthma, and Immunology (ACAAI)
Online: www.allergy.mcg.edu
85 West Algonquin Road, Suite 550
Arlington Heights, IL 60005
Tel: (800) 842-7777
An organization of allergists, immunologists, and related health-care professionals dedicated to quality patient care through research, advocacy, and professional and public education.

Asthma and Allergy Foundation of America
1233 Twentieth Street, NW, Suite 402
Washington, DC 20036
Tel (202) 466-7643
Online: www.aafa.com
A not-for-profit organization dedicated to finding a cure for and controlling asthma and allergic diseases.

Food Allergy Network (FAN)
Online: www.foodallergy.org
A not-for-profit organization designed to increase public awareness about food allergy, provide education, and advance research.

American Academy of Allergy, Asthma, and Immunology (AAAAI)
Online: www.aaaai.org
Patient and Public Resource Center
Tel: (800) 822-2762

The Human Ecology Action League (HEAL)
PO Box 29629
Atlanta, GA 30359-1120
Tel: (404) 248-1898
For information on multiple chemical sensitivities.

Medic-Alert Foundation
Online: www.medicalert.org
2323 Colorado Avenue
Turlock, CA 95382
Tel: (800) 825-3785
For medical SOS necklaces & bracelets.

National Institute of Allergy and Infectious Disease (NIAID)
Online: www.niaid.nih.gov
31 Center Drive MSC 2520
Bethesda, MD 20892-2520
A section of the National Institutes of Health that is dedicated to research on asthma and allergies.

Allergy Internet Resources (AIR)
Online:
www.immune.com/allergy/index.html

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From *Common Allergies*, New York: DK, 2000.

You may not find a current print medical resources in the Library on the specific medical topic of your interest. Our collection, however, is driven by patron requests. Make sure to fill out a *Request for Acquisition* slip at the front desk for resources that may interest you.

Two books, specially on medical information on the Internet, are available at the Library. They do not circulate.



Davis, James B., ed. *Health & medicine on the Internet: a comprehensive guide to medical information on the World Wide Web*, 3rd ed. Los Angeles, Calif.: PMIC, 2001. 610.58 H (Stack 11)

Smith, Ian K. *Dr. Ian's guide to medical websites*. New York: AtRandom.com, 2001. Ref. 610.58 S (Reference Room)



**ONLINE
JOURNALS**

- **BMJ (British Medical Journal)**

<http://bmj.com>

- Articles available in full-text. Registration not required.
<http://content.nejm.org/>

- **JAMA (Journal of the American Medical Ass.)**

<http://jama.ama-assn.org/>

- This popular journal is not available in full text for free. The website does offer, however, a summary of articles, some in full text.

- **New England Journal of Medicine**

<http://content.nejm.org>

- Another popular journal is not available in full text for free. It does include extensive abstracts to recent articles.



**FINAL
FRIENDLY TIPS**

- **PDF documents**

- Make sure your browser can read .pdf files. You should have Adobe Acrobat automatically “bundled” into your browser. If you can’t open files of this type, you may have an older version of your web browser on your computer. It’s time to upgrade to a newer version.

- **Paid sites**

- Some sites may ask for a subscription fee for access to medical information. Before spending the money, check with someone to verify the worthiness of the site. Reputable information services will offer a trial subscription for evaluation purposes.

- **Talk to NYSL Systems staff**

- If you find a digital resource that interests you, contact the NYSL Systems staff. We may be able to subscribe to the resource if there is sufficient interest at the Library.



BIBLIOGRAPHY

These texts were used in the preparation of this preparation. They appear above in the recommended print resources.

Davis, James B., ed. *Health & medicine on the Internet: a comprehensive guide to medical information on the World Wide Web*, 3rd ed. Los Angeles, Calif.: PMIC, 2001. 610.58 H (Stack 11)

Smith, Ian K. *Dr. Ian's guide to medical websites*. New York: AtRandom.com, 2001. Ref. 610.58 S (Reference Room)