

## Coffee Consumption and Type 2 Diabetes Mellitus

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### <Summary>

Coffee consumption has been associated with decreased risk of type 2 diabetes mellitus, while the ingestion of caffeine or caffeinated coffee acutely deteriorates glucose tolerance. We investigated the effects of chronic drinking instant coffee on glucose and insulin concentrations during a 75-g oral glucose tolerance test. Overweight men with a mild to moderate elevation of fasting plasma glucose were randomly allocated to a 16-week consumption of 5 cups of caffeinated or decaffeinated instant coffee per day or no coffee. The caffeinated coffee group showed a decrease in 2-hour glucose concentrations while neither decaffeinated coffee nor non-coffee group showed such a change. Waist circumference decreased in the caffeinated coffee group, increased in the decaffeinated coffee group, and did not change in the non-coffee group. With adjustment for the change in waist circumference, caffeinated and decaffeinated coffee consumption were associated with a modest decrease in the post-load glucose levels. A trial on coffee drinking for a much longer period deserves a challenge.

## Long-Chain Polyunsaturated Fatty Acids (LCPUFA) and Age-Related Decline in Brain Function

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### <Summary>

Long-chain polyunsaturated fatty acids (LCPUFA) are included in essential fatty acids. Typical LCPUFAs, docosahexaenoic acid (DHA) and arachidonic acid (ARA), are the major fatty acids in the brain. These are components of breast milk and are important for infant nutrition. Now they are used for infant formula. It is well known that DHA is related to the brain function. Recently, it was reported that the ARA intake has been shown to ameliorate age-related decline of brain function in humans and rats. The ARA intake has also been shown to improve the fluidity of the cell membranes and increase the number of neural stem/progenitor cells. The levels of DHA and ARA in the body are affected by both biosynthesis in the body and direct dietary intake. The levels are affected also by a competitive relationship with one another. Therefore, the levels are intricately influenced by such factors as dietary habits and age-related decreases in biosynthesis. Recently, studies on young and elderly Japanese volunteers showed that the ARA composition in erythrocytes was lower in the elderly than in the young, even if the analysis was adjusted for higher DHA intake in Japanese elderly. Future studies will investigate changes in LCPUFA metabolism and changes in brain function with age.

## “Nutrition Labelling Systems – Using Data on Current Trends and Research from around the World to Predict the Future”

### 2. Consideration regarding the State of Consumer Awareness

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#### <Summary>

In order to ensure consumers' safety and their ability to independently and rationally choose foods offered for sale, the Food Labelling Bill was passed into Act on June 21st, 2013, and then the Food Labelling Act was promulgated on June 28th, 2013. Therefore, the existing voluntary Nutrition Labelling System may become a mandatory framework. The Consumer Affairs Agency has spent a lot of time discussing and investigating the issue of mandatory nutrition labelling. However, it is necessary for such labels to contribute to the improvement of consumers' health by enabling them to manage their nutritional status and dietary habits. Therefore we should not only urge food manufactures to use nutrition labelling on a wide range of food products, but also educate consumers as to how to put healthy dietary habits into practice by helping them understand nutrition labelling and how to make practical use of that information. Therefore, in this article, I would like to address these issues from a consumer's perspective, while presenting the current state of consumer awareness with regards to nutrition and nutrition labelling, and also comment on some related factors which impede consumers from utilization of nutrition labelling.

## ILSI CHP Japan Activities Report 2012

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### <Summary>

ILSI Japan CHP is working on the following 3 projects in the name of “Making people of the future healthier”.

- I. Project PAN: Physical Activity and Nutrition
- II. Project SWAN: Safe Water and Nutrition
- III. Project IDEA: Iron Deficiency Elimination Action

(Please refer <http://www.ilsijapan.org/English/ILSIJapan/COM/CHP.php> for details of each project up to now. The information will be updated at a later day.)

We have reported on the activities annually. Allow us to look back upon the progress of projects last year. For more information, the papers on each project will be followed from next issue.

## Conference on Healthy Aging in Asia

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### <Summary>

Asian countries are beginning to experience population aging at a rate that is more rapid than was the case in Europe or North America. Changes that took over 50 years to occur in the West are now being compressed into 20-30 years in Asia. As aging is occurring more rapidly than economic growth, these countries will have less time to prepare for aging.

At the same time, these countries are faced with looming chronic disease epidemics. For example, by 2030, it is projected that 320,000 Singaporeans over the age of 60 will be stricken with diabetes if present trends are not corrected. Therefore, strengthened nutrition of life have become an urgent priority.

On March 4-5, 2013, ILSI Southeast Asia Region (ILSI SEAR) together with its co-organizer, the Health Promotion Board, Singapore organized the Conference on Healthy Aging in Asia at the Grand Copthorne Waterfront in Singapore. The Commonwealth Scientific and Industrial Research Organization (CSIRO) of Australia also provided its support to the conference.

The theme of this conference was “Strategies to Meet Health and Lifestyle Challenges”, highlighting the Present current scientific findings on diet, nutrition, and longevity and also effective nutritional strategies and best practices to promote healthy aging. The conference was well attended by more than 200 participants representing academic, government and industry stakeholders from Asian countries.

## Report of the 45th Session of the Codex Committee on Food Additives

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### <Summary>

The Codex Committee on Food Additives held its 45th Session in Beijing, Peoples Republic of China from March 18th to 22nd, 2013. The Session was attended by 222 delegates representing 66 Member Countries and 33 Member organization and international organizations. The summary and conclusions of the Session are as follows;

#### **1. For adoption by the 36th session of the CAC at Step 8 or 5/8**

The Committee forwarded;

- Draft and proposed draft food additive provisions of the General Standards for Food Additives (GSFA)
- Proposed draft amendments to the INS
- Proposed draft Specifications for the identity and Purity of Food Additives

#### **2. For revocation by the 36th session of the CAC**

- Food Additive provisions of commodity standards
- Specifications for mineral oil (medium and low viscosity)

#### **3. For approval as a New work**

- Revision of the guidelines for the Single Evaluation of Food Additive Intakes (CAC/GL 3-1988)

#### **4. Other Matter**

##### (1) To the CAC and FAO/WHO

The Committee agreed:

- To a process to deal with food additives included in the GSFA with no corresponding monograph specifications
- To continue work on the alignment food additive provisions of commodity standards and relevant provisions of the GSFA with a view to finalize work on the meat standards
- To prepare a discussion paper on the use of additives in additives
- To forward the Priority List of Compounds Proposed for Evaluation to FAO and WHO for their follow-up
- To prepare a discussion paper on different options for the use of the outcomes of the prioritization exercise and other feasible steps to identify compounds for re-evaluation by JECFA

##### (2) To the other Committee and task Forces

The Committee:

- Informed on the progress the decision-tree approach for its work on the alignment of the food additives provisions of commodity standards and relevant provisions of the GSFA
- Endorsed the food additive provisions forwarded by the CCFPP, CCPFV, CCS and CCASIA
- Agreed to inform CCFO of the process for inclusion of compounds in the Priority List for JECFA evaluation.

## Report of the 7th Session of the Codex Committee on Contaminants in Foods

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### <Summary>

The Codex Committee on Contaminants in Foods (CCCF) held its 7th Session in Moscow, Russia from April 8th to 12th, 2013, at the kind invitation of the Government of the Russia. The Session was attended by 209 delegates representing 64 Member Countries, one Member Organization and 9 international organizations. The ILSI delegation led by the author was from ILSI Japan.

Mr. Martin Weijtens, Head of Unit, Department for Animal Supply Chain and Animal Welfare, Ministry of Economic Affairs, Agriculture and Innovation, the Netherlands, chaired the meeting.

Main items were “Maximum Levels for Lead in selected commodities and for Arsenic in Rice”, “Amendments to Codex General Standard for contaminants and Toxins in Food and Feed” and “Code of Practice for the prevention and reduction of mycotoxin contamination in cereals and cocoa”

### **Proposed draft standards and related texts for adoption**

The Committee agreed to forward:

- Proposed draft maximum levels for lead in fruits juices and nectars, ready-to-drink; canned fruits; and canned vegetables
- Proposed draft maximum levels for DON in raw cereal grains (wheat, maize and barley) and associated sampling plan; in flour, semolina, meal and flakes derived from wheat, maize or barley; and in cereal-based foods for infants and young children
- Proposed draft Code of practice for the prevention and reduction of ochratoxin A contamination in cocoa °Proposed draft Code of practice for the reduction of hydrocyanic acid in cassava and cassava products
- Maximum levels for hydrocyanic acid for cassava flour and gari (transfer form commodity standards to the GSCTFF) and consequential amendments to the Standards for Edible Cassava Flour, Gari, and Sweet Cassava.

### **Revocation of standards**

- The Committee agreed to recommend the revocation of the maximum levels for lead in the individual standards for canned fruits and canned vegetables

### **Discontinuation of work**

- The Committee agreed to inform the Commission on discontinuation of work on the revision of the guideline levels for radionuclides in the *General Standard for Contaminants and Toxins in Food and Feed* including development of guidance to facilitate the application and implementation of the GLs and on the establishment of maximum levels for hydrocyanic acid in cassava and cassava products

### **Matters of interest to the Codex Alimentarius Commission**

The Committee:

- agreed to retain the current maximum levels for lead for milks, cereals, and juices and nectars from berries and other small fruits, ready-to-drink and to inform the Commis-

sion accordingly

- agreed to resume work on maximum levels for arsenic in rice and rice products and on fumonisins in maize and maize products and to prepare revised proposals for comments and consideration by its next session
- agreed to redraft the draft Annex for the prevention and reduction of aflatoxins and ochratoxin A contamination in sorghum (Code of practice for the prevention and reduction of mycotoxin contamination in cereals) ; and the proposed draft Code of practice for weed control to prevent and reduce pyrrolizidine alkaloid contamination in food and feed for comments and consideration by its next session;
- agreed to continue discussion on editorial amendments to the GSCTFF
- agreed to develop discussion papers on methylmercury in fish; aflatoxins in cereals; and total aflatoxins in ready-to-eat peanuts and associated sampling plans for consideration by its next session;
- endorsed the Priority list of contaminants and naturally occurring toxicants for *JECFA evaluation* and agreed to re-convene the physical working group at its next session to review the Priority List .

#### **Matters referred to Codex committees and task forces**

*Committee on Methods of Analysis and Sampling (CCMAS)*

- The Committee agreed to request the advice of CCMAS on the appropriateness of the performance criteria for methods of analysis for DON to ensure consistency with the *Working Instructions for the Implementation of the Criteria Approach in Codex*.

#### **Matters of interest to Codex committees and task forces**

*Committee on Fats and Oils (CCFO)*

- The Committee will consider the transfer of provisions for halogenated solvents from the Standard for Table Olives and Pomace Oils into the General Standard for Contaminants and Toxins in Food and Feed at its next session
- The Committee agreed to consider the allocation of maximum levels for lead and arsenic for fish oils once the Standard for Fish Oils is finalized by CCFO including the question on whether the MLs should apply to total arsenic or inorganic arsenic



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Regularity Framework and Case Studies of Foods and Food Additives in India, Bangladesh, Nepal, and Sri Lanka

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<Summary>

In the Overseas Business Support Projects for Japanese Food Industry in East Asia funded by the Ministry of Agriculture, Forestry and Fisheries from FY2009 through FY2011, ILSI Japan has been commissioned the projects of “Investigations and Sharing Information of Commodity Food Standards and Methods of Analysis in East Asia”. The countries investigated for these projects were Codex, Korea, China, and Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam in ASEAN countries.

The FY2012 project aimed to further include India and the neighboring countries, Bangladesh, Nepal, and Sri Lanka to a maximum extent where fast-growing and emerging markets were expected, and to investigate regulatory framework on foods, commodity food standards and methods of analysis, and conditions for use of food additives. The debriefing conference of “Regularity Framework and Case Studies of Foods and Food Additives in India, Bangladesh, Nepal, and Sri Lanka” was held on February 22, 2013 in Tokyo to share the information of the results.

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The Great Progress in ILSI SEAR in 20 Years

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<Summary>

The 20th Anniversary and Annual Meeting of ILSI Southeast Asia Region (ILSI SEAR) was held on April 16 and 17, 2013 in the Hilton Singapore Hotel in Singapore. We have been collaborating with ILSI SEAR more than 10 years and observing their significant achievements and their increased importance. Taking an opportunity of my participation in the meeting, I briefly introduce the latest about ILSI SEAR.

## Lord Krebs Special Lecture and Panel Discussion “Food and Science – Towards Sustainability –“

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### <Summary>

Lord Krebs special lecture and panel discussion “Food and Science –Towards Sustainability–“was held on 13th March 2013 at Tetsumon-Kinen Auditorium, The University of Tokyo with over 220 attendances.

Lord Krebs lectured the human history of food and upcoming global problems: dearth and human population which will increase from 7 billion to 9 billion in 2050. In conclusion, Lord Krebs added we could overcome these problems with agricultural intensification, using all ‘tools’ we can use for our descendants who would live in the future.

In panel discussion, representatives from government, academia, media and company had keen discussions on 3 themes: theme 1st: global sustainability on food and science, theme 2nd: domestic sustainability on food, theme 3rd: food science and communication.