# MALAYSIA TEE E. SIONG

## DESCRIPTION

Malaysia is situated in south-central South East Asia and is separated into two regions, peninsular Malaysia, and Sabah and Sarawak in the northern portion of the island of Borneo. The total population is 12 million and the total area is 330,000 square kilometres.

## FOODS PRODUCED, EXPORTED AND IMPORTED

The major food commodities exported from Malaysia for the year 1982 were palm oil, palm kernel oil, cocoa beans, fresh and frozen prawns, coconut oil, pepper and canned pineapple juice.

Imported foods included rice, raw sugar, maize, milk and cream, wheat, coffee, onions, live animals, butter, frozen beef and assorted other foods.

### FOOD COMPOSITION TABLES AND FOOD ANALYSES

The Institute of Medical Research initiated the Malaysian Food Composition Table Project in 1980, and the IMR is currently leading the project and collaborating with the Faculty of Food Science and Technology of the Agriculture University of Malaysia (UPM) and the Food Technology Division of the Malaysian Agricultural Research and Development Institute (MARDI). An understanding was arrived at whereby these three institutions would tackle the analyses of certain food groups using the same methodologies, carry out analyses more systematically, and with more thought toward the quality of results. This project is funded by the ASEAN Protein Project until the middle of 1985.

Most of the funds obtained from the ASEAN Protein Project were

used for the purchase of laboratory equipment, such as UV-VIS and atomic-absorption spectrophotometers. Spectrofluorometers, HPLC and auto-analysers are less common in our laboratories. Funds have just been allocated to MARDI under the new ASEAN Food Habits Project, commencing next year, to carry out analysis of fermented foods.

#### USERS AND USES OF FOOD COMPOSITION TABLES

Currently in use is a Preliminary Table which consists of data published by investigators prior to 1960 and from analysis carried out in the 1960's and 1970's at the IMR (Tee, 1982).

This Preliminary Table has been fairly well received by local workers in food and nutrition. It is used primarily in the calculation of the nutrient intake of communities such as in food consumption studies of the IMR, the Department of Human Development Studies and the Faculty of Food Science and Technology of the Agriculture University of Malaysia (UPM), and the Department of Food Science and Nutrition of the National University of Malaysia (UKM) as well as for training in universities.

A serious effort to obtain feed-back on the usefulness of this Preliminary Table has not been made. It is nevertheless probably correct to say that the Table has found limited use by workers in the country, mainly due to its limitations. Some people are still relying on tables from abroad, such as the one published by FAO, which are more comprehensive but lack information on local foods.

Although the Preliminary Table may be considered an improvement over previously available tables, it is still far from being a satisfactory one. The nutrient contents of several food items are not complete, and the composition of many food items are not available. Furthermore, most of the data will have to be re-examined since techniques and methodologies in laboratory analysis have improved tremendously in recent years. Nevertheless, it is felt that it is of use to workers in food and nutrition in the country.

### PLANS FOR THE FUTURE AND NATIONAL NEEDS

There is thus a need for greater emphasis on the importance of the data. Greater involvement and a more definite commitment by researchers is required. The Project currently tackles only raw foodstuffs, and even for these foods, a limited range of nutrients are determined. As the food industries of the nation progress and consumers become more demanding and concious of food components, food analysis becomes increasingly more important. There is thus a need to be ready for this expected demand.

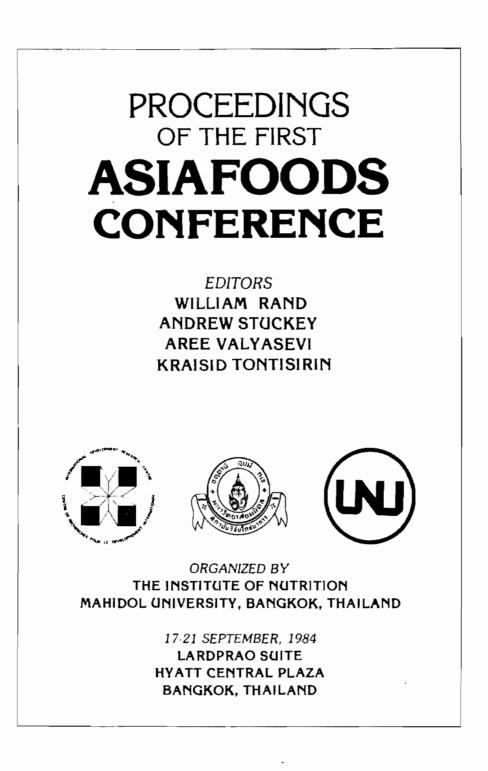
Progress on the Food Composition Table has not been entirely

satisfactory. The shortage of manpower, break-down of laboratory equipment, and the long time required to carry out such repairs is an important factor in the slow progress of the analysis. The most important however, is the problems encountered with the methodologies.

We have observed that reported methods were often not entirely satisfactory. Furthermore, the same method may need some minor modifications for different groups of foodstuffs. Hence a great deal of time has been spent on studying and testing a method before it may be adopted for use with confidence. Technical assistance is much needed to develop methods suitable for use.

Technical assistance in the management of food composition data is also felt to be greatly needed. This is a new area for us and much time would be saved if assistance from established laboratories could be obtained. Thus far, data from food analysis has been entered into conventional printed forms. It is felt that modern electronic data processing using computers would greatly assist us in the storage of data as we obtain them, in having access to the stored data, and the retrieval of such information.

Obtaining government funds for continuing the current Food Composition Table Project may face some difficulties due to the current unfavourable economic conditions, especially when this project may be viewed to be of lesser importance. There is a need to obtain financial assistance from other sources which would be much needed in the procurement of equipment, the servicing and maintenance of such apparatus, the purchase of chemicals and reagents, and even for the employment of laboratory personnel.



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