Using Internet and Electronic Bulletin Boards for Food Composition Data

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There is a lot of information and misinformation being printed on the "Information Superhighway" or whatever name one chooses to use for the electronic information systems under development in the United States and around the world. The attendees of the Nutrient Databank Conference have always been in the forefront of database development. This article provides a guide to locating food and nutrition resources on the information network to assist in this important work.

However, like the more traditional highway systems, the information superhighway is very much a highway under construction. There are delays, detours, and closed roads. The quality can vary from that of a modern superhighway to that of dirt track through the forest. It can also be intimidating to users. New "ramps" are added to the highway constantly and familiar routes to get to information can change as rapidly.

When one talks about the "Information Superhighway" one is most often talking about the Internet. Therefore, what is the Internet? The Internet was originally developed by the Department of Defense as ARPANET to link together universities and high-tech defense contractors. Later the National Science Foundation developed NSFNET to provide connections between supercomputer sites. The Internet is a loose amalgamation of computer networks worldwide which have agreed to connect to each other and adhere to common standards. As a result no one "owns" the Internet and no one controls it.

How do I get access?

Many universities, government agencies, and companies are already connected to the Internet. Your organization's computer staff will be your best source of information. If your organization is connected, they will be able to tell you what to do. If you are not connected, there are a number of local companies which sell both organization and individual accounts. You will need to determine which level of access is best for your needs. These can range from an E-Mail account up to and including access to the World Wide Web through Mosaic or similar software. It is also possible to get your own domain, that is, your company or organization name appears as part of the address. Whatever service you choose, it is best if it allows you to obtain additional features as your needs change. This way you won't need to change your E-Mail address. Ads for these companies can be found in the daily newspaper or check with your local computer user group. There are also a number of commercial software programs on the market which can connect you the Internet. Instructions on contacting a local company are provided with these packages.

E-Mail

E-Mail is probably the most common use of the Internet. It gives you the ability to send and receive text messages similar to conventional mail. There are many programs for writing, managing, and sending your E-Mail and it is beyond the scope of this article to cover them all. The manual which came with your program will explain the features of the program. These programs give you the capability of composing your mail in a word processing environment. They can also import files from your favorite word processing program. However, E-Mail is sent as straight text without any formatting such as underlining or bold type. If you wish to send a formatted document, there are ways to attach a file to your message. You will need to refer to the manual which accompanied your program to find out how.

One common and valuable feature of these programs is a phone book where you can store the electronic addresses of people with whom you correspond. This way you do not have to retype the address every time you send that person a message. E-Mail addresses are often cryptic and hard to remember. In addition computers require accurate addresses and accept exactly what you type as the address. If you misspell the street address on a letter, the mailman will probably get it to the right address. With E-Mail, incorrectly addressed mail will be returned to you. Therefore, it is very important that you type the addresses correctly, both when sending mail and when giving your E-Mail address to others.

These programs also allow you to keep and manage old letters. This can be very helpful when working on projects and you have forgotten some piece of information which was sent to you some time ago. However, if you keep too many messages, you can run out of disk space.

You can also send E-Mail to subscribers on one of the national services, such as America Online, Compuserve and MCI Mail. You will need to know the identifier or name of your intended recipient on each service. The manual or online help will give you information on how.

LISTSERVs

Listservs are electronic mail list and there are literally thousands of them. They can be created by almost anyone to communicate with a list of individuals who share a common interest. By subscribing to a listserv you receive all E-Mail sent to that list. Conversely, you can also send mail to everyone who subscribed to the list, by simply addressing your E-Mail to the list. Some food composition and nutrition related lists follow.

Food Composition

Established by the International Network of Food Data Systems (INFOODS) as a medium for individuals working in the area of food composition to discuss issues of common interest.

Subscription Command: Send a message indicating you want to subscribe to the listserv Address: food-comp-request@infoods.unu.edu Post messages to list: food-comp@infoods.unu.edu

IFT Announcements

A listserv established at Cornell University to allow posting of announcements of interest to IFT members.

Subscription Command: subscribe IFT-Announce-L your name Address: listserv@cornell.edu Post Messages to list: IFT-Announce-L@cornell.edu

Food Laws and Regulations

Established by the Food Law and Regulations Division of IFT to allow division members to discuss the latest developments in food law and regulatory issues. This list is maintained at the University of Minnesota.

Subscription Command: subscribe food-law your name Address: listserv@vm1.spcs.umn.edu Post messages to list: food-law@vm1.spcs.umn.edu

Biotechnology Education and Public Policy Network (BCEPP)

BCEPP enables people working in Biotechnology education and public policy to exchange information. Participants include representatives of biotechnology centers and associations, extension personnel, researchers, teachers, university administrators, and colleagues from industry. This listserv is maintained at the University of Wisconsin.

Subscription Command: SUBSCRIBE BCEPP your name Address: listserver@relay.adp.wisc.edu Post Messages to list: bcepp@relay.adp.wisc.edu

Food and Nutrition Specialists

Allows food and nutrition professionals to exchange information and easily contact their colleagues. Maintained by Purdue University.

Subscription Command: subscribe fnspec_mg Address: almanac@ecn.purdue.edu Post Messages to list: fnspec_mg@ecn.purdue.edu

Seafood Internet Network

Set up to facilitate information exchange about the Seafood HACCP Alliance and implementation of the FDA seafood HACCP program. Maintained at the University of California, Davis.

Subscription Command: subscribe seafood your name

Address: listproc@ucdavis.edu Post messages to list: seafood@ucdavis.edu

Some additional things to know about Listservs:

- To subscribe to one of the Listservs above send an E-Mail message to the address of the listserv you wish to join. The message contains only one line--the subscription command for that listserv. Also, leave the subject line blank. You do not need to supply your E-Mail address--the computer captures it from the header of your message.
- When you first subscribe to a listserv, you will be sent a message confirming your subscription and information on how to use the listserv. It is strongly recommended that you save this message as it contains valuable information, such as how to unsubscribe from the list.
- ALL MESSAGES SENT TO THE LIST are automatically posted to all other members of the list;
- IF YOU "REPLY" to such messages send out over the list, your reply will go ALL members on the list;
- IF YOU WANT TO SEND YOU ANSWER DIRECTLY TO AN INDIVIDUAL (rather than broadcast it to the whole list), you need to send your response addressed to that individual's user name and address.
- Some of the more active lists can generate hundreds of messages per day. At this point, none of the food or nutrition related lists have this level of activity. However, if you do not read your mail frequently, the messages can pile up. The are also programs available to help filter your mail. If you find the mail from a listserv overwhelming or if you just are not interested in that group, you can unsubscribe. See the information message sent to you when you first subscribed.

Gophers

Gopher is a menu driven system for accessing Internet resources developed at the University of Minnesota (whose mascot is the Golden Gophers) to "go for" information. By moving through a series of menus you can connect to a wide variety of resources. To assist in locating these resources, search programs such as Archie and Veronica are available. These enable you to locate information without knowing in advance exactly where the information might be located. A number of the gopher servers listed below are at universities. While the information given here is specific to food science and nutrition, university gophers contain a wealth of information on a large range of subjects. These include information on the campus, faculty and staff directories, and other information useful to faculty, staff and students. They also provide connections to other Internet resources in the state or elsewhere.

University of Maryland

gopher info.umd.edu

This site contains various USDA Food Composition Data bases such as the USDA Nutrient Data Base for Standard Reference and several data sets created for nationwide food consumption

surveys. To get to the USDA Food Composition Data make the following selections from the menus:

Educational Resources
Academic Resources by Topic
Agriculture and Environment Resources
United States Department of Agriculture (USDA)
USDA Food Composition Data

Food and Nutrition Information Center, NAL

gopher gopher.nalusda.gov

This site contains information about the Food and Nutrition Information Center (FNIC) at USDA's National Agricultural Library. Electronic copies of many FNIC publications and references are available for downloading. These include compilations of references on a wide variety of food and nutrition topics, nutrient data base software, and other electronic source of information.

U.S. Department of Agriculture, Extension Service

gopher esusda.gov

This site contains a wealth of information on USDA. It also has other government information, such as the text of the GATT and, NAFTA agreements.

Environmental Protection Agency (EPA)

gopher gopher.epa.gov

This site contains EPA information and publications covering rules, regulations & legislation. There is also a section on consumer information. It also provides links to other environmental gophers.

Library of Congress

gopher marvel.loc.gov

This gopher contains data bases on legislation and Congress. There are also links to Senate and House gophers and information.

World Wide Web

The World Wide Web (WWW) is a more advanced protocol for accessing Internet resources. It is perhaps the next "killer" application for PCs and has been the subject of numerous articles in both the computer and the popular press. While adding such features as pictures and sound, it incorporates other, earlier protocols, such as gopher, as well. WWW resources are available through a graphical browser such as Mosaic (and its many competitors) or a text-based one such as Lynx. Many of the commercial services, such as CompuServe and America OnLine are adding WWW browsers to their repertoire.
WWW sites are accessed via a Universal Resource Locator (URL). The URLs for some food and nutrition related web sites and a capsule summary of the information provided are given below. Check the manual which came with your software to find out how to enter the URL and connect to that site. When you type in the URL for the site, an introduction or "home page" will be presented. These "home pages" provides connections to the various resources. While the URLs for universities given here are for the food science and/or nutrition departments, university WWW serves contain a wealth of information on a large range of subjects. These include information on the campus, faculty and staff directories, other information useful to faculty, staff and students, and connections to other Internet resources in the state or elsewhere.

Infoods

http://www.crop.cri.nz/crop/infoods/infoods.html

This WWW site in New Zealand provides information on Infoods, an international resource on food composition data. It also contains various food composition references and other relevant information.

USDA Food Composition Data

http://www.inform.umd.edu/EdRes/Topic/AgrEnv/USDA/USDAFoodCompositionData

This WWW site hosted at the University of Maryland contains various USDA Food Composition Data bases such as the USDA Nutrient Data Base for Standard Reference and several data sets created for nationwide food consumption surveys.

Swiss Food Composition Data

http://food.ethz.ch:2000

A prototype food composition data base prepared by the Institute for Scientific Computing in Zurich, Switzerland. It contains a program for querying their data base, and a library containing software, pictures and additional documents. There are also links to other servers and information on other projects.

Food and Drug Administration

http://vm.cfsan.fda.gov/index.html

This WWW site contains information on CFSAN, including E-Mail addresses for all CFSAN employees. It also provides access to other U.S. Government WWW Servers as well as other U.S. Government Internet resources.

National Institutes of Health

http://www.nih.gov

This WWW site contains information from the National Institutes of Health on a variety of health related subjects. Health information is provided on cancer and AIDS. NIH consensus statements are also available. Information on NIH programs such as Grants and Contracts, and Scientific Resources is also provided.

University of Minnesota

http://fscn1.fsci.umn.edu

This WWW site contains information on Department of Food Science. There is also an outline of course on the Internet which is available for food science students. This site also hosts the home page for IFT's Food Law and Regulations Division. This home page has links to many food law resources such as food related government agencies; sites providing full text of the Federal Register, the Code of Federal Regulations and the U.S. Code; and other related materials. The Food Law and Regulations home page can be accessed directly through the following URL:

http://www.fsci.umn.edu/FoodLaw/foodlaw.html

Cornell University

http://aruba.nysaes.cornell.edu:8000/fst.htm

Another University WWW site. It contains information on Food Science Department. This WWW site allows the web browser to look up any food science faculty in the U.S.

University of Arizona

http://128.196.106.42/nutrition.html

This university WWW site has a link to USDA Food Composition Data at the University of Maryland. There are also a number of other resources in food and nutrition.

White House

http://www.whitehouse.gov

This very popular WWW site provides access to White House press releases and other information. There is also a section on White House family life and you can take a tour of the building. This site also provides connections to other government servers, both WWW and gopher.

Capitol Hill and Congress

http://thomas.loc.gov

This recently announced WWW site allows users to obtain all sorts of information on Congress. The full text of house and senate bills are provided, searchable by either free text or the bill number. The bills from the 103rd and 104th Congress are available. Access to the Congressional Record will also be provided. There is also access to the House gopher and the C-Span gopher.

CIA

http://www.ic.gov

This once secretive agency has joined the Information Superhighway. While not technically food or nutrition, the World Fact Book contains information on all the countries of the world prepared by the CIA which is useful in many disciplines.

Conclusion

The best way to find information on the Information Superhighway is to get on and try it. Look at some of the gopher and World Wide Web sites listed here. They will provide links to other sites and lead you to sources of information you didn't even know existed. If you do not find what you are looking for today, look again in a couple of weeks. New servers are being added constantly and new information is being added at existing sites. So, let's get on the Information Superhighway and see what's out there.