



9 February 2007

From Generation to Nutrition Gap

Washington, Jan 27. Despite initiatives to encourage healthy eating habits, teens in middle adolescence are eating fewer fruits and vegetables than in 1999, a new study conducted by researchers at the University of Minnesota has found.

The study, which also says that these eating habits only get worse as kids grow older, has researchers worried, for fruit and vegetable intake is important for the prevention of future chronic disease.

The researchers undertook the study to examine whether or not teens in the state were increasing their intake of fruits and vegetables as recommended by the U.S. Department of Health and Human Services' Healthy People 2010 objectives and Dietary Guidelines for Americans.

During the transition from middle school or junior high to high school, teens decreased their intake of fruits and vegetables by almost one serving per day, the study found, from roughly four servings for girls and roughly two and a half to fewer than two servings for boys. It also found that from high school to early adulthood, the teens decreased their consumption by almost the same amount.

While there is little research investigating exactly why adolescents might be choosing to eat fewer fruits and vegetables - the most frequently cited one attributes responsibility to the increasing amount, variety and availability of fast food, it is agreed that just educating teens about healthy food choices is not enough. "Teaching adolescents that fruits and vegetables are healthy isn't going to help - they already know that," the

study states: "We need to address things going on in the environment, in the community or at home to help adolescents increase their consumption of fruits and vegetables." Environmental interventions could include increasing the availability and palatability of fruit and vegetables at school, in restaurants, and at home and decreasing the availability of less healthy, highly palatable foods. Research also shows that more frequent family meals can help adolescents develop healthier diets.

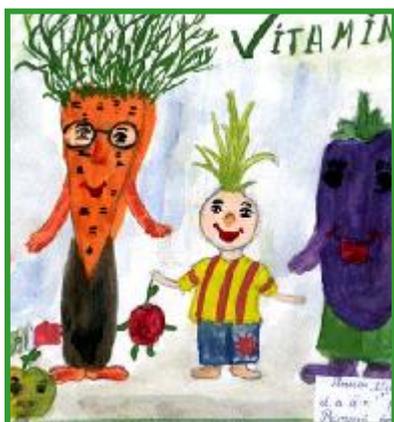
The Food Pyramid Effect: Changing Landscapes

However, what would happen if the acceptance of the proposed dietary guidelines actually took place? This issue is addressed by another recently published report (20 November 2006). The agricultural landscape could change profoundly, if Americans followed the dietary guidelines set by the Department of Health and Human Services and the United States Department of Agriculture (USDA). "It looks like good news for agriculture", the report says. There would be more hectares of almost everything. Likewise there would be a higher demand for labor. Farmers in the U.S. would have to increase their areas of some vegetables and decrease the areas of others. Most consumers would need to increase their fruit and vegetable consumption by about 31%. "But this increase would be larger for orange and yellow vegetables, dark-green vegetables, and legumes, while consumption of 'starchy' vegetables, primarily white potatoes, would decrease. According to USDA economists, farmers would need to plant and harvest an extra 3.5 million hectares, affecting labor requirements in the agricultural sector: "Picking green beans isn't like harvesting soybeans, so the hand labor and post-harvest treatment would be different."

Sources: <http://www.dailyindia.com/show/107799.php/US-teens-eating-fewer-fruits-and-vegetables-now-than-1999-levels> ; <http://www.ers.usda.gov/Publications/ERR31/>

Photo: USDA

Recommended link: <http://www.mypyramid.gov>



AVRDC - The World Vegetable Center in 2007:

A Center on the Move

An interview with Dr. Thomas Lumpkin, the Center's Director General

Q.: *It is very apparent that AVRDC is a Center on the move. New faces at Headquarters and in the regions, an annual agenda that is bigger than ever before, and last but not least the good news regarding the Gates proposal.*



T.L.: This year will be a year of many changes for the Center, perhaps more changes than in the past few years. AVRDC is a Center on the move. We are moving people to

make a difference in the livelihoods of the poor in developing countries. However, our focus and range of activities also move on. Our science and development orientation are expanding and at the same time some projects have enough funding for long-term commitment. I think it is also important to state that our work is bringing like-minded partners together. We are also moving people. In this regard let me refer to the Global Horticulture Initiative, that derived from AVRDC's work and from which the Center will benefit in the future, or to a proposed Challenge Program for High Value Crops, that our Center has initiated. Some changes may often appear uncomfortable at first glance, but most of them will be positive. We cannot reach our ambitious goals for this year without the cooperation of all. I encourage all staff to show initiative, bring in their ideas and effort to the Center. Thanks to our motivated staff our Center has rapidly evolved, and it will keep on doing so in the future as well. Not everyone had the chance to join our "End of the Lunar Year"-Party last week, so I want to express my gratitude and best wishes to all again.

Q.: *AVRDC's adequate budget as well as the acknowledgement by decision-makers and scientists show that AVRDC is a partner that is gaining momentum and whose knowledge and experience are valued. However, AVRDC is not like any other International Agricultural Research Center (IARC). Aside from the research agenda and mandate, where do you see the strongest differences?*

T.L.: If one compares AVRDC with other International Agricultural Research Centers, one will learn that for instance we have a different cost structure. Besides all the many wonderful and positive aspects of being based in Taiwan, and the tremendous support and hospitality by our host country, there is also the issue that our personnel costs are much higher here than where most IARCs are located, because Taiwan is now highly developed. One of the consequences is that we have to strive hard to be more efficient and to use our resources with consideration and an understanding of the growing tasks and relative costs. We must stay flexible, keep our curiosity for new solutions and be eager for steady improvements. I am sure we will succeed because Taiwanese have a creative curiosity which will help us with our transition.

Q.: *The Gates program is one of the big challenges over the next few years ...*

T.L.: ... that takes us back to our roots as a R&D center. AVRDC's focus is now global, and we must not lose sight of our mission statement. Our clients are living in the poorest countries of the world. It remains our primary goal to improve their livelihoods through vegetable production and consumption, and everyone at the Center knows that the emphasis of our activities is to work in accordance with that mission. I also consider it a necessity for an international center like AVRDC to be linked more with the international development, research and also policy communities. We are recognized as AVRDC – The World Vegetable Center. This new title is also an obligation. Some of us will also have to devote time to Africa and travel to there to either provide services or support the research of our colleagues.

Q.: *At the "End of Lunar Year Party" you announced that the Center will have more women as staff than ever before, more in leadership positions. A vision?*

T.L.: I wouldn't call it a vision. We haven't changed our center's policy either. It is a sign of the changing times that more and more women are proving to be the most qualified candidates. By the way, this process can be observed globally. Our Center already has women in many senior research and management positions, and our

Board has more female members than ever before. No one would be surprised if the next Director General was a woman.

Q.: *Recently you went to Japan to discuss the future of Japan's support and cooperation with the Center. Can you tell us some of the outcomes of your talks?*

T.L.: At this moment it is still too early to be able to sum up the outcomes. All of you are aware that the Japanese government is cutting back expenditures, and Centers like ours are facing reduced budgets. However, the talks I had with our donors were encouraging. I have been invited to further discussions with relevant decision makers in Tokyo later this year. Perhaps this is a good sign. What we have to do now is to continue our hard work and convince donors that investments in our R&D expertise will be investments in the future of the poor in developing countries. I also went to Tsukuba University.



The researchers there are very eager to work together with our scientists at AVRDC, especially on the issue of GMO regulations. Most likely some scientists from Japan will be visiting our Center during this year.

News from AVRDC-ARC, Thailand

ARC Has Moved to A New Location

The Asian Regional Center moved to a new building at the Kasetsart University (KU) campus on 26 January 2007. The ARC Office is now located at the 4th floor of KU's Research and Development Building. All contact details (email address, telephone and fax numbers) remain the same.

Travel

Dr. Peter A.C. Ooi and Ms. Doreen Canillas, 11-14 February, to Lao PDR, to monitor progress of the HRDP IV project – to visit project sites and to discuss with LPDR collaborators about the final activities of HRDP IV and the impact assessment report of LPDR; to visit the SDC Mekong Regional Office regarding concluding activities of the HRDP IV project and possible future collaborative projects.

ARC Prepares for the BOD Meeting

The AVRDC-ARC Office is bustling with the preparations for the forthcoming Board of Directors meeting on 12-15 March 2007. A field trip is being arranged to the ARC field station including the ceremonial grand opening of the ASEAN Indigenous Vegetable Garden developed and maintained by ARC in collaboration with the Tropical Vegetable Research Center (TVRC). The Board members will also be brought to a vegetable wholesale market at Sri Muang in Ratburi province to let them have a first-hand experience of the hustle and bustle of Thai vegetable marketing and postharvest handling. A farewell dinner cruise on the famous Chao Phraya River in Bangkok is also being arranged to conclude the Board meeting.

Fire Fighting Drill on Tuesday, 13 February

A fire fighting drill will be held at the volleyball court next to the Administration building starting at 1000 hours on Tuesday, 13 February. Interested people are welcome and a representative from each unit is encouraged to attend.

2月13日(星期二)網球場有一場消防演習,各單位請派一名代表參加,有興趣的同仁可自行前往。

- Source: TSO

AVRDC-RCA 25th Regional Training Course Closing Ceremony

The 25th Closing Ceremony of the Regional Training Course was held on 25 January 2007 with Associate

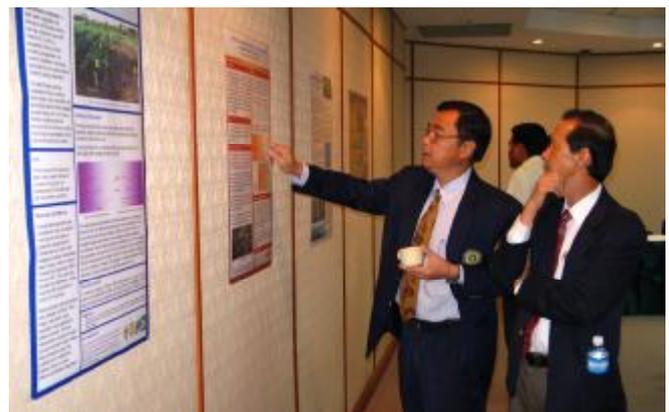
Prof. Dr. Thongchai Mala, Vice President of KU Kamphaengsaen campus gracing the occasion.



Dr. Thongchai Mala (front row, the fourth from left) and Dr. Peter Ooi (front row, the third from left) with the 25th RTC participants and ARC Training and Research Staff



Dr. Peter Ooi hands a token of appreciation to Dr. Thongchai Mala



New Member of AFSTA/Nouveau Membre de l'AFSTA

We are pleased to inform you that AVRDC - The World Vegetable Center Regional Center for Africa based in Tanzania has joined AFSTA as an associate member.

The contact addresses are:

- Contact person: Dr. Detlef Virchow
- Postal address : P.O Box 10, Duluti, Arusha, Tanzania
- Physical address: Arusha, Tanzania
- E-mail: detlef.virchow@inwent.org
- Website: www.avrdc.org/rca.htm
- Tel: +255 27 2553093 / 2553125
- Fax: +255 27 2553125

Please let us welcome this new member to AFSTA.

Nous avons le plaisir de vous annoncer l'adhésion du Centre Régional pour l'Afrique de l'AVRDC - The World Vegetable Center basé à Arusha Tanzanie à l'AFSTA en tant que membre associé.

Les coordonnées sont les suivantes:

- Personne contact : Dr. Detlef Virchow
- Adresse postale : P.O Box 10, Duluti, Arusha, Tanzania
- Physical address : Arusha, Tanzania
- Courriel : detlef.virchow@inwent.org
- Site web : www.avrdc.org/rca.htm
- Tel: +255 27 2553093 / 2553125
- Fax: +255 27 2553125

Nous souhaitons la bienvenue à ce nouveau membre à l'AFSTA.

- Source: Justin Rakotoarisaona/The African Seed Trade Association

What's New in the AVRDC Websites?

Internet home page : <http://www.avrdc.org>

- News: AVRDC-ADB RETA 6208 Postharvest Technologies in Progress: Newly Designed Solar Dryer and Better Tomato Drying Techniques
- News: AVRDC-ARC Regional Training Course: An Interview with Five Alumni
- Featured Databases: AVRDC Vegetable Genetic Resources Information System (AVGRIS) and The System-wide Information Network for Genetic Resources (SINGER)
- Featured Site: Asian Regional Center Website

First international Symposium on Chili

Anthraxnose <http://www.avrdc.org/anthracnose/index.html>

- First Announcement, Program, Important dates and organizing committees

Postharvest Website: <http://www.avrdc.org/postharvest/index.html>

- Research Briefs: Solar Dryer & Tomato Drying Experiment
- Upcoming Events

Intranet: <http://www.avrdc.org/intranet/home.html>

- Weather Data: 1-31 January 2007

- Source: Christie Clavero/CTO

New Publications (Articles & Books) Received by the Library

Keller, G.B., Mndiga, H., Maass, B.L. (2006). Diversity and genetic erosion of traditional vegetables in Tanzania from the farmer's point of view. *PLANT GENETIC RESOURCES*. v.3(3):400-413.

Akinci, I.E., Akinci, S., Yilmaz, K., Dikici, H. (2004). Response of eggplant varieties (*Solanum melongena*) to salinity in germination and seedling stages. *NEW ZEALAND JOURNAL OF CROP AND HORTICULTURAL SCIENCE*. v.32:193-200.

Arida, G.S., Punzal, B.S., Ravina, C.C., Gapud, V.P., Rajotte, E.G., Talekar, N.S. (2004). Monitoring adult populations of two insect pests with sex pheromone traps for effective timing of interventions against the defoliators of onion (*Allium cepa* L.) growth after rice (*Oryza sativa* L.). *PHILIPPINE ENTOMOLOGIST*. v.18(2):139-150.

Arida, G.S., Revina, C.C., Punzal, B.S., Rajotte, E.G., Talekar, N.S. (2004). Response of the onion (*Allium cepa* L.) plant to simulated pest damage. *PHILIPPINE ENTOMOLOGIST*. v.18(2):151-162.

Harada, K., Kano, M., Takayanagi, T., Yamakawa, O., Ishikawa, F. (2004). Absorption of acylated anthocyanins in rats and humans after ingesting an extract of *Ipomoea batatas* purple sweet potato tuber. *BIOSCIENCE BIOTECHNOLOGY AND BIOCHEMISTRY*. v.68(7):1500-1507.

Liu, Y.S., Gur, A., Ronen, G., Causse, M., Damidaux, R., Buret, M., Hirschberg, J., Zamir, D. (2003). There is more to tomato fruit colour than candidate carotenoid genes. *PLANT BIOTECHNOLOGY JOURNAL*. v.1(3):195-207.

Fondong, V.N., Pita, J.S., Rey, M.E.C., Kochko, A.D., Beachy, R.N., Fauquet, C.M. (2000). Evidence of synergism between African cassava mosaic virus and a new double-recombinant geminivirus infecting cassava in Cameroon. *JOURNAL OF GENERAL VIROLOGY*. v.81:287-297.

Middleton, E. (1998). Effect of plant flavonoids on immune and inflammatory cell function. *ADVANCES IN EXPERIMENTAL MEDICINE AND BIOLOGY*. v.439:175-182.

Geoffriau, E., Kahane, R., Bellamy, C., Rancillac, M. (1997). Ploidy stability and in vitro chromosome doubling in gynogenic clones of onion (*Allium cepa* L.). *PLANT SCIENCE (INDIA)*. v.122:201-208.

Sawhney, V.K., Shukla, A. (1994). Male sterility in flowering plants: Are plant growth substances involved. *AMERICAN JOURNAL OF BOTANY*. v.81(12):1640-1647.

- Source: Fang-chin Chen/Library Services Unit

New Popular Magazines Now Available in the Library

The Economist: India overheats – February 3rd-9th 2007

National Geographic (Chinese): February 2007

- Source: Fang-chin Chen/
Library Services Unit



Recommended Web Link of the Week: Intute Database

Intute – is a free online service providing you with access to the very best Web resources for education and research. It is managed by a consortium of seven UK universities working with a range of partners to ensure that all material is evaluated and selected by a network of subject specialists. Topics covered include Science and Technology, Arts and Humanities, Social Sciences

and Health and Life Science. The Intute database makes it possible to discover the best and most relevant resources in one easily accessible place.

Please visit <http://www.intute.ac.uk/>

- Source: Fang-chin Chen/Library Services Unit

New Staff



Mr. Hsu Chin-chin 許晉欽, project-based Field Assistant at the Molecular Marker Laboratory joined the Center on 5 February. Mr. Hsu obtained his B.S. degree in June 2005

from the Plant Protection department at the National Chiayi University. He can be contacted at ext. 381.

- Source: Felisa Wang/ASU

Travel

Dr. Jackie Hughes, 8-24 February, on annual leave.

Ms. Dolores Ledesma, 11-27 February, on annual leave.

Dr. Jong-Gyu Woo, 12-19 February, to Seoul, Korea, to attend the conference of RDA seconded scientists, to visit NHRI, to give a presentation on AVRDC activities at NHRI, and to visit Taega Provincial RDA.

Dr. Liwayway M. Engle, 16-28 February, on leave.

- Source: Jim Fu/ASU

Dr. M.L. Chadha, 12-16 February, Kathmandu, Nepal, to attend the Rice-Wheat Consortium meetings at the Nepal Agricultural Research Council.

- Source: Dr. M.L.Chadha/AVRDC-RCSA

Dr. Antonio L. Acedo Jr., 20-25 February, to Phnom Penh, Cambodia, to provide advice and ensure proper conduct of PHT research on tomato harvesting from the large-scale variety trial and the two in-country PHT training courses; to discuss other project activities and concerns.

- Source: Dr. Antonio L. Acedo Jr.

2007 Recreational and Social Committee Members

The 2007 R&S Committee members are : Kartini Luther (Chair), Vicki Easdown, Christian Genova, Yong-hong Li, Chong-zheng Lin, Jean Lin, Malini Srinivasan, Zhan-yong Sun, with administration help from Angela Chen. We have had our planning meeting and have come up with exciting activities for the whole year. We expect you will all be as excited as we are in joining in with the activities. We are looking forward to having fun together with you!

本年度中心康委會委員包括：盧卡婷（主任委員）、維琪、希天敏、李永紅、林崇正、林貞余、梅麗寧、孫占勇以及陳美洪。委員們已將今年度的各項精采活動安排妥當，期待您熱情的參與！

- Source: Kartini Luther/Chairperson/R&S Committee

News from AVRDC Goodwill Club

This month the AVRDC Goodwill Club donated NT\$24,000 each to two elementary schools in Shanhua. The money was for the schools' emergency fund which is used to pay for school lunches for those poor students whose families run into difficulty throughout the school year and are unable to apply for government assistance. The two schools that received donations were Shanhua Da-chen Elementary School and Shanhua Elementary School. Currently 9 students (5 students for Shanhua Elementary School and 4 students for Da-chen Elementary School) have been identified that will benefit from the fund thanks to the generosity of the Goodwill club members and AVRDC staff.

這個月本中心愛心社各捐新台幣24000元給善化鎮兩所國小—大成國小以及善化國小，當作急難救助金，幫助得不到政府補助的貧困家庭學童的午餐費。目前共有九位（五位善化國小，四位大成國小）小朋友受到愛心社捐款的照顧。

- Source: Dr. Kathryn Hamilton/AVRDC Goodwill Club

Position Announcement – Secretary for the Grant Development Office

Key Responsibilities

The position will report directly to the Grant Development Coordinator and will have responsibilities which include:

- Assisting in drafting agreements and contracts
- Assisting in preparing the office's publications
- Managing the database of contracts and deadlines for project report submission
- Compiling data for reports as required
- Internet searches for funding opportunities
- Translating official correspondence (Mandarin/English)
- Basic office duties such as travel arrangements, filing, mailing, copying, etc.
- Other duties as assigned

Qualification and Experience

- BA in business administration/management, foreign languages, or a closely related field
- At least 3 years work experience
- Efficient, accurate & meticulous work output
- Ability to make good judgments and act independently
- Tact and diplomacy in communicating with international partners and staff in a multi-cultural environment
- Excellent command of Mandarin and English (both written and spoken)
- Knowledge of MS Office, especially Excel and Access, knowledge in SAP or Oracle would be preferable.

Application: Submit a letter of application and Curriculum Vitae, with names and contact addresses (phone number and e-mail) of three referees. Send to: Personnel Office, AVRDC - The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 74199, Taiwan; e-mail: felisa@netra.avrdc.org.tw; fax: +886-6-583-0009 not later than 28 February 2007.

募款策劃室徵「秘書」乙名。

主要工作：協助部門主管草擬合約書、準備辦公室刊物、管理合約/計畫報告提送截止日期等資料庫、彙集報告資料、網頁搜尋資金機會資訊、翻譯文件（英譯中或中譯英）、支援部門行政業務及主管指派工作。
應徵資格：大學企業管理、外文相關科系畢業或相當之學歷。具三年相關經驗。細心、準確、有效率、能獨立作適當判斷。機智、可與國內、外籍合作夥伴及員工圓融溝通並可融入多元文化環境。中、英文說寫流利。熟悉應用電腦軟體（MS Office，精通 Excel, Access）、知 SAP 及 Oracle 軟體者更佳。

意者，請於 96 年 2 月 28 日前，將中、英文履歷表（附照片）及自傳、畢業證書影本及相關證照寄至：亞蔬—世界蔬菜中心，台南縣善化鎮郵政信箱 42 號，人事室收。

- Source: Felisa Wang/ASU

Vegetable of the Week

The Indians of Mexico and Central America used me as far back as 7000 B.C. The first European to "discover" me was Christopher Columbus in America in 1493 looking for an alternative spice. What he found was a small hot pod of me and within a century, my popularity had spread worldwide. More hints:

- People consume me in many forms: fresh fruit, pickled fruit, sauces, dried powder, tender leaves, and even roots
- Typically, the larger I am, the less hot I can be
- Vitamin C was first extracted and characterized from my fruit

- Capsaicin, a flavorless, odorless substance that acts on pain receptors in the mouth and throat gives me my pungency. Concentrated sprays of it are used as a defensive weapon, and creams are used to sooth sore muscles.
- My seeds are not the hottest parts of me, but rather the white membrane where my seeds are attached
- A country's name sounds like mine, but is spelled differently

Now, what am I?

- Source: CTO

Answer of last week's Vegetable of the Week: SQUASH