

Editorial

Internet and the International Nutritional Community

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The Internet and the international nutrition community

We would guess that almost every reader has heard of the Internet. It is also our guess that not every one has had the opportunity to experience being on the Internet, and that many have yet to "surf the net". However, we do not intend to teach this here. For a detailed guide to the Internet, we recommend a series of articles published by the British Medical Journal^{1,4}.

The World Wide Web

The World Wide Web (WWW or simply "The Web") provides a user friendly interface to the Net. The information provided is often graphically attractive. Its most useful feature is its ability to search for information by just typing one or more "keywords". The basic unit of the Web is the web page (or home page). There are virtually millions of home pages on the Web since many institutions, organisations and individuals have begun to publish their own home pages. To address the problem of locating useful sites for information, efforts have been made to develop Web sites exclusively dedicated to the systematic classification of Web pages. These sites often serve as a starting point for linkage to other Web pages that deal with related material in a specific area of interest. A good example is the MedWeb which has a nutrition section that contains the nutrition home page: <http://www.cc.emory.edu/medweb/medweb.nutrition.html>.

As a nutritionist, you may wish to explore what is available about food and nutrition on the Web. The best way to start is to use a "search engine" (Yahoo, Excite, Infoseek, etc). An input box allows you to enter a keyword or string of words. We located more than 200,000 sites with the keywords "food OR nutrition".

Newsgroups or Usenet

The "usenet" can be defined as a world-wide discussion system. There are several nutrition related usenets on the Internet, such as sci.med.nutrition, alt.support.diet, and alt.food. Readers who wish to know more about "usenet" may wish to e-mail Mark Moraes at netannounce@deshaw.com. The site <ftp://rtfm.mit.edu/pub/usenet/news.answers/usenet/site-setup> shows you how to setup a "usenet" site.

Teaching and interactive information exchange

The Internet can be used for interactive teaching. For example, the Monash University Health Promotion Unit (MHPU) first explored the potential of the Internet as a new medium for health promotion⁵. The MHPU home page⁵ contains teaching material, including student workbooks, slides from lecture series, student projects, etc. Students may submit their assignments via the Net. Perhaps one of the greatest advantages of the Internet is that it allows individuals and organisations, with shared interests, to communicate and collaborate on projects in an interactive, effective and efficient manner.

The Monash Health Promotion Unit home page has an "Interactive Lounge" (<http://www.monash.edu.au/health/lounge/wwwboard.html>). The home page of the International Union of Nutritional Sciences⁶ (IUNS) contains the Interactive Information Exchange Corner (<http://www.monash.edu.au/IUNS/interactive->

[information-exchange-corner.htm](http://www.monash.edu.au/IUNS/interactive-information-exchange-corner.htm)). Both provide a simultaneous "many-to-many" communication mode which is still at a developmental stage, and is not widely used. The Interactive Information Exchange potential of the Internet can be fully utilised to enhance our performance in research and education.

In the United States, the University of Minnesota, Department of Food Science and Nutrition, through its Continuing Education and Extension courses, offers Internet on-line teaching and interaction with off-campus students at the "virtual campus"⁷ (access to parts of this site requires a password). To the knowledge of the authors, this is one of the most comprehensive interactive food and nutrition teaching sites available. From the various page-links, the site takes advantage of virtually every feature of the Internet: e-mail, newsgroups, FTP (File Transfer Protocol), Gopher, Telnet, etc. Academic credit may be granted on completion of the course. Together with other Universities which offer Food and Nutrition as a discipline, this site is conveniently linked to the IUNS home page under "Nutrition Education" (<http://www.monash.edu.au/IUNS/nutrition-education.htm>).

Benefits to the international nutrition community

The Internet can benefit the international nutrition community in at least two ways: (1) by providing web sites that supply information - on nutrition education, professional meetings and events, ongoing research (published and unpublished), progress in intervention programmes, professional membership lists, nutrition-related legislation such as changes in nutrition labelling regulations; and (2) by providing an efficient and effective means for communication - networking and collaboration among members of the international nutrition community.

We will call food and nutrition information handled by electronic means "Nutrition Informatics", and classify Web sites into two major categories (a) those making original contributions to Nutrition Informatics, and (b) food and nutrition link sites. Most of the sites under category (a) also provide links to "other Web sites", and will not be discussed again under (b). In addition, there a large number of Web sites that are set-up by profit making commercial establishments.

(a) Original contribution to Nutrition Informatics

Web sites making original contributions to Nutrition Informatics include predominantly government agencies, tertiary educational institutions, research projects/groups, professional societies/associations, news corporations, newsletters, journals (abstracts only), and books (via leaflet type of info). New material or information is constantly being added to Web pages. Some Web sites also change their page layouts to take advantage of new Internet software and to accommodate the ever increasing volume of information. Previously published information can be stored or archived using an internal index system. To visit these sites regularly, use the Bookmark facility of your browser.

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We selected the following as examples of original contributions to Nutrition Informatics:

The Food and Drug Administration (<http://www.cfsan.fda.gov/> or <http://www.fda.gov/fdac/special>) and USDA (<http://www.nal.usda.gov/fnic/>), provide quality food and nutrition information directly relevant to the public. At the USDA site, you will find topics such as food safety, nutrition labelling, food assistance programs, and even food and nutrition software and multimedia programs. The International Food Information Council (IFIC) has a home page (<http://ificinfo.health.org/fdsinfo.htm>). Current food and nutrition issues or news can be viewed at the CNN Food and Health site (<http://www.cnn.com/HEALTH/index.html>). There are newsletters, such as Food and Nutrition Digest (<http://www.oznet.ksu.edu/dep/fnut/newslet.htm>), which contain original material. Food-Net project at University of Minnesota (<http://www.fsci.umn.edu/foodnet/>) is a collaborative effort by the Universities of Minnesota and Wisconsin Extension Services and the Nutrition Education and Training (NET) Programs of Minnesota and Wisconsin. The graphic design of the page is excellent and it provides useful information on children's health.

The China Health and Nutrition Study (http://www.cpc.unc.edu/projects/china/china_home.html) of the Carolina Population Center at the University of North Carolina at Chapel Hill, the Institute of Nutrition and Food Hygiene, and the Chinese Academy of Preventive Medicine make available data from their 1989 and 1991 Surveys.

The Florida Agricultural Information Retrieval System (FAIRS) (<http://hammock.ifas.ufl.edu/>) of the Institute of Food and Agricultural Sciences, University of Florida has a search facility within the page. Documentation of plants, foods, flowers, etc. can be found from this site.

Consumer and Family Science (<http://wombat.cfs.purdue.edu/fn.html>) of the Foods and Nutrition Department, Purdue University, documents a satellite video conference workshop on food safety, nutrition, and volunteer management for staff and volunteers of food assistance organisations.

So far, few food and nutrition journals have made their way to the Internet. The American Journal of Clinical Nutrition (<http://www.faseb.org/ajcn/ajcn.htm>) announces the abstracts from the latest issues and has links to other Web sites. The Journal of Food Science (http://www.ift.org/publ/publ_c00.html) of the Institute of Food Technologists is another journal which has attempted to use the Internet to attract a wider readership. So far, there are no "true" Internet journals of nutrition in the Web.

There are also individuals, such as Dr Tony Helman, of Australia, who make available their professional and personal experiences in nutrition practice to the Internet community. His "Nutrition and the family physician - an Australian perspective" (http://netspace.net.au/~helmant/oz_nut.htm) discusses the great paradox in family physician-based nutrition at the present time.

American Cancer Society Nutrition page (<http://www.cancer.org/services/nutrition/>) through its "Eat Right" program promotes a low fat, high-fibre diet and encourages the consumption of nutritious vegetables and fruits that may prevent certain cancers.

(b) Food & nutrition Web links

Web sites, dedicated to linking food and nutrition related web sites, provide convenient access to original nutrition information. These sites often index the links according to the nature of information provided by the source or designating site. For example, "MedWeb: Internet Medical Resources" has an index called "MedWeb: Nutrition" (<http://www.cc.emory.edu/medweb/medweb.nutrition.html>) under which various sub-indices are used to group available information on the Net.

The following are some quality Web links sites:

The Virtual Nutrition Center, Martindale's Health Science Guide (<http://www-sci.lib.uci.edu/HSG/Nutrition.html>) is by far the most comprehensive nutrition link site. It provides international site linkages including ones to non-English speaking countries.

The World Wide Web Nutritional Links site (<http://www.medlib.arizona.edu/educ/nu-www.htm>) links to sites with quality content and non-profit motives.

Professor Geoff Skurray's Food & Nutrition Information (<http://www.hawkesbury.uws.edu.au/~geoffs/>) is an Australian site with food and nutrition groupings that are easily understood.

BUBL WWW Subject Tree - Food and Drink (<http://www.bubl.bath.ac.uk/BUBL/Food.html>) is a UK site and contains links to sites in Australia as well as international food and nutrition sites. Topics include Food Labelling, Educational Materials, Food and Nutrition Software and Multimedia, and educational materials covering Food-borne Illness and the Food Guide Pyramid.

WWW DIETETICS (<http://indigo.ie/~comdiet/expnets5.htm>) is by dietitians from Ireland and contains AgriGator, IFAS Resources, Food Science and Human Nutrition; COOL Nutrition and Health Links Worldwide with Guide References.

Applied Nutrition is a guide to applied and clinical nutrition resources on the Internet. It is a patient oriented nutrition link site (http://netspace.net.au/~helmant/nutr_p.htm).

Nutrition Industry (<http://www.medlib.arizona.edu/educ/nu-indus.htm>) includes a "single listing of every food and beverage related site on the WWW" and offers a directory of food industry professionals. Be warned that access to this site can be very slow at times.

Guide to nutrition resource on the Internet by Dr. Tony Helman (<http://netspace.net.au/~helmant/index.htm>): A non-graphic version is also available at http://netspace.net.au/~helmant/index_p.htm. This page contains links to resources concerning food composition, food science and food safety.

Links (<http://www.ag.uiuc.edu/~food-lab/240/links1.html>) is the Iowa State University Dept of Food Science and Human Nutrition. You can submit your own entry to the encyclopedia.

Other Web Sites (<http://www.ift.org/other.html>) is a web site with links which may be of interest to food technologists and other food science professionals.

Conclusions

In summary, the Internet has great potential for promoting collaborative efforts among members of the international nutrition community. We are hopeful it will contribute greatly to the sharing of food and knowledge and the initiation of international collaborative projects. At the same time, until the Internet is readily available to most of the world, we must continue to accommodate the needs of colleagues and organisations with limited access to it.

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