

By Dr TEE E SIONG

Asian nutrition update

Nutritionists in the region must be poised to face the challenges of a rapidly developing Asia.

THE 11th Asian Congress of Nutrition (ACN) was held in Singapore in mid July, organised by the Singapore Nutrition and Dietetics Association. The scientific programme covered the whole range of topics that are relevant to nutrition in the region.

Some 60 Malaysians participated in the congress. This write up provides some highlights from the 11th ACN, particularly those sessions that I participated in and made presentations.

The Asian Congress of Nutrition (ACN) is held every four years under the auspices of the Federation of Asian Nutrition Societies (FANS). The first congress in this series was organised 40 years ago, in 1971 by the Nutrition Society of India. The congress provides an opportunity for nutrition scientists, experts and activists to share information on nutrition advances in research and technical expertise.

Malaysia joined FANS soon after the formation of the Nutrition Society of Malaysia (NSM) in 1985. NSM organised the 6th Congress in 1991, in Kuala Lumpur.

Facing nutritional challenges in Asia

There has been rapid socio-economic development in Asia for over four decades. As a result, nutrition issues have changed dramatically. There has been a decline in nutrient deficiencies in many population groups, whilst many communities are now afflicted with huge problems of overweight and obesity and associated chronic diseases.

Asia is burdened with the largest number of undernourished people and the most number of overnourished individuals, at the same time.

Asia will continue to develop and progress rapidly in the years to come. The theme of the 11 ACN, "Nutritional Well-Being for a Progressive Asia – Challenges and Opportunities", is indeed appropriate. It is a reminder that as Asia progresses further into developed and industrialised nations, it is imperative that the nutritional well-being of the population must not be neglected. It is a reminder that the nutrition community must be ready to face the challenges ahead. It is a reminder that opportunities abound for networking and sharing of expertise and experiences among Asian nutrition scientists.

Malaysia has its own share of the nutrition problems. Every effort must be made in pushing ahead with the nutrition agenda of the country as contained in the National Plan of Action for Nutrition.

Progress of dietary guidelines in Asia

A pre-congress seminar on dietary guidelines in Asia was organised by Danone Institutes in Indonesia, Japan and China. Nutrition experts from eight Asian countries updated participants regarding the development and promotion of dietary/nutritional guidelines, namely China, Indonesia, Japan, Malaysia, Philippines, Singapore, Thailand and Vietnam.

Faced with the double burden of malnutrition and overnutrition, countries in Asia need to regularly review their dietary/nutrition guidelines so that they remain relevant and beneficial to the population at large. The seminar is most timely and provided an excellent opportunity for nutritionists to share experiences in the development and promotion of dietary guidelines.



There have been major regulatory developments in health claims in Asia, specifically on functional claims and disease risk reduction claims. – Bloomberg News

I presented on the development and promotion of dietary guidelines in Malaysia. The first official Malaysian Dietary Guidelines (MDG) was published in 1999 and was thoroughly reviewed and launched in 2010.

The new MDG has 14 key messages and 55 recommendations, covering the whole range of food and nutrition issues, from importance of consuming a variety of foods to guidance on specific food groups, messages to encourage physical activities, consuming safe food and beverages, and making effective use of nutrition information on food labels.

In collaboration with other professional bodies and the private sector, the Nutrition Society of Malaysia has been promoting the dissemination and usage of the MDG to the public through a variety of formats and channels.

Speaking as president of the Nutrition Society of Malaysia (NSM), I shared with participants numerous examples of strategic partnerships in nutrition promotion programmes in Malaysia. Many of these examples are partnerships between NSM and other professional bodies and the private sector, targeted towards promoting healthy eating and active living amongst various population groups.

On-going collaborative programmes with major food companies include the Health Kids Programme, the Healthy Meal Time Magic, and the nationwide nutrition promotion programme of Nutrition Month Malaysia.

Several other programmes are being planned for implementation in the next months.

The Singapore Health Promotion Board shared its experiences in public-private-people partnerships to promote a conducive ecosystem for healthy eating in the island republic. These include the Healthier Choice Symbol Labelling Programme, the Healthier Hawkers Programme and Health Promotion Malls.

The Food Industry Asia discussed various considerations for successful public-private partnership opportunities to improve health.

A successful example of metabolic syndrome prevention in Taiwan was presented by Taiwan Millennium Health Foundation. Since 2006, the foundation has alerted people to self-monitor waist circumference regularly and to practise healthy eating and active lifestyle. A variety of campaigns and community programmes have been conducted every year.

Lastly, the Hong Kong Nutrition Association (HKNA) described its

activities, aimed at promoting healthy eating among the local community. HKNA has formed strong partnership with its stakeholders, including mass media, other healthcare associations and commercial firms to disseminate knowledge on proper nutrition.

Functional foods and health

It is now recognised that bioactive or functional components in foods, other than nutrients, are able to serve physiological roles beyond provisions of basic nutrient requirements. Foods containing such components have been termed "functional foods". This symposium on functional foods had five presentations, to share the latest findings on selected Asian functional foods and ingredients and their health benefits and to discuss scientific substantiation of nutrition and health claims for these foods.

As the first speaker in this symposium, I provided an overview of the "Development and Status of Functional Foods in Asia". International Life Sciences Institute SEA Region has been in the forefront of scientific activities to promote a harmonised development of functional foods in the region.

Over the years, a number of documents have been published resulting from these scientific activities, including a monograph on functional foods and a suggested framework and guidelines for the scientific substantiation and safety evaluation of functional foods.

There have been major regulatory developments in health claims in Asia, specifically on functional claims and disease risk reduction claims. These claims focus on the role of food bioactive or functional components in improving or modifying a physiological function or promoting health.

I presented a review of the health claim status in several South East Asian countries (Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) as well as China and Japan. There are significant differences in the health claims permitted in these countries.

All regulatory authorities require proper scientific substantiation of health claims. The objectives of these regulations are to achieve a high degree of consumer protection, to ensure confidence in claims on foods, to promote fair trade, to stimulate academic research, and to encourage product innovation.

The second presentation in the symposium was on "Scientific Substantiation for Functional Foods – How Much Evidence Is Enough?" The health benefits of foods are communicated to consumers in many ways through nutrition communications. In each case a review of the scientific literature lies behind the summaries that are communicated.

Two presentations were focused on specific functional foods. A presentation discussed "Evidence on Polyphenol-Rich Functional Foods for Cardiovascular Health". Theother was focused on the "Effects of Functional Foods and Components on Microbiota and Gut Health".

Food and nutrient database in Asia

Almost all countries in Asia have established nutrient composition databases. This dedicated symposium on food and nutrient database, organised by NEASIAFOODS, SAARCFOODS and Chinese Nutrition Society, provides an update on activities, particularly in Asia.

The first of the four presentations was on the FAO/INFOODS "Advances in Food Composition and Database Management System". International Food Data Systems (INFOODS) was established in 1984 to increase the availability and quality of food composition data. Its secretariat is at FAO since 1999.

Over the years, INFOODS has developed several standards (nomenclature of foods, component identifiers and interchange formats), provided guidelines (on compilation, dissemination and use) and was involved in over 25 international training courses. In recent years, the dimension of food biodiversity was introduced to food composition.

I provided an overview of the current regulations on nutrition labeling and health claims in several Asian countries and implications for developing capabilities in food analysis.

There are various implications and challenges in implementing these regulations. One area relevant to this conference is developing capability in food analysis. For truthful nutrition labeling, food manufacturers have to ensure that there is accurate data on the composition of the nutrients contained in the food.

Similarly, for nutrition and health claims, accurate data on the amounts of the nutrients or bioactive components are needed.

For scientific substantiation of health effects, accurate quantitation of the amounts of these nutrients or components is essential.

For regulatory agencies, well-equipped laboratories and well-trained personnel are required for surveillance and enforcement purposes.

Nutrient profiling (NP) is a tool for classifying foods based on their nutritional composition. A review was first carried out to evaluate 34 NP models in the world. A simple score model of NP was established and can be used to filter foods bearing nutrition and health claims.

Nutrient content differences among cultivars of the same species are more significant than has generally been recognised. The last presentation in this symposium described nutrient biodiversity in major food crops and its health implications. The findings of the study on 300 rice cultivars and 125 landraces, 43 potato varieties, 32 carrot, 130 mango, 20 pearl millet, 24 sorghum and 40 minor millets which are commonly consumed in India was presented.

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