



NUTRINET newsletter

Nutrition Research Information Network

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Working towards an improved food and nutrition information system in the country

NUTRINET Database... now accessible in the Internet

The food and nutrition databases developed by the NUTRINET member libraries are now accessible in the web or Internet. The NUTRINET libraries with their focal point at the Food and Nutrition Research Institute-Department of Science and Technology (FNRI-DOST), is viewed as the premier national resource on food and nutrition information data and literature in the country.

The FNRI-DOST being the Secretariat of the NUTRINET and a member of the DOST Science Network-Philippines (ScINET-PHIL) initiated the incorporation of the developed NUTRINET databases in the integrated databases for Science and Technology. The said databases were made available and accessible in the world wide web or Internet launched on December 13, 2002 at the Multi-purpose Hall, Science and Technology Information Institute, DOST Compound, Bicutan, Taguig, Metro Manila.

ScINET-PHIL is a national network of specialized information system and services in science and technology (S&T) aimed at supporting the information requirements of the various users at the national, regional and international levels. The ScINET-PHIL Secretariat is the Science and Technology Information Institute (STII) which is also a NUTRINET member.

Opening of a gateway to S&T by DOST is a step towards its vision to contribute to the enhancement of national productivity and competitiveness and to give solutions for pressing national economic problems. The DOST believes that improved access to quality information and services and greater S&T awareness by our people are the backbone to national development of a nation.

Both the NUTRINET and the ScINET-PHIL are working towards realizing this vision through:

- Developing information products and services in simple and high-technology formats that are responsive to their clientele's requirements;
- Enhancing information collections in printed and ICT formats;
- Upgrading facilities to ease access to information;



ScINET-PHIL Website launching last December 13, 2002 at STII. (Left to right) Ms. Rosario T. Genato of ITDI, Undersecretary Fortunato T. Dela Peña and Secretary Estrella F. Alabastro.

- Establishing linkages with existing and future information highways and connectivity to various information resources;
- Developing human resource capability for information and related work; and
- Mobilizing and generating local, national, and external resources to sustain their operations.

With these, we wish to commend the NUTRINET and ScINET-PHIL for these noble tasks and mission to improve S&T information system in the country. ●

*CCGuilatco
FNRI-DOST*

FOOD NOTES

- ☆ Cereal products like crackers and cookies which absorb moisture from the air can be crisped by heating them for a few minutes in the oven.
- ☆ It is best to wash the vegetables before cutting to prevent loss of water-soluble vitamins and some trace minerals.
- ☆ Natural occurring nutrients, especially vitamins are more stable than added nutrients.
- ☆ When buying fruits, choose fruits that are fresh, free from bruises and blemishes, mature, and the right size and shape for your needs.

Source: FNRI Digest, 2002 Oct-Dec. 19(4): 13

RESEARCH UPDATE

KNOWLEDGE AND PERCEPTION OF NUTRITION EDUCATORS ON THE FOOD GUIDE PYRAMID: A BASELINE STUDY*

Pastores, G.A.F.

This study was conducted to determine knowledge and perception of nutrition educators on the food guide pyramid. Five hundred sixty six nutrition educators from the 11 cities and 6 municipalities of the National Capital Region (NCR) served as respondents of the study.

Results showed that nutrition educators have fair basic nutrition knowledge but have low knowledge about the food guide pyramid. Correlation analysis revealed that age is inversely correlated, while educational attainment and training on growth monitoring and nutrition education are positively correlated with nutrition knowledge. Training on growth monitoring is significantly related to knowledge on food guide pyramid. Income was found to be significantly related to perception about the food guide pyramid. Nutrition educators perceive the food guide pyramid to be a useful nutrition education tool despite their low knowledge on its

content. Nutrition educators' concept of the messages conveyed by the food guide pyramid is about balanced diet, which means eating a variety of foods. Nutrition educators expected a colorful food guide in whatever shape or form. Despite their low knowledge scores on the food guide pyramid, they found it to be attractive in color, shape, and layout.

Correlation analysis revealed a significant positive relationship between knowledge and perception on the food guide pyramid. ●

**A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Nutrition in the College of Home Economics, University of the Philippines.*

*Contributed by: Emiliana M. Mañago
UP-CHE*

SPECIAL FEATURE

THE IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGIES ON LIBRARIES*

(Continued from last issue)

The Role of the Internet in Libraries and Information Centers

Sad to say, many libraries in the country have not really integrated the Internet in their operations. In my visits to various institutions outside Metro Manila, it is not unusual for administrators to boast that they have access to the Internet, and yet their libraries have no access to it. Very often, the use of the Internet is associated only with e-mail functions. One reason for this neglect is often the lack of awareness of the librarian and consequently of her/his administrator, on the uses of the Internet in improving and enhancing library operations and services.

The Internet provides access to more information. It can improve library services by making available various resources to library users. Some information sources such as electronic journals and listserv messages are available only in electronic format.

- It provides access to new services. Information can be created and transmitted on the Internet and made available worldwide quickly, such as electronic publishing.
- Limitations of time and location become non-existing. Access to online library catalogs is usually available only to local users and during library hours. The Internet makes these resources accessible every hour of the day, to and from any location on the globe.

To be more specific, how can the Internet be used in libraries?

- For research on all topics using known Uniform Resource Locators (URLs), subject directories, search engines, and portals.

**Lecture of Dr. Josephine C. Sison, Dean, Institute of Library Science, University of the Philippines-Diliman at the NUTRINET Training on Current Library Operations and Management held last July 17-19, 2002.*

- Uniform Resource Locators can be likened to an address of the website where the information can be found. Ex. : <http://www.ovid.com>
- Subject directories are selective lists of Internet sites compiled by subject specialists. Like subject bibliographies, they list web sites where you can find information you need on a subject.
Example: The Internet Public Library: <http://ipl.sils.umich.edu>
- Search engines are websites which enable the researcher to enter key words on their topic of choice and locate relevant information on the Internet. They tell you what search strategy to use in locating information.
Examples: Google: <http://www.google.com>
Hotbot: <http://www.hotbot.com>

- For exchange of information or request for assistance via
 - E-mail (one-on-one communication)
 - Listservs (discussions groups via e-mail)
 - Usenet newsgroups
- For selecting library materials over the Internet through reviews, publishers' catalogs, and the like
- For making purchases over the Internet direct to the publisher, through book jobbers or bookdealers on the Internet, including software and hardware dealers.
- For obtaining technical support from system dealers
- For providing library support for distance learning.
- For extending the library's resources

For all its potentials, however, we should also be aware of the limitations of the Internet, such as

- Content limitations

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- The Internet is not a replacement for standard library materials, but an additional source of information.
- Content is either very new, very old, and very unstable
- Full contents of most library materials are not on the Internet
- Internet versions of known publication are not always the same as print
- Archival material is limited to the short term
- More recent and/or more complete infofilation often requires fee-based database searching
- Cost consideration
 - Cost of computer equipment, software, and telecommunications can easily outrun costs for print materials
 - Technology is not a one-time purchase; upgrades are always necessary.
 - Technology changes necessitate constant staff training.
 - All information on the Internet is not free of charge.
- Retrieval issues
 - Searching logically and efficiently for information can be difficult due to:
 - ⇒ lack of organization and standardization;
 - ⇒ the quality of automated "indexing" conducted by search engine robots versus indexing by trained indexers show a wide gap.
 - Searches often result in an overwhelming number of retrievals which satisfy a query, but many of which are of little value.
 - Lack of standards for Web documents to aid the automated indexing programs to extract basic information about a document such as author, date of publication, and subject.
 - Ability of Internet publishers to misrepresent the content of their documents using unrelated keywords to describe their site in order to get "noticed" by searchers.
 - Inability for anyone search engine to "index" the entire Internet or even just what is on the Web.
 - Robots/spiders cannot keep up with sites in a constant state of change, as information is added and deleted daily.
- Sites appear and disappear with regularity. Valuable information which may be present one day may no longer exist the next day as organizations and individuals responsible for mounting the information remove the information without archiving it for future use.
- Connectivity
 - Is the connection dependable? Is it there when you need it?
 - Is the connection fast enough to be a substitute for other sources?
- Quality

The Internet is an open market with no quality controls. It is up to the user to critically evaluate any information found in the Internet. To evaluate your information, you must :

 - Identify the source of the information
 - ⇒ Commercial company
 - ⇒ Government (local, national, foreign)
 - ⇒ Organization (local, national, international)
 - ⇒ Academic (student, professor, researcher)
 - ⇒ Special Interest Group (charity, political, religious, etc.)
 - ⇒ Individual
 - Evaluate their credentials
 - ⇒ Does the site say anything about the author/authoring organization?
 - ⇒ Is the site produced by a recognized authority?
 - ⇒ Does the site give contact information?
 - Consider the purpose of the site. Does it have a particular bias?
 - Is the information from an original source, or a compilation by someone else?
 - Look for a date on the site and be sure it is clear what the date pertains to: the information itself, the date the site was updated?

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- Currency
- Objectivity
- Copyright: Copyright rules apply to information on the Internet. There are a number of good sites which can help in clarifying copyright issues.

Issues and Challenges that Impact on ICT Use in Libraries

In the similar work edited by David Raitt (1997) entitled *Libraries for the New Millennium: Implications for Managers*, Stephen Griffin describes the issues confronting libraries in the electronic era. Griffin groups these under the following categories:

- Technological issues: what to do about the acquisition and conversion of digital media, obsolescence, stable long-term access, etc.;
- Organizational issues: how can/should the organization respond to changing roles and responsibilities thrust upon it;
- Economic issues: who will bear the costs and will there be economies of scale;
- Legal and regulatory issues: resolving intellectual property issues associated with acquiring and making digital collections available.

These issues will have to be addressed by us as we acquire and use more and more of the new ICTs to improve services.

Implications of ICT on Library Managers

You, as library managers, are in the middle of a technology flux which is being compared in scope and consequence to the invention and use of the printing press. The emergence of the Internet, World Wide Web, and the new information and communication technologies for creating and managing distributed information repositories has cast traditional organizational and managerial functions in a new light, forcing new responsibilities on library staff at all levels of the organization.

The following is a short list of suggestions given by Griffin (1997) for library managers caught in the midst of this rapid and uncertain period of technological and institutional change:

- Learn new vocabularies. To understand technology and technologists more fully, managers must become literate in the concepts and vocabularies that frame technological discourse.
- Encourage interaction among staff. As more functions of the library merge traditional librarianship and technology, it is important that the technical and non-technical staff understand each other's values and work well together.
- Carefully match technologies and users. One step in achieving this is to make users an integral part of the systems requirements and design processes.
- Reach out and educate. Steps should be taken to orient users and employees to make them aware of new library technology environments and services.
- Prepare for loss of control. Accompanying the transformation from management of physical to electronic media in libraries will be decentralization coupled with direct, unmediated use of a library's resources by many clients.

Connect and communicate. Active participation in local, national, and international professional events and workgroups can reduce the risks associated with moving into the digital age. Conferences and workshops are important venues for learning.

Conclusion

We have explored, at length, the new information and communication technologies and how these are profoundly changing our work environment. It is my hope that all of you will rise to the challenges of the Internet Age to provide the best possible mix of information services to your users. ●

**MERRY CHRISTMAS
AND A PROSPEROUS
NEW YEAR TO ALL!**

RESEARCH UPDATE

COCONUT FLOUR SUPPLEMENTED FOODS ARE GOOD FOR DIABETES AND WEIGHT MAINTENANCE

A study on bakery products supplemented with increasing amounts of coconut flour in 10 normal and 10 diabetic human subjects was done at the Food and Nutrition Research Institute, Department of Science and Technology in collaboration with the Philippine Coconut Authority. It was found that increasing the levels of coconut flour in the bakery products resulted to lower the glycemic index of the food.

This study was undertaken by Dr. Trinidad P. Trinidad, Scientist II of the Department of Science and Technology. According to Dr. Trinidad, this has great significance in the proper control and management of diabetes mellitus and in the maintenance of weight.

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Coconut flour from “*sapal*” is a good source of dietary fiber, containing 60 % total dietary fiber. Foods rich in dietary fiber are low glycemic index foods. Glycemic index (GI) is a classification that ranks foods by how they affect your levels of blood sugar. Low GI foods produce a gradual rise in blood sugar that is easy on the body. Findings of the study, showed that dietary fiber present in coconut flour work to prevent diabetes or maintain our weight by slowing down the release of glucose with time and therefore needs only enough insulin in order to breakdown the glucose into energy. She added that foods without dietary fiber result in a fast release of glucose with time needing more insulin to breakdown the glucose. If an individual does not have enough insulin needed to break the glucose, glucose stays in the blood and therefore can cause diabetes. The excess glucose can also be stored in our body and increase our weight.

For further information about this study, interested parties may contact Dr. Trinidad at telephone numbers 837-2071 to 80 local 2281, 837-8113 to 14 local 329 or through e-mail: tpt@fnri.dost.gov.ph. ●

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EGG TIPS

by: **AUMondala
FNRI-DOST**

- ☺ If you want to freeze egg yolks, add a little sugar, corn syrup, or salt, then cover and freeze.
- ☺ Do not wash eggs before storage.
- ☺ The older the egg, the larger the air space.
- ☺ To determine egg freshness, put in cold water e.g. if fresh, egg will sink, if not it will float.
- ☺ An opened egg with a flat yolk and wholly watery white is not fresh.
- ☺ Two (2) egg yolks = one whole egg in a cake recipe. Add little milk.
- ☺ It is easier to separate the yolk from the white if the egg is very cold.
- ☺ Thaw eggs a couple of hours before frying or boiling.
- ☺ If you forgot to thaw the eggs, put them in a fairly warm water for 10 minutes
- ☺ Hit an egg obliquely, not straight across.
- ☺ When serving eggs, use stainless steel flatware instead of silver.
- ☺ To pick spilled egg, cover with salt, let it set and pick with a damp paper towel.

FOOD NOTES

- ⊙ Store, cook and preserve vegetables gently and carefully to retain their nutritive value, flavor, and color. If they are kept for long periods of time at high level of temperature and in a dry atmosphere, the losses of vitamin C particularly are great. Fat soluble vitamins like A,D,E, K degrade at high temperatures in the presence of oxygen. Storing at lower temperature reduces the rate of loss. Frozen beans, cauliflower, spinach lose only a small amount of vitamin C over a year period if the temperature is maintained at -20°F.
- ⊙ Store rice and other dry cereals including flour, cornmeal, noodles, macaroni in tightly covered containers in a dry cool place which is free from insects and rats.
- ⊙ When buying fresh fruits, choose those that are fresh, free from bruises and blemishes, mature, and the right size and shape for your needs
- ⊙ Coffee creamers or whiteners are non-dairy substitutes for cream or milk for use in coffee. The protein, mineral, and vitamin contents of these products are substantially less than that found in regular milk or cream. They should not be used by children as replacements for milk as beverage.
- ⊙ Butter is a milk product from ripened cream which is churned until butterfat separates from the buttermilk. Margarine is made from vegetable oils which are partially hydrogenated to produce the desired consistency and to resemble butter.

Source: *FNRI Digest*, 2002 Jul-Sep. 19(3): 18

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FNRI RESEARCHES-ABSTRACTS

FN Abstracts of completed researches. 27th
Z6293.N9 FNRI Seminar Series on food and
F73 nutrition researches. – Bicutan: FNRI –
2001 2001 ; 32p.
FNRI

FOOD SECURITY, FOOD SUPPLY

HD1401 Trueblood, M.A.; Shapouri, S.;
U61 I13 Henneberry, S.
#764 Policy options to stabilize food
2001 supplies: a case study of Southern
FNRI Africa. – Washington, D.C.: USDA –
2001 ; 18p. – (Agriculture Information
Bulletin No. 764)

NUTRITIONAL GUIDELINES-FILIPINOS

FN Nutritional guidelines for Filipinos,
TX359 revised edition 2000. – Bicutan: FNRI –
N95 2000 ; 102p.
F73
2000
FNRI

OBESITY

RG628 The Asia-Pacific perspective: redefining
A41 obesity and its treatment. – Australia:
2000 Health Communication Australia – 2000
FNRI ; 56p.

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