REPORT

ASEANFOODS Workshop 2011: INFOODS Training and ASEANFOODS Activities

18 - 21 July 2011

By

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We look forward to further collaboration with ILSI, INFOODS/FAO and most importantly the ASEANFOODS country members on the future food composition data activities.

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BACKGROUND

The Association of Southeast Asian Network of Food Data systems (ASEANFOODS) was established in 1986 with the first group of member countries comprising Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand. Vietnam joined the network in 1996 and in 2001 ASEANFOODS welcomed three new member countries: Cambodia, Myanmar and Laos. In order to coordinate the activities of the ASEAN member countries, the Institute of Nutrition, Mahidol University (INMU) was appointed as the Network's Regional Centre in 1986 and as the INFOODS Regional Database Centre in 1991. The main objective of the Network is to promote and support the development of national and regional food composition databases (FCDBs), and to ensure that they are maintained at a high standard and are accessible to users in ASEAN and other regions. The Network is dedicated to the ongoing contribution of knowledge towards improving food and nutritional security, and achieving sustainable diets.

Mission:

- ASEANFOODS member countries develop good quality national food composition databases with generation and compilation systems harmonised with INFOODS Guidelines;
- ASEANFOODS member countries jointly develop a regional food composition database and update it at appropriate intervals;
- ASEANFOODS Regional Centre, with the collaboration of member countries, strengthens laboratory capabilities and resources for food data systems, and internal and external quality controls by providing training at national and regional levels;
- ASEANFOODS Regional Centre supports related activities of member countries and INFOODS.

ASEANFOODS Activities (1986-2010)

Since 1986, the main activities of ASEANFOODS⁽¹⁻¹¹⁾ have been as follows:

- 1. Organisation of five ASEANFOODS Workshops. The main focus of each Workshop was to: update on the status of and activities on food composition data systems (1986); strengthen collaboration among member countries and identify problems and specific needs (1989); evaluate, modify and harmonise national food composition database development (1991); develop ASEAN Food Composition Database (1996); and develop the ASEAN Manual for Food Analysis (2002).
- 2. Strengthening the analytical performance of food analysis laboratories in ASEANFOODS member countries by organising laboratory performance studies (1986-2007), developing food reference materials (with reference values of nutrients) and organising training courses and workshops in collaboration with Asia Pacific Food Analysis Network (APFAN) and AusAID-Public Sector Linkages Program (AusAID-PSLP).
- 3. Development of the first ASEAN Food Composition Tables (2000)⁽¹¹⁾.
- 4. Organisation of the First International Graduate Course on the Production and Use of Food Composition Data in Nutrition Asia (FoodComp Course-Asia in 2002)⁽¹²⁾, in Thailand.
- 5. Organisation of the 8th International Food Database Conference (8-IFDC) in 2009⁽¹³⁾, in Thailand.

The last ASEANFOODS Workshop was organised in 2002. Since then each ASEANFOODS member country has continued working on revising and updating national food composition tables and undertaking related activities. The reports of these activities have yet to be disseminated. It is important to acknowledge that in the last ten years much new knowledge, technologies and information on food composition have been acquired. It was identified that the ASEAN FCT, which was published in 2000, should be revised and updated. The progress in developing national and regional food composition databases should be reviewed and procedures may need harmonisation. In addition, some country representatives have retired and have been replaced by young staff who have yet to be formally invited and officially designated as ASEANFOODS Country Coordinators and updated on INFOODS activities.

In view of the above, the ASEANFOODS Regional Centre (INMU) organised the ASEANFOODS Workshop in Thailand on 18 - 21 July 2011. This Workshop was financially supported by the International Life Sciences Institute (ILSI).

OBJECTIVES OF THE ASEANFOODS WORKSHOP 2011

The objectives of the Workshop were to:

- organise an INFOODS training course on 1) Identification of foods in ASEAN FCTs for biodiversity classification, 2) using the INFOODS database system for data generation and compilation;
- review activities in and information from each ASEANFOODS country;
- inform the new lead personnel in ASEANFOODS member countries on food composition database (FCDB) generation, compilation and use through presentations on international, regional and national activities and group work sharing experiences and information.
- formulate a strategic plan for future activities at national and regional levels.

WORKSHOP PARTICIPANTS

Fifteen participants – three from Malaysia, one from Myanmar, three from the Philippines, one from Singapore, one from Vietnam and six from Thailand (three representatives from the Ministry of Public Health and three from the Institute of Nutrition, Mahidol University) – and four resource persons and nine observers attended the workshop. National representatives from Indonesia and Cambodia could not attend the Workshop and we received no response was received from the previous representative from Brunei Darussalam. A list of participants, with their expertise and contact addresses is shown in **APPENDIX 1**.

WORKSHOP PROGRAMME

The Workshop was organised for four days, from 18 to 21 July 2011. It included two special lectures to describe the roles of FAO Regional Office and INFOODS and five lectures on data compilation, quality assurance for data generation and uses of food composition data. Other sessions included training and hand on practices on data compilation, country reports, discussions, and planning for national and ASEANFOODS future activities. The detailed programme of the Workshop is presented in **APPENDIX 2.**

SUMMARY OF THE ACTIVITIES

1. Training and hand-on practice

1.1 Identification of foods in ASEAN FCTs for biodiversity classification (14, 15)

Many foods for biodiversity are available in ASEAN countries. During the past few years FAO/INFOODS compiled available food composition data (FCD) from ASEANFOODS member countries for biodiversity grouping. However, some of the submitted data cannot be used because they did not meet the food composition indicators for biodiversity. The objective of the training was, therefore, to describe the indicators which, for common foods, include details on

variety/sub-species/cultivar/breed, preferably with the scientific name, and for wild/under utilised foods the genus/species and/or the local name, among other criteria. Both food types must contain at least one value for nutritional or other bioactive components. Practice in the selection of food items from several food groups in the ASEAN Food Composition Tables (FCTs) 2000 was undertaken.

The ASEANFOODS members have agreed to review food composition indicators for biodiversity in their present national FCTs for separate compilation according to the INFOODS/FAO Compilation Tool and subsequent submission to INFOODS (Dr. Ruth Charrondiere).

1.2 Food composition data compilation

Most ASEANFOODS members, except Singapore, have not had a specific data management programme for compilation of FCD. FAO/INFOODS developed a food composition database compilation tool^(16, 17) in Excel format for use in the absence of a food composition database management system. Training on compilation of new data from a published paper (Proximate and mineral composition of three Nigerian freshwater fishes. J. Sci. Food Agric. 1997, 75, 312-314) using the compilation tool was conducted.

The ASEANFOODS members agreed that the FAO/INFOODS Compilation Tool contains all the necessary information required for quality data compilation. It could be used as a model for future compilation of national FCD. It may not be applicable for previous and current FCDB because there is a number of missing information in the archival files. In addition, its programme has a limited number of cells (rows and columns) and this could be a drawback in applying it.

INFOODS recommended that regional and national members generate data on "starch and sugars" to obtain more accurately the amount of available carbohydrate. If "total CHO calculated by difference" continues to be used, Dr. Ruth Charrondiere (INFOODS) suggested that "available CHO" be calculated with "exclusion of dietary fibre <CHOAVLDF(g)(standardised)>". Participants from the Philippines and Thailand informed the group that for nutrition labeling, based on the U.S. FDA and the Thai FDA regulations, the "total CHO calculated by difference (as CHOCDF, includes dietary fibre)" has to be used.

Detailed information on food composition data compilation can be self-studied using "The Food Composition Study Guide 2011" in INFOODS website⁽¹⁸⁾.

2. Country reports

Food composition data activities from 2002 to 2011 were reported by national Coordinators from six countries, together with some problems and needs as well as planned future activities. Myanmar is one new member country, joining an ASEANFOODS Workshop for the first time. A summary of some highlights are presented below and in **Table 1**. The summary is based on the information presented in the national reports and the survey data for setting Norm-of-Task.

2.1 National Technical Working Group (TWG)

A TWG for updating the national Food Composition Database and coordinating activities on food composition database system was formed in Malaysia in 2010. The members represent two major institutes, the Institute of Public Health providing the Chairperson and the Institute of Medical Research providing the secretariat, and several universities and research Institutes. Collation and updating of the Malaysian Food Composition Database has been identified as one of the seven research priority areas for nutrition, under the 10th Malaysia Plan (2011-2015). The working group harmonised the protocol for sampling and the methods of analysis used among the participating institutions in updating the Malaysian FCDB.

ASEANFOODS strongly recommended that other member countries form national TWGs for FCDB activities, as done by Malaysia.

2.2 Features of national FCTs

Since 2002, only Singapore (2003) and Vietnam (2007) have published new FCTs. Other countries continue to use old versions which were published during the period 1997-1999. They are revising, updating and planned to have new versions of their FCDB in 2013. For Myanmar, two versions of FCTs were published, the first one in 1994 and a revised one in 2002. Some food group names vary in the different national FCTs and the number of food groups varies from 13 for Myanmar to 17 for the Philippines.

All FCDBs contain data on proximate composition, some vitamins as well as macro- and traceelements. Myanmar FCDB does not have data on ash and dietary fibre contents. FCDBs of Malaysia and Vietnam contain data on crude fibre. Some of the food items in the Philippines FCDB have data on both (dietary fibre data were derived from local literature and foreign FCTs). Dietary fibre data will be generated and be included in the new versions of these **FCDBs.** Only Singapore obtained carbohydrate data from starch + sugars; others – Myanmar, the Philippines, Thailand - calculated CHO data by difference, which includes dietary fibre <CHOCDF>, whereas. Malaysia and Vietnam (their FCDBs contain crude fibre) calculated CHO by difference but excluded crude fibre. These differences need to be resolved. Malaysia, Singapore, Thailand and Vietnam FCDBs contain some data on fatty acids, cholesterol and sugars. Malaysia, Thailand (data from Nutrition Division, Ministry of Public Heath) and Vietnam FCDs have some data on amino acids. The number of nutrients/components in each database varies from 13 (Myanmar) to 85 (Vietnam). Not all the FCDs of Myanmar, Singapore and Vietnam are derived from analysis; some data are borrowed Those of Malaysia, Thailand and most (except dietary fibre) of the or calculated data. Philippines are directly analysed data, except for energy, protein (based on total nitrogen), carbohydrate and retinol equivalent, which were derived using conversion factors.

2.3 Methods of food analysis

Methods for nutrient analysis used among the member countries are standard methods or inhouse methods based on standard or published methods. The "ASEAN Manual of Food Analysis", the procedures of which were documented at the ASEANFOODS Workshop in 2002, was prepared as a hard copy. Copies of the Manual were distributed to country representatives at the Workshop.

Each member agreed to review the book and send comments to the Regional Coordinator at INMU for further revising and updating of the book. See more detail in Session 3.3, 3)

2.4 Data compilation tool

Most countries use Microsoft Excel as the data compilation tool; Vietnam uses Microsoft Access.

ASEANFOODS member countries will try out the INFOODS/FAO Compilation Tool and possibly use it as template or model for their own FCDB, modifying where need arises, and communicating the same to INFOODS for possible revision of the Tool by INFOODS.

2.5 FCD/FCT quality

All member countries expressed concern about the quality of their FCD/FCT. They evaluate the quality using five criteria: sampling plan, number of samples, sample handling, analytical methods, and quality control system.

Dr. Ruth Charrondiere (INFOODS/FAO) suggested the inclusion of two more parameters to aid judgment. They are food item identification (descriptors/qualifiers) and components (more accurate label for chemical speciation or fractions, e.g. "available" vs. "total carbohydrate").

2.6 Available FCT/FCDB

FCDs in hard copies (as FCTs) are available for all member countries. On-line electronic FCDBs are available for Malaysia (Nutriweb), Singapore (Food Info Search) and Thailand (as pdf file, from Ministry of Public Health).

2.7 Database management programme

The data management programme is available in Malaysia (NutriCal), Singapore (FOCOS) and Thailand (INMUCAL).

Country	On-line electronic database: website address				
Malaysia (Nutriweb)	www.nutriweb.org.my				
Singapore	http://www.hpb.gov.sg/hpb/ere/ere070101.asp				
Thailand:	Nutritive values of Thai foods				
Ministry of Public Health http://nutrition.anamai.moph.go.th/FoodTable/Html/frame.h					
	2. Amino acids content of Thai foods				
	http://nutrition.anamai.moph.go.th/temp/files/book/ชนิดและปริมาณกรดอมิโน				
	<u>ในอาหารไทย.pdf</u>				
	3. Fatty acids Composition and Cholesterol in Thai foods http://nutrition.anamai.moph.go.th/temp/files/book/กรดไขมันและ				
	คอเลสเตอรอลในอาหารไทย.pdf				

3. Strategic plan for ASEANFOODS activities 2011 to 2013

3.1 Validation of ASEANFOODS' Mission

Members agreed at the Workshop to review the mission of ASEANFOODS as presented on page 1 and will send suggestions/comments to the ASEANFOODS Coordinator before 15 November 2011.

3.2 Revising and updating the ASEAN food composition database

- Members agreed to review, revise and update their national FCTs. The next Workshop on development of the new version of ASEAN FCD will be in <u>May 2013</u>.
 A pre- Workshop meeting of the key persons on FCD may be needed to develop and harmonise guidelines, criteria and related matters.
- 2) Members decided to have hard copies of the ASEAN FCTs and explore the possibility of an online FCTs. The cost of printing the ASEAN FCTs must be estimated and included in the budget of any funding proposal to be drafted for ASEANFOODS. The online system should be able to provide different access rights, and an appropriate charging model for data download should also be looked into.
- 3) The format of the ASEAN FCTs:

The tables should include:

- % Edible Portion
- Alternate name can be presented in an Appendix
- Food groups: at present there are some differences in food grouping among the national FCTs.

Mr. Dung H Le (Country Coordinator from Vietnam) agreed to compile and review the food groups from each country report and will propose a set of

harmonised food groups (and sub-groups) to other members for consideration, suggestions and comments by <u>15 November 2011</u>. After revision the list, the final version should be available for use by <u>30 January 2012</u>. The approved list will be used as the food groups (and sub-groups) in the new version of the ASEAN FCTs.

- Food code: for the time being, the alphanumeric system which is similar to the current version will be used.
- Nutrients: proximate composition, minerals and vitamins are a must. CHO should be available carbohydrate/sum of starch and sugars. However, use of available CHO excluding dietary fibre <CHOAVLDF(g)(standardised)> was recommended by INFOODS/FAO. There should be separate tables for nutrients for which data are incomplete (e.g. iodine, folate)
- 4) Database evaluation: a guideline or protocol for data evaluation before compilation will be prepared by Ms. Ennata M. Avena (Country Coordinator from Philippines) and Mr. Dung Le (Country Coordinator from Vietnam). See more detail in **Section 3.3.5** below.

3.3 Developing FCD documents for harmonisation

 Manual with guidelines on sampling, sampling plans, sample preparation: Ms. Rusidah Selamat, (Country Coordinator from Malaysia) agreed to modify the similar document developed by the National Technical Working Group of Malaysian FCD and prepare a draft protocol to be used by ASEANFOODS members.

The draft should be submitted to member countries for consideration and comment by <u>before 15 December 2011</u>. After revising the document, the final version to be used for ASEANFOODS will be prepared and finalised by <u>15 March</u> 2012.

2) Protocol for photographing foods: Assist. Prof. Uraiporn Chittchang from INMU will prepare a draft protocol for photography.

The draft should be submitted to member countries for consideration and comment <u>before 15 November 2011</u>. The comments should be submitted to the ASEANFOODS Regional Coordinator (INMU) by <u>15 December 2011</u>, after which the final version will be prepared and be available for use among ASEANFOODS member countries by <u>30 January 2012</u>.

3) ASEANFOODS Manual for Food Analysis:

If there are major changes on the present Manual, a new version of the manual will be prepared, otherwise supplements will be issued. Dr. Kunchit Judprasong from Thailand together with Mr. Dung Le from Vietnam, will take major responsibility for editing the revised manual. If possible, the new version, renamed as the "ASEANFOODS Manual for Food Analysis", will be distributed at the ASEANFOODS Workshop in 2013.

It was agreed at the Workshop that all participants of this Workshop (and those who developed the Manual in the ASEANFOODS Workshop 2002 – proposed by Dr. Prapasri Puwastien) will review the ASEAN Manual for Food Analysis provided in this Workshop and send their comments by 30 March 2012 to INMU. The submitted comments will be reviewed by an editorial team with Dr. Kunchit Judprasong (TH) and Mr. Dung Le (VN) being the majors editors. The new edition of the Manual should be available by 30 August 2012.

4) Quality control system: Every laboratory under ASEANFOODS has the ultimate goal to achieve ISO 17025 accreditation.

A document on practical approaches and criteria for internal and external quality control systems will be prepared by the Country Co-ordinators of Thailand (Drs. Prapasri Puwastien and Kunchit Judprasong). The first draft should be available

by <u>30 June 2012</u>, then submit to be reviewed by other members. The final version should be available for use in September 2012.

5) Database evaluation:

The following guidelines, protocols and criteria will be prepared

- Quality assessment of new data to be included in the archival file (Ms. Ennata M. Avena, PH)
- Quality assessment of the user FCDB (Mr. Dung Le, VN)

It was suggested by INFOODS to consider EuroFIR documents as guidelines for preparation of ASEANFOODS documents.

The documents should be available for comments by other members on <u>15 March 2012</u>. The comments should be submitted for finalisation by <u>15 April 2012</u>. The final version should be available by <u>31 May 2012</u>.

6) Online FCD and promotion of data usage: Mr. Meng Thiam Lim, (Country Coordinator from Singapore) agreed to prepare a proposal on approaches to an online ASEANFOODS database. The participants also requested Mr. Lim to establish recommendations on promoting the use of the ASEAN FCDs.

The documents are targeted to be ready for comments by other members in <u>January 2012</u>, revised and finalised by <u>30 April 2012</u>.

7) On-line Manual for Food Analysis:

Members agreed that the pdf version of the present Manual for Food Analysis should be uploaded online.

It is now available at: http://www.inmu.mahidol.ac.th/aseanfoods/Activities.htm

4. ASEANFOODS Proposal submitted to FAO-TCP Facility (TCPF)

A short proposal on updating ASEAN food composition database was prepared and submitted to Technical Cooperation Programme Facility (TCPF). The proposed activity is to organise a workshop in 2013 to develop an updated ASEAN FCT by reviewing, compiling and evaluating national reference database of ASEANFOODS member countries. The developed ASEAN FCT will serve the needs of users in many areas of food, nutrition, health and trade which include the areas of research, dietary assessment, dietary guidelines, and nutrition labeling. It will also contribute to nutritional security in the ASEAN region.

5. Other aspects

5.1 ASEANFOODS Logo

Since the logo of ASEAN may not be used for ASEANFOODS, at the previous ASEANFOODS workshops in 2002, there was an attempt to design a logo for ASEANFOODS. The Coordinator encouraged the members at the Workshop to send some ideas for an ASEANFOODS logo.

At present, there are several proposed logos as shown below. The participants are requested to provide comments, edit or propose a new design and submit them to INMU before 15 November 2011. A final logo should be available by 30 November 2011 and will be used on future documents and occasions.











5.2 ASEANFOODS Regional Coordinator

In 1986, the Director of the Institute of Nutrition, Mahidol Universty, the ASEANFOODS Regional Centre, was appointed by the country members to be the ASEANFOODS Regional Coordinator, with Dr. Prapasri Puwastien being the Technical Coordinator until 2003. From 2003 onwards, Dr. Prapasri Puwastien was designated by INFOODS/FAO to be the Regional Coordinator of ASEANFOODS. During the current Workshop, after closed discussion, all countries agreed that Dr Prapasri Puwastien and the INMU team should continue to be the ASEANFOODS Coordinator until an appropriate successor has been determined.

Dr. Prapasri agreed to continue being the ASEANFOODS Regional Coordinator until 2013 and at the ASEANFOODS Workshop in 2013, a new ASEANFOODS Coordinator will be selected. She proposed that the new Coordinator should come from an ASEAN country other than Thailand.

5.3 ASEANFOODS Country Coordinators

The national Coordinators of ASEANFOODS would like to have an official appointment letter from INFOODS to the Head of the Department or the Director of the Institute.

Dr. Ruth Charrondiere, INFOODS Coordinator, agreed to process the document or organisation to which they belong.

5.4 Proposed work plan of INFOODS for 2011 to 2013

During the Workshop, Dr Ruth Charrondiere, the INFOODS Coordinator, presented the proposed work plan of INFOODS for 2011 to 2013 and requested comments. Each item was discussed thoroughly. Some agreed commitments were included in the modified document which was prepared by INFOODS, as shown in **APPENDIX 3**. The main commitments among ASEANFOODS and INFOODS are as follows.

- 1) Data Centres and INFOODS secretariat
 - ASEANFOODS and country members will develop three-year plans of action (as shown in this Report)
 - Annual or biannual reports may be submitted by ASEANFOODS to INFOODS to be published at INFOODS website, and at the regional data centre websites.

2) Standards

- In collaboration with all INFOODS members and EuroFIR, INFOODS tagnames will be updated. ASEANFOODS proposed 2 contact persons: Dr. Kunchit Judprasong (TH) and Mr. Dung Le (VN) for this activity.
- Periodically, INFOODS will provide comments on relevant CODEX and other standards to ensure harmony between international standards: Dr. Aida Aguinaldo, (PH) a consultant of ASEANFOODS, volunteered to draft a paper on aspects of harmonising international standards which relate to food composition data system and will submit to INFOODS in 2012.
- 3) Food Composition tables/databases
 - ASEANFOODS members will submit Food Composition Database to FAO/INFOODS to update the Biodiversity database annually.
 - ASEANFOODS members will collaborate with INFOODS to develop, publish and update regularly the Food Composition Database containing solely analytical data.
 - ASEANFOODS will collaborate with INFOODS to develop and publish a fish user database.

- INFOODS intends to develop a database on bioavailability of minerals and vitamins: Dr. Prapasri Puwastien, ASEANFOODS Regional Coordinator, volunteered to make the first draft of a database format.
- INFOODS intends to publish a Manual on Nutrient Analysis. ASEANFOODS
 published its Manual in 2011 in printed form and in the ASEANFOODS website.
 The Manual will be reviewed and updated; a new version is expected to be available in 2013.

FINAL NOTE

Detailed information on the activities at the ASEANFOODS Workshop in 2002 and at the last Workshop in 2011, including the presentations, pictures of activities and the reports, are available at http://www.inmu.mahidol.ac.th/aseanfoods/Activities.htm

 Table 1. Current status (2011) of food composition data system in ASEANFOODS member countries

Status	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
FCD: current version	1997	2002	1997	2003 (hardcopy)	1999	2007
Expected year for new FCD	2013	2013	2016	2012/13	2013	-
Source of data:	analysed/calculated	analysed/borrowed	analysed/calculated	analysed/borrowed	analysed/calculated	analysed/borrowed
(analysed/borrowed/calculated)		/calculated	Borrowed (DF)	/calculated		/calculated
Number of food groups	14 (Raw) and 7 (cooked)	13	17	15	16	14
Number of food items (total)	783	770	1541	3500 (borrowed and analysed)	1050	526
Number of nutrients	19	13	17	24 (core)	24	85
Nutrients included (tick, some specify) - Proximate	water, protein, fat	water, protein, fat	water, protein, fat	water, protein, fat	water, protein, fat,	water, protein,fat,
- i Toximate	ash, crude fiber	ash (analysed but	ash, CF/dietary			-
	(CF)	no record)	fibre	dietary fibre	ash, dietary fibre	sugars, ash, crude fibre
Calculation of CHO by difference =100-(water+prot+fat+ash)>1 =100-(water+prot+fat+CF+ash)>2	2	1	1 <chocdf></chocdf>	sum of starch + sugar (analysed data)	1 <chocdf></chocdf>	2
- Minerals	Ca, P, Fe, Na, K,	Ca, P, Fe	Ca, P, Fe, Na, K,	Ca, P, Fe, Na, K,	Ca, P, Fe, Na, K, Cu,	Ca, Fe, Mg, Mn, P,
	Cu, Zn, Mg		Cu, Zn, Mg, Mn.I	Zn, Se	Zn, Mg, Se	K, Na, Zn, Cu, Se
- Water-soluble vitamins	vit C, B1, B2, B3	vit C, B1, B2, B3	vit C, B1, B2, B3	vit C, B1, B2	vit C, B1, B2, B3	vit C, B1, B2, B3, B5,
						B6, folic, biotin, B12
- Fat-soluble vitamins	all, except vit K	Retinol, β - carotene, vit A RE	Retinol, β -carotene, vit A RE	Retinol, β-carotene, vit A RE	Retinol, <i>β</i> -carotene, vit A RE	vit. A, D, E, K
- Fatty acids	√ (some)	VILA KE	VILARE	VILARE	√ (INMU and MOPH)	٦/
- Cholesterol	√ (some)			√	√ (INMU and MOPH)	√
- Sugars	√ (some)			\ \ \ \ \ \	√ (INMO and MOFT)	<u> </u>
- Amino acids	√ (some)			V	√ (MOPH)	√ (18 amino acids)
- Others (specify)	(Some)			starch	Iodine (MOPH)	Phytosterols, Carotenoids
Method of analyses (Std/in-house/published method)	Std/published with modified	Std	Std/published with modifications	Std/in-house (analysis by external lab)	Std/in-house	Std/in-house
Database compilation tool	7	Excel	Excel	Excel	Excel	Access, Excel
Database Compilation tool	· ·	EXCEI	EXCEI		EXCEI	MUUCSS, EXUEI
Database Management System	NutriCal			FOCOS (System: Oracle DB and Net)	INMUCAL	up coming
Database in Website	Nutriweb			Food Info Search	pdf (MOPH)	up coming

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APPENDIX 1.

List of participants, addresses, and areas of expertise

APPENDIX 1. List of participants, areas of expertise, contact address

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List of participants, areas of expertise, contact address (continued)

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Observers

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4. Jintana Yhang-aree, Assist. Prof. PhD. FCD User	Institute of Nutrition, Mahidol University Community Nutrition unit	
5. Pattanee Winichagoon Assoc. Prof. PhD. FCD User	Institute of Nutrition, Mahidol University Community Nutrition unit	
6. Orapin Banjong, Ms. FCD compiler and user	Institute of Nutrition, Mahidol University Community Nutrition Unit	
7. Thitiporn Chanawangsa, Ms. FCD user	Institute of Nutrition, Mahidol University Community Nutrition Unit	
8. Nipa Rojrungvasinkul, Assist. Prof. PhD. FCD user	Institute of Nutrition, Mahidol University Biostatistics Unit	
9. Sinee Chotiboriboon, Ms FCD user	Institute of Nutrition, Mahidol University Nutrition and Happiness Promotion Unit	

APPENDIX 2.

Programme for ASEANFOODS Workshop

APPENDIX 2.

Programme for ASEANFOODS Workshop 18-21 July 2011 Institute of Nutrition, Mahidol University

Date and time	Topic	Lecturer/moderator				
18 July 2011	•	20014101711104014101				
08.30-09.15	Registration Opening and Welcome	Dr. Visith Chavasit INMU Director				
	Special lecture 1 : Role of FAO Regional Office to ASEANFOODS	Ms. Shashi Sareen, FAO-RAP, Thailand				
09.15-09.30	Participants: Introduction					
09.30-10.00	Special lecture 2: Roles of INFOODS on activities of regional and national data centres and INFOODS' expectation	Dr. Ruth Charrondiere, INFOODS Coordinator, FAO, Rome				
10.00-10.30	Activities of ASEANFOODS: 1986-present	Dr. Prapasri Puwastien ASEANFOODS Coordinator, Thailand				
10.30-11.00	Morning break					
11.00-12.00 (20 min each)	Country report 1: current status on food composition data system (generation compilation and use), problems and needs	Myanmar, Malaysia, Philippines				
12.00-13.00	Lunch					
13.00-13.45	Visiting INMU facilities – Food Chemistry					
13.45-14.45	Country report 1: current status on food	Singapore, Thailand,				
(20 min each)	composition data system (continued)	Vietnam				
14.45-15.00	Afternoon break					
15.00-15.45	Lecture 1: ISO 17025: potential application in food composition data generation	Dr. Aida Aguinaldo				
15.45-16.30 Lecture 2: Internal and external quality control system		Dr. Kunchit Judprasong				
Date and time 19 July 2011	Topic	Lecturer/moderator				
08.30-10.00	Lecture 3: Updating information and activities on food biodiversity and sustainability related to food composition database	Dr. Ruth Charrondiere				
	Demonstration and practice on identification of food items in ASEAN FCTs which are counted towards food biodiversity	Dr. Ruth Charrondiere Participants: group working				
10.00-10.30	Morning break					
10.30-12.00	Training and practice on reviewing and compilation of new data using INFOODS/ FAO Compilation Tool	Dr. Ruth Charrondiere Participants				
12.00-13.00	Lunch					
13.00-14.00	Mahidol University: Campus tour					
14.00-15.00	Country report 2: Current practice: evaluation process of a data set to develop a user database	Malaysia, Philippines Singapore,				
15.00-15.30	Afternoon break					
15.30-16.10	Country report 2: Current practice: evaluation process of a data set to develop a user database	Thailand, Vietnam				
16.10-17.00	Presentation: INFOODS/FAO food composition training modules	Ruth Charrondiere				

Programme for ASEANFOODS Workshop (continued)

Date and time	Topic	Lecturer/moderator
20 July 2011	•	
08.30-09.00	Lecture 4. Use of nutrient data in development of food-based dietary guideline (FBDG) and front-of-pack (F-O-P)	Dr. Prapaisri Sirichakwal
09.00-09.30	Lecture 5: Use of FCD for evaluation of nutrient intakes (INMUCAL) and for school lunch programme	Dr. Uraiporn Chitchang
9.30-10.30	Setting up "Norm of Task" on food composition data activities among ASEANFOODS members	Group discussion
10.30-11.00	Morning break	
11.00-12.30	Strategic plan of national activities for upgrading/improvement of food composition data system Potential institutes for training and consultation on technical and management systems	Group discussion
12.30-13.30	Lunch	
13.30-15.00	ASEANFOODS regional activities: 2011- 2013 - Validation of ASEANFOODS' Mission - Revising and updating ASEAN food composition database: content, format of new FCD, foods and nutrients included, data evaluation, etc - FCD Documents: sampling plan, photograph, methods of analysis and updated version, quality control system, database development (data reviewing, compilation, scrutinisation, and evaluation) - On-line food composition database - On-line Manual of food analysis - Training/workshop - Funding agencies	Group discussion and agreement Consultant: INFOODS/FAO Dr. Ruth Charrondiere
15.00-15.30	Afternoon break	
1530-17.00	Scope of a proposal on ASEANFOODS activities (2011-2013	Small group working Consultant: INFOODS/FAO Dr. Ruth Charrondiere
18.00-20.00	ASEANFOODS Dinner	

Programme for ASEANFOODS Workshop (continued)

Date and time 21 July 2011	Торіс	Lecturer/moderator
08.30 - 10.00	Preparation of a proposal on ASEANFOODS activities (2011-2013)	Group discussion Consultant: INFOODS/FAO Dr. Ruth Charrondiere
10.00-10.30	Morning break	
10.30-12.00	Proposed work plan of INFOODS for 2011 to 2013 INFOODS Website	Dr. Ruth Charrondiere
12.00-12.30	Other aspects: - The 9 th International Food Data Conference - FoodComp course in ASEAN/Asia and at Wageningen - ASEANFOODS Website – database, ASEAN Manual of Food Analysis in - ASEANFOODS Logo - A copyright	Group discussion
12.30-13.45 13.45-16.00	Lunch Summary and Discussion: proposal on	Participants from
	ASEANFOODS activities (2011-2013)	Myanmar, the Philippines, Singapore, Thailand, Vietnam

APPENDIX 3.

Proposed work plan of INFOODS for 2011 to 2013

Appendix 3

Proposed work plan of INFOODS for 2011 to 2013

Prepared by Ruth Charrondiere, INFOODS coordinator since June 2011

To be discussed and agreed to at regional INFOODS meetings and at INFOODS task Force meeting at 9th IFDC in Norwich, UK

Objective

· Increase INFOODS activities and visibility

Assumptions

- INFOODS can only be as active as members are willing and able to contribute
- FAO has very limited funds available and can finance only very few activities in the regions, mostly through TCP (FAO Technical Cooperation Programme) for which the countries need to prepare a proposal
- Funding needs to be sought from other than FAO sources
- Collaboration as IUNS task force will increase

Data Centres and INFOODS secretariat

- FAO to support at least one regional data centre meeting per year (in 2011 two meeting are planned: ASEANFOODS meeting in July and AFROFOODS meeting in September), preferable in conjunction with existing conferences or meetings to make them cost-effective
- Each regional and sub-regional data centre develops an annual or biannual plan of action (also over e-mail, skype or telephone)
- Annual or biannual reports should be published at INFOODS website, and at the regional data centre websites if existing
- Give regular input into the development and update of INFOODS standards, databases and websites (e.g. on tables and databases or data centre coordinators)
- Each data centre to present a document with the defined roles of national and regional data centre coordinators, election process and duration of terms (if this is desired by data centres). This documents should be put on the INFOODS and regional data centre web pages
- Common reflection on how to assure funding for food composition, biodiversity and sustainable diets at national, regional and international level
- Biennial Regional Data Centre meetings of coordinators at IDFCs
- Short biennial report to IUNS on global activities and progress of INFOODS and present a more comprehensive report at ICNs (in 2012 in Granada)

Standards

- In collaboration with all INFOODS members and EuroFIR, update INFOODS tagnames
- In collaboration with all INFOODS members, develop
 - guidelines for food matching (done in July 2011)
 - guidelines for conversions (in progress)
 - guidelines for selection of most appropriate food composition sources (in progress)
 - Sampling guidelines (if possible)
- Periodically, INFOODS to provide comments on relevant CODEX and other standards to ensure harmony between international standards
- Enlarge keyfood approach to biodiversity (if possible)

Capacity development

 INFOODS members to collaborate with universities to introduce food composition and biodiversity into the curricula of nutritionists, food scientists etc (e.g. by using the Food Composition Study Guide)

- FAO to publish in 2011 the French and Spanish translation of the Food Composition Study Guide (done in July 2011)
- FAO to publish in 2011 the second revised version of the Food Composition Study Guide in English (done in July 2011)
- FAO will offer two to three six-months-on-the-job-training opportunities on the compilation of a national/regional food composition table/database in Rome through e.g. the special programme (needs co-funding from national institutes)

Food Composition tables/databases

- Publish at least one new national or regional food composition table/database per year with FAO/INFOODS technical support (in 2011 FC T published for Armenia and West African Food Composition Table to be published)
- In collaboration with all INFOODS members, update annually the FAO/INFOODS Food Composition Database for Biodiversity
- In collaboration with all INFOODS members, develop, publish and update regularly a FAO/INFOODS Database on Amino Acid Composition and Protein Quality
- In collaboration with all INFOODS members, develop, publish and update regularly a FAO/INFOODS Food Composition Database containing solely analytical data
- In collaboration with all INFOODS members develop and publish a fish user database
- FAO has a volunteer programme (no financial compensation) and an internship programme (700 USD/month) which can be used to populate databases with analytical data
- Develop a database on bioavailability (Prapasri volunteered to make first draft of format)
- Develop a database on laboratories carrying out nutrient analysis (with QA measures)
- Publish a density database (done in July 2011)
- Publish a Manual on Nutrient Analysis (done by ASEANFOODS in 2011)

Advocacy at international conferences and meetings

- INFOODS members to present posters and oral presentations or to organize symposiums on food composition, food biodiversity and sustainable diets
- Publish success stories on the INFOODS and regional data centre websites, if existing
- Identify an 'Ambassador' for INFOODS
- Produce a brochure and or video on INFOODS and importance of food composition

Nutrition Indicators for Biodiversity

- In collaboration with all INFOODS members, FAO will revise the templates for reporting on the nutrition indicator for biodiversity on food composition
- In collaboration with all INFOODS members, FAO will report annually on the nutrition indicator for biodiversity on food composition

Analytical capacities for food composition

 Assist in developing TCPs, sometimes in conjunction with food safety or food control, to strengthen analytical capacities on food composition

Funding

Together with INFOODS coordinators write a grant proposal for INFOODS

APPENDIX 4.

Work to be done and time schedule

APPENDIX 4. Work to be done and time schedule

Na	Dagaag(a) yaan aasibla	Activity				Time schedule (Month and Date)									
No.	Person(s) responsible	Page # in ASEANFOODS Report		Oct11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12
		Review the mission of	First draft	6-Oct Report											
1	All participanrs of the ASEANFOODS WS	ASEANFOODS (page 1),	Distribute for comment	7-Oct											
	ASEANFOODS WS	2. ASEANFOODS Logo (page 7)	Submit to ASEANFOODS Coordinator		15-Nov.										
			Final version		30-Nov										
		Compile and review the food	First draft		15-Nov.										
2	Mr. Dung H Le (VN)	groups from each country report and to propose a set of	Distribute for comment		15-Nov										
-	Will During TT EG (VTV)	harmonised food groups and sub-	Submit to ASEANFOODS Coordinator			15-Dec									
		food groups. (page 5)	Final version				30-Jan								
			First draft		15-Nov.										
3	Assist. Prof. Uraiporn	Protocol for photographing	Distribute for comment		15-Nov										
3	Chittchang (INMU, TH)	foods (page 6)	Submit to ASEANFOODS Coordinator			15-Dec									
			Final version				30-Jan								
		Manual with guidelines on	First draft			15-Dec									
4	Ms. Rusidah Selamat,	sampling, sampling plans, sample preparation: Ms. Rusidah	Distribute for comment			15-Dec									
7	(MY)	Selamat, (Country Coordinator from Malaysia) (page 6)	Submit to ASEANFOODS Coordinator					15-Feb							
			Final version						15-Mar						
	Mr. Meng Thiam Lim	Proposal on approaches to an online ASEANFOODS database. (page 6)	First draft				30-Jan								
5			Distribute for comment				30-Jan								
J			Submit to ASEANFOODS Coordinator						30-Mar						
			Final version							30-Apr					
			First draft						15-Mar						
6	Ms. Ennata M. Avena,	vena , Guidelines, protocols and criteria: quality assessment of new data (page 6)	Distribute for comment						15-Mar						
O	(PH)		Submit to ASEANFOODS Coordinator							15-Apr					
			Final version								31-May				
		Guidelines, protocols and	First draft						15-Mar						
7	Mr. Dung Le (VN)	criteria: quality assessment of	Distribute for comment						15-Mar						
'	IVII. Durig Le (VIV)	user food composition data	Submit to ASEANFOODS Coordinator							15-Apr					
		(page 6)	Final version								31-May				
			First edition	(21-July)											
8	Editors: Dr. Kunshit	Review the ASEAN Manual of Food Analysis book and send	Submit to ASEANFOODS Coordinator						30-Mar.						
J	(TH), Mr. Dung Le (VN)	comments to the Regional Coordinator at INMU (page 6)	Review, revise and edit							1-A	pril to 30-	June			
			Final version											30-Aug	
	Des Desses	Practical approaches and	First draft									30-Jun			
9	Drs. Prapasri Puwastien; Kunchit	criteria for internal and external	Distribute for comment									30-Jun			
J	Judprason (TH)	quality control systems (page 6)	Submit to ASEANFOODS Coordinator											30-Aug	
		0)	Final version												30-Sep