

# Meeting research needs



## Nutri Scene

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### Sound scientific data is required for every food and nutrition activity.

**M**ALAYSIA has made impressive socio-economic developments in the past three decades. These developments have brought about marked changes to the lifestyle of the population. These include dramatic changes to health and nutrition issues, with "impressive" increases in obesity, hypertension, diabetes, coronary heart disease rates.

In recent years, the country has continued on its path towards greater growth and development, in spite of the current economic slowdown. This will certainly affect the food and nutrition scene. A greater number of people in the country will be affected by such issues. For example, more "rural groups" will become afflicted with obesity, diabetes, hypertension and coronary heart disease. Younger age groups may become similarly affected. There are already data to indicate these trends in the country.

Over the years, globalisation has brought about greater movements of food, nationally and internationally. This has great impact on consumers in the country as they are exposed to world foods and cuisines. This also has implications on the nation's participation in international trade, including commitment to World Trade Organisation (WTO) agreements.

### Greater demand for food and nutrition activities

All these changes also mean greater demand for food and nutrition activities in the country. Food and nutrition scientists have taken on the challenge to try and cope with the new health and nutrition scenarios. Nutrition policies and programmes have been reviewed and intervention programmes re-examined. The National Plan of Action for Nutrition, which was established after the 1992 WHO/FAO International Conference in Nutrition, has been re-aligned towards combating both extremes of the malnutrition problem.

Over the years, the country has strengthened its national food regulatory system to protect the health and safety of consumers. This is also important to enable the country to participate in international trade and in the activities of the Codex Alimentarius. There is, however, much room for improvement.

There has generally been better consumer awareness of food and nutrition issues. There is greater demand for safe and quality food. Consumers demand for more information on nutrients in food and even non-nutrients or bioactives in food. This has necessitated the periodic review of food regulations and guidelines.

There has been greater recognition of the importance of the work of the Codex Alimentarius. It has also become clear that the Codex has huge economic implications on

local produce in international trade as well as the protection of local consumers in relation to imported foods. The country has therefore been participating actively in the work of this international food standards setting body.

### Need for sound scientific data

Sound scientific data are required for each of the food and nutrition activities outlined above. I will highlight below how scientific data is vital for some of the food and nutrition activities and where such data gaps exist.

Reliable data are required for preparing nutrition policy and national plans of action appropriate to national scenarios and needs. In preparing the National Plan of Action for Nutrition (NPAN) Malaysia (1996-2000), data was needed of the nutrition situation in the country as well as a detailed examination of the current intervention strategies. In the exercise to update NPAN II (2006-2015), it was necessary to review the food and nutrition situation and to identify current and emerging food and nutrition issues.

The 2004 WHO Global Strategy on Diet, Physical Activity and Health was formulated to reduce the risk of the population to chronic diseases. The WHO has called on all stakeholders, including governments, professional bodies, non-governmental organisations and the food industry to work together towards achieving this goal. WHO has emphasised that strategies need to be based on the best available scientific research and evidence.

Approaches need to be comprehensive, incorporating both policies and action and addressing all major causes of non-communicable diseases together. The world health body has emphasised that strategies undertaken must be multisectoral, taking a long-term perspective and involving all sectors of society.

There is a need for continued monitoring of food consumption patterns of the population; we need to know what people are eating and the changes over time. Malaysia has not had a periodic national food consumption survey until the first attempt in 2003, in the form of the Malaysian Adult Nutrition Survey (MANS), coordinated by the Ministry of Health Malaysia.

Besides food consumption, other data collected in the survey included weight and height measurements and habitual physical activity pattern. It is vital that we continue with such efforts periodically. We need a periodic national nutrition survey.

In combination with health and nutrition data, good food consumption data are also required to enable us to better understand the role of foods in health and disease. It is important to have a better understanding of the role of specific causative factors of various nutritional disorders.

There is also greater interest in understanding the role of functional (bioactive) components that are abundant in the local cuisine. Such data are also essential to substantiate nutrition and health claims linked to these food components, which is key to the marketing and promotion of functional foods.

Food consumption data are needed for the establishment of dietary guidelines. The current Malaysian guidelines were established in 1999. A technical group is currently reviewing and updating these guidelines and is expected to finalise them before the end of the year.

It is vital that a good food composition database is available for a variety of food and nutrition activities. The current food composi-



Food and nutrition scientists in Malaysia have taken on the challenge to cope with the changing health and nutrition scenarios in the new millennium.

tion database, established in 1997, is incomplete and lacks data in terms of the number and type of nutrients as well as food items.

A variety of scientific data are needed in supporting and strengthening food regulatory systems. There must be a scientific basis when establishing safety levels of the wide variety of food additives permitted in foods. Permitted maximum levels of chemical and microbial contaminants in food regulations must also be based on scientific data. At the same time, quality specifications or requirements of food standards must be based on established data. This is also true for establishing labelling and nutrient declaration needs.

The Food Quality Control Division, subsequently known as the Safety & Quality Division (FSQD) of the Ministry of Health Malaysia, was established in the 1974. The Food Act 1983 and Food Regulations 1985 were subsequently enforced. Over the years, periodic review of the regulations have been undertaken, as and when the need arose and when data becomes available to enable amendments to be made.

For better risk assessment of communities to hazards in food, greater efforts in exposure assessment of contaminants and food additives have been carried out by the FSQD. For this purpose, better food consumption data are required. At the same time, a good database of health hazards (ie chemical, microbial, veterinary drug residues) in food is required.

It is recognised that more effective participation in the work of Codex Alimentarius is vital as the codex is the international reference point for food safety. This requires full commitment of relevant stakeholders at the national level, including the food regulatory authority and the food industry. Local producers must realise that in order to participate in international trade, they must keep up with global specifications.

Malaysia joined the Codex in the 1960s. The country has participated actively in its various activities, including serving as coordinator and representative for Asia, hosting the Codex Committee on Food Labelling and the Codex Committee for Asia. Malaysia was vice-chair of the Codex Alimentarius from 2005-2008 and took over as host country for the Codex Committee for Fats and Oils from 2009. There has also been intensified efforts to harmonise Malaysian Food Regulations with the Codex Alimentarius.

### Bridging data gaps

Promoting continuous research and development is one of the facilitating strategies in

NPAN II. Efforts must be made to identify research gaps and priorities. The need for periodic reviews in view of rapidly changing scenarios has been identified as one of the activities in NPAN II. In mid April this year, a workshop for research priority setting in Malaysia was conducted to provide input into the 10th Malaysia Plan (2010-2015). I am very pleased with this development as I had organised the last research priority workshop in 1999 when I was still with the Institute for Medical Research. I do hope the IMR will play a bigger role in nutrition research in the years to come.

The challenge is to convince funding agencies of the importance of allocating resources for generation of the much needed research data. Strengthening institutional research capability must also be an essential part of national development plans.

Indeed, these have been identified as one of the facilitating strategies of the NPAN (II). However, no dedicated funding has been set aside for these activities. It is recognised that nutrition plans and activities compete with many other public health issues for funding. NPAN II must have its own funding for the various identified activities in order to realise its objectives.

We must be able to meet the challenges of becoming a developed nation. Development must mean more than just infrastructure development. Development must include promoting and maintaining community wellbeing. Meeting nutritional needs must therefore be part of the national development plan to enable the country to grow and develop confidently.

We need to be equipped with the required knowledge and data. We must be prepared for the challenges.

■ *NutriScene is a fortnightly column by Dr Tee E Siong, who pens his thoughts as a nutritionist with over 30 years of experience in the research and public health arena. For further information, e-mail starhealth@thestar.com.my. The information provided is for educational and communication purposes only and it should not be construed as personal medical advice. Information published in this article is not intended to replace, supplant or augment a consultation with a health professional regarding the reader's own medical care. The Star does not give any warranty on accuracy, completeness, functionality, usefulness or other assurances as to the content appearing in this column. The Star disclaims all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.*