Current status of nutrition labelling and claims in the South-East Asian region: are we in harmony?

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This review includes the situation of nutrition labelling and claims in six countries in South-East Asia: Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand. With the exception of Malaysia, there is no mandatory nutrition labelling requirements for foods in these countries except for special categories of foods and when nutritional claims are made for fortified or enriched foods. Nevertheless, several food manufacturers, especially multinationals, do voluntarily label the nutritional content of a number of food products. There is, therefore, increasing interest among authorities in countries in the region to start formulating regulations for nutrition labelling for a wider variety of foods. Malaysia has proposed new regulations to make it mandatory to label a number of foodstuffs with the four core nutrients, protein, carbohydrate, fat and energy. Other countries have preferred to start with voluntary labelling by the manufacturers, but have spelt out the requirements for this voluntary labelling. The format and requirements for nutrition labelling differ widely for countries in the region. Some countries, such as Malaysia, closely follow the Codex guidelines on nutrition labelling in terms of format, components to be included and mode of expression. Other countries, such as the Philippines and Thailand, have drafted nutrition labelling regulations very similar to those of the Nutrition Labeling and Education Act (NLEA) of the United States. Nutrition and health claims are also not specifically permitted under food regulations that were enacted before 1998. However, various food products on the market have been carrying a variety of nutrition and health claims. There is concern that without proper regulations, the food industry may not be certain as to what claims can be made. Excessive and misleading claims made by irresponsible manufacturers would only serve to confuse and mislead the consumer. In recent years, there has been efforts in countries in the region to enact regulations on nutrition claims. Recently enacted regulations or amendments to existing regulations of almost all the countries reviewed have included provisions for nutrition claims. Malaysia is in the process of gazetting regulations to clearly stipulate the permitted nutrition claims and the conditions required to make these claims along the guidelines of Codex Alimentarius Commission. Only two countries in the region permit health claims to be made – Indonesia and Philippines. Other countries in the region are following developments in Codex and examining the need for allowing these claims. There are more differences than similarities in the regulations on nutrition labelling and claims among countries in the South-East Asian region as no previous efforts have been made to address these. Hopefully, through this first regional meeting, countries can initiate closer interaction, with a view to working towards greater harmonization of nutrition labelling and health claims in the region.

Key words: food regulations, health claims, nutrition claims, nutrition labelling.
Nutrition labeling in South-East Asia

Nutrition labeling in Malaysia

There is currently no mandatory nutrition labeling of foods in Malaysia, except for regulations pertaining to the labeling of ‘special purpose foods’. Regulations 388 to 393 of the Malaysian Food Regulations 1985 provides for obligatory nutrition labeling of foods such as infant formulae and cereal-based foods for infants and young children. These foods are to be labeled with the energy, protein, carbohydrate, fat, vitamin and mineral contents. In addition, as provided for under Regulation 26, foods enriched or fortified with permitted vitamins, minerals, essential amino acids or essential fatty acids shall be labeled with the type and quantity of the nutrient.

There are now, however, a number of products in the market with voluntary nutrition labeling, most of which are imported foods. There is no uniformity in the various formats used in nutrition labeling. Some of these labels are very brief, with only a few nutrients, whereas others go to the full extent of listing over 15 nutrients. Some are expressed as per 100 g (or per 100 mL) whereas others refer to amounts per serving. Some of the labels express the amounts in relation to recommended daily intakes (RDI) or recommended dietary allowances (RDA).

In August 2000, the Ministry of Health announced the intention to amend the current regulations to have mandatory nutrition labeling for a wide variety of foods.2,3 The proposal is to have mandatory labeling for a number of core nutrients, namely energy, carbohydrates, protein and fat for a wide variety of foods. The categories of foods requiring labeling include the following:

- prepared cereal foods;
- bread;
- milk and powdered milk products;
- canned meat; canned fish;
- canned vegetables;
- canned fruit and fruit juices;
- soft drinks and botanical beverages.

The proposed format for labeling closely follows the Codex guidelines.4 Nutrients are to be declared in per 100 g, per 100 mL, or per package if the package contains only a single portion. In addition, this information must be given per serving as quantified on the label. Nutrients may also be given as a percentage of the Nutrient Reference Value.

The proposal has received comments from various organizations, the food industry and consumer bodies. A number of seminars, including several outside Kuala Lumpur, have also been organized to further familiarize the food industry with the proposed regulations. Particular attention was also given to encourage small and medium scale industries to attend such seminars. The proposed amendments are expected to be gazetted soon.

Discussions within the Ministry of Health (MOH) on the implementation of the proposed nutrition labeling included conducting consumer education activities. This has, in fact, long been in the agenda of the MOH as one of the prime messages disseminated to the public through the Healthy Eating Program launched by the Ministry of Health. Leaflets to promote the ‘read the label’ habit among consumers were also published with the different elements of the food label explained, including the listing of nutrients. It is recognized that a great deal remains to be done in terms of consumer education. This can be facilitated through collaborative efforts with professional bodies such as the nutrition, dietetics and food science societies in the country.

Health and nutrient claims in Malaysia

There are no elaborate provisions for health and nutrition claims in the 1985 Malaysian Food Regulations.1
Nevertheless, there are several labelling requirements that are related to health and nutrition claims. For example, regulation 18(3) prohibits the description of any food which includes the word ‘compounded’, ‘medicated’, ‘tonic’ or ‘health’ or any other words of the same significance. Regulation 26(7) also stipulates that no label on a food shall claim to be ‘enriched, fortified, vitaminized, supplemented or strengthened’ or that the food is a source of one or more vitamins or minerals unless a reference quantity of the food contains no less than the amount of the nutrient in question, as specified in Table 2 to the Twelfth Schedule. However, the label on a food to which an essential amino acid or essential fatty acid or both have been added may bear a claim that the food is enriched or supplemented with these nutrients.

Although there are no specific provisions in the current regulations, various claims are already being made on several products. Claims of low fat, low or no cholesterol, high in fibre, and high in various vitamins, minerals and fatty acids (such as omega-3 fatty acids) are being made on various products in the market. Without any official guidelines or regulations, there is no common understanding among manufacturers and the consumer on how much is ‘high’ or ‘low’. These claims can, therefore, be misleading to the consumer. An existing regulation also allows industries to claim ‘presence of’ vitamins and minerals. However, no criteria has been stipulated for making such claims, for example, the presence of minimum amounts of the vitamins and minerals.

To prevent abuse by manufacturers and thereby misleading consumers, the Ministry of Health Malaysia recently introduced a proposal to regulate the use of nutrient content claims, namely claims for ‘low’, ‘free’ for energy, fat, saturated fat, cholesterol, sugars, sodium and claim for ‘source’, ‘high’ for protein and vitamins and minerals. In order to make these claims, the food must contain minimum or maximum amounts of the specified nutrients, depending on the type of claim.

Two other types of nutrition claims will be permitted in the proposed new regulations. These are comparative claims and nutrient function claims. In comparative claims, as the name suggests, a manufacturer may make comparison on the nutrient content of two or more similar foods and make claims such as ‘reduced’, ‘less than’, ‘lower’ or ‘increased’, ‘more than’, and ‘higher’. There are, however, various criteria to be met for such claims to be made, such as, the difference in the amount of nutrients between the two foods. A total of 15 nutrient function claims have been permitted. During the public comment stage, it was observed that there was considerable confusion among the industries between nutrient function claims and health claims. The latter are not allowed in the proposed regulations. Thus, a close list of nutrient function claims is initially proposed, while allowing the industry to submit requests to add other claims to the list. There are specific conditions to be met before these claims may be made, for example, there should be a minimum amount of a nutrient to be present.

Health claims are not permitted, even in the proposed new regulations on nutrition labelling and claims. Instead, there are several prohibitions. For example, claims as to the suitability of a food for use in the prevention, alleviation, treatment or cure of a disease, disorder, or particular physiological condition are not permitted.

Nutrition labelling in Brunei Darussalam

There is no mandatory nutrition labelling for general categories of food in Brunei. However, when foods are enriched or fortified with permitted vitamins or minerals, it is required to state the amount of the nutrient present in a specified quantity of the food on a nutrition information panel. Several other groups of foods also require mandatory nutrition labelling, including foods for special dietary uses (for example, diabetic food, low sodium food, gluten-free food, low protein food, CHO-modified food, low calorie food, infant formula, formulated food) and foods that make nutrition claims. The nutrition information panel should specify the amounts of protein, carbohydrates, fat and the amount of any other nutrients for which a nutrition claim is made.

Nutrition and health claims in Brunei Darussalam

Nutrition claims permitted under the Brunei regulations include representations that suggest or imply that a food has a nutritive property, whether general or specific, and whether expressed affirmatively or negatively. The claims may be made on energy, salt, sodium or potassium, amino acids, fatty acids and a variety of other nutrients, except for vitamins and minerals.

A food label may claim the presence of a vitamin or mineral or imply the presence of a vitamin or mineral, provided the reference quantity for that food contains at least one-sixth of the daily allowance as stipulated in a reference table. These vitamins and minerals may also be presented as percent of the RDA. Specific provisions are also provided for claim of source of energy and source of protein. For the former, the food must contain at least 300 kcal in the amount recommended for consumption in a day. Similarly, for protein, the minimum amount is 10 g and comprise at least 20% of the calorie of the food.

Health claims are not permitted in the Brunei regulations. Instead there are specific prohibitions, for example, claims for therapeutic or prophylactic actions; claims which may be interpreted as advice of a medical nature; claims that a food will prevent, alleviate or cure any disease; and words that imply health or improved condition may be achieved.

Nutrition labelling in Indonesia

Specific requirements for nutrition labelling in foods in Indonesia were spelt out in the section on guide for general labelling food advertisement. More recently, further details were provided in Regulation 69 pertaining to food labelling and advertisement. Nutrition labelling is mandatory for certain types of foods namely baby foods, dietary foods, milk and milk products and other foods as specified by the Director-General. The regulations also apply to foods making claims that they contain specific nutrients, including energy, protein, fat and carbohydrate content, as well as levels of
vitamins and minerals. Nutrition labelling is also mandatory for foods that are required to be fortified or enriched with specific nutrients as required by the national legislations. The regulations are also applicable to the voluntary labelling of all other types of foods.

In nutrition labelling, the following are required to be listed:
- serving size;
- number of servings per pack;
- energy content per serving;
- protein content per serving;
- carbohydrate content per serving;
- fat content per serving;
- breakdown of the percentage of energy derived from fat, protein and carbohydrate;
- percent of recommended dietary allowances of nutrients;
- amounts of other nutrients for which a claim is made;
- other nutrients which are considered relevant for the preservation of good nutritional status for example as required by specific regulations.

Energy values should be given in kJ and kcal per 100 g or per 100 mL. In addition, information can also be given per serving as stated on the label. Data on amounts of protein, carbohydrate and fat are to be given in g per 100 g or per 100 mL of the food. For vitamins and minerals, the amounts are to be given in metric units and also expressed as percent of the RDA. The nutrient content values on the labels should be derived from an analysis of a representative sample of the food.

**Nutrition and health claims in Indonesia**

The Indonesian Regulations provide detailed conditions for nutrient content and comparative claims for energy and protein, fat and fatty acid content and enrichment with vitamins and minerals.7

No claim for ‘source’ of energy is permitted unless there is at least 300 kcal in the suggested amount of food consumed per day. For claims for ‘source’ of protein, at least 20% by weight of the calorie should be derived from protein and there is at least 10 g of protein in the suggested amount of food consumed per day.

For making claims of ‘no calories’ or ‘low calories’, foods are required to meet specific levels of energy per serving. For claims of ‘lower calories’, the difference in energy content between two similar foods should be at least 25%. Similar claims for fat, saturated fat, cholesterol, sodium and sugar are permitted, provided they comply with specific levels of these nutrients per serving of the food. Conditions for making claims of ‘light’ and ‘very low’ are also provided.

Claims of ‘enriched’, ‘fortified’, ‘extra’, ‘plus’, ‘more’ and ‘added’ vitamins, minerals, protein and dietary fibre are permitted provided the foods meet the specified criteria. Similarly, claims for ‘high’, ‘rich in’, ‘with’, ‘provides’ and ‘good source of’ are also permitted.

Ten health claims are also permitted under these regulations, all which are disease risk reduction claims. Examples of the permitted statements to make the claims are given, as well as conditions that must be met before these claims can be made. The statements generally require supporting statements in addition to the statement associating the nutrient with the disease. The example provided for calcium and osteoporosis is as follows: ‘An active lifestyle and a healthy diet with sufficient calcium intake helps teenagers, men and women to maintain healthy bones and reduce the risk of osteoporosis in later life’.

The permitted health claims are as follows:
1. Calcium and osteoporosis
2. Dietary fat and cancer
3. Dietary saturated fat and cholesterol and coronary heart disease
4. Fibre-containing grain products, fruits and vegetables and cancer
5. Fruits, vegetables and grain products that contain fibre, particularly soluble fibre and risk of coronary heart disease
6. Sodium and hypertension
7. Fruits and vegetables and cancer of the digestive system
8. Folate and neural tube defect
9. Sugar alcohols do not increase dental caries
10. Soy protein and risk of coronary heart disease

Conditions for making claims for foods for weight loss, diabetics, ‘tonic’ foods and foods to ‘restore’ health are also stipulated in the Regulations. It is also prohibited for a food to claim that it is able to prevent, alleviate, treat or cure a disease.

The Regulations prohibit the making of the following claims:
- a balanced and varied diet still requires to be supplemented with vitamins;
- good health and longevity can only be maintained by vitamin supplements;
- normal healthy individuals can look younger and live longer with vitamin supplements;
- vitamins A and D, the vitamins that are found in fish oil, and vitamin C are able to speed recovery from infections such as influenza or prevent a person from infections;
- increased benefits can be derived from products containing more than 400 units of vitamin D in each daily dose;
- that there is evidence of widespread vitamin deficiency.

**Nutrition labelling in the Philippines**

The Philippine Regulations have prescribed mandatory nutrition labelling for enriched or fortified foods.8 Nutrition information may be given in tabulated form and presented on the basis of the food as packaged while another column declares the nutrient amounts after cooking; in relation to average or usual serving in terms of slices, pieces or a specified weight or volume. Nutrients are also to be expressed as percent of the Philippine RDA. The Regulation also stipulates the minimum amounts of the nutrients that must be present at any point of inspection. The methods for sampling and analysis (generally by the AOAC methods) are briefly mentioned in the Regulations.

If foods are to be exported to the United States, they are
required to follow the United States Nutrition Labeling and Education Act (US NLEA) requirements.

Nutrition and health claims in the Philippines
The use of nutrient descriptors such as ‘high’, ‘rich’, ‘good source’, ‘low’, in nutrition claims are permitted. The required criteria for making these claims are different from those provided in the Codex guidelines.

Health claims are still being developed in the Philippines. Two claims are currently permitted, using the United States Code of Federal Regulations Standard (USCFR). The first of these claims associate calcium with reduced risk to osteoporosis and the second associate diets low in fat with reduced risk of cancer.

In addition, the Regulations in the Philippines also clearly prohibit claims that state that:
• the food is effective in the prevention, cure, mitigation or treatment of any disease or symptoms – a balanced diet cannot supply adequate nutrients;
• the food has dietary properties when such properties are of no significant or unproven value in human nutrition;
• natural vitamin is superior to an added or synthetic vitamin.

Nutrition labelling in Singapore
In Singapore, mandatory nutrition labelling is only required for foods enriched or fortified with permitted vitamins, minerals, essential amino acids and fatty acids (Regulation 11). It is required to state the amount of the nutrient present in a specified quantity of the food on a nutrition information panel. Mandatory nutrition labelling also applies to special purpose foods, including infant formula (Regulation 252). For these foods, the amounts of energy, protein, carbohydrate, fat, vitamins and minerals are to be expressed per 100 mL of the formula prepared according to directions. For foods making nutrition claims, they are also required to have a nutrition information panel with energy, carbohydrate and fat (or other nutrients). Although the number of foods requiring mandatory nutritional labelling is limited, various foods in the market already have these labels on their products voluntarily.

In 1997, a voluntary program to introduce nutrition labelling for a wider variety of general foods was introduced. A Nutrition Labeling Handbook was published by the Ministry of Health Singapore which explains in detail the format for a typical nutrition information panel. The serving size of each food is to be provided as well as the listing for a core group of eight nutrients in per serving and as per 100 g (or 100 mL) of the food. The booklet also explains that the acceptable methods of nutrient analysis are direct chemical analysis or indirect analysis using established nutrient food composition database. Nutrient verification criteria is also given in the booklet.

Nutrient and health claims in Singapore
In the current Regulations, several nutrition claims are permitted. A claim for ‘source’ of energy is permitted provided there is at least 300 kcal in the suggested amount of food consumed per day. For claims for ‘source’ of protein, at least 20% by weight of the calorie should be derived from protein and there is at least 10 g of protein in the suggested amount of food consumed per day. A food label may claim presence of a vitamin or mineral or imply the presence of a vitamin or mineral if the reference quantity for that food contains at least one-sixth of the daily allowance as stipulated in a reference table. The vitamins and minerals present may also be presented as percent of the RDA. For making claims on enrichment or fortification, or that the food is a source of one or more vitamins, the food must contain a specified quantity of the nutrient in a reference quantity.

In the amended regulations a few years later in 1993, provisions for nutrition claims were further elaborated. Nutrition claim is defined as a representation that suggests or implies that a food has a nutritive property, whether general or specific and whether expressed affirmatively or negatively. This includes reference to energy, salt, sodium potassium, amino acids, carbohydrate, dietary fibre, cholesterol, fats, protein and starch or sugars or any other nutrients. However, these claims do not include a statement of ingredients or a declaration or claim relating to a vitamin or mineral. Claims for vitamins and minerals are separately provided for, as explained in the previous paragraph.

Several years later, the Singapore government progressed further in the regulating of nutrition claims. Detailed guidelines on making these claims are given in the handbook published by the Ministry of Health Singapore. The conditions required for making claims such as ‘free’, ‘source’, ‘low’, ‘light’, ‘less’ and ‘more’ for each of the nutrients mentioned above are given in the guidelines. In foods claiming ‘high’, ‘low’, ‘reduced’, etc., it is mandatory to include a nutrition information panel. In addition, the ‘Healthier Choice’ Label Program was introduced as part of the overall Nutrition Labeling Program in 1997. It is a voluntary program, jointly implemented by the National Heart Association and the Ministry of Health.

In a move towards allowing some health claims, a tentative list of some 30 acceptable claims (nutrient function and enhanced function claims) has been prepared by Singapore. Companies may apply to use these claims on a case-by-case basis. For general food products, permitted claims include those related to probiotics and prebiotics, vitamins and minerals, lactose, protein and dietary fibre. For infant foods, claims on vitamins and minerals, nucleic acids and essential fatty acids may be considered. Some claims related to pregnancy are also in the list.

The Singapore Regulations also prohibit the making of various misleading statements or claims. These include claims for therapeutic or prophylactic actions, no words implying that a food will prevent, alleviate or cure any disease or condition affecting the human body, improve health or physical condition.

Nutrition labelling in Thailand
In Thailand, nutrition labelling is mandatory only for the following categories of foods:
• foods with nutrition claim, comparative claim or nutrient function claim;
• foods with claims of specific benefits or functions to the body or specific ingredients;
• foods for specific target groups, e.g., school children, executives, elderly;
• other foods prescribed by the Food and Drug Administration Office.

Other foods not mentioned above may have nutrition labelling, provided the stipulated format and rules are observed.

The Regulations provide examples of the full format and brief format, which are similar to that of the US FDA. In the case of the former, 15 items of nutrients are required to be listed, expressed as per serving of the food and as per cent of the Thai RDI. The label (termed as Nutrition Facts), also allows for insertion of simple guides on nutrition, for example prescribing the maximum or amounts of several nutrients including fat, cholesterol and sodium. The Regulations explains the procedure for prescribing serving size, with a list of the serving size for a variety of foods. Rounding rules for expressing the values are also given.

**Nutrition and health claims in Thailand**

Three types of nutrition claims are identified in the Regulations of Thailand: nutrient content claim, comparative claim and nutrient function claims. These claims are similar to those in the Codex guidelines. Examples of nutrient content claim are ‘source of calcium’ and ‘high in fibre and low in fat’. The Regulations prohibit the making of making a claim of ‘free’ or ‘low’ if the food is naturally ‘free’ or ‘low’ in that nutrient. Comparative claims permit the manufacturer from making claims such as ‘less than or fewer’, ‘more than’, ‘reduced’, ‘lite’. Conditions for nutrient content claim and comparative claim are listed in detail in a table in the Regulations.

Examples of nutrient function claims are:
• calcium is an important component of bone and teeth
• folate is an important component in red cell formation.

In order to make these claims, it is required to meet various criteria, for example, the nutrient should be present in certain quantities. The claim must not have any message that identify or lead to understand that the consumption of such a nutrient (or nutrients) can prevent or cure any disease.

Health claims are not permitted under the current food regulations. The health authorities are examining the draft Codex document on health claims (Kongchuntuk, 2000).

**Conclusions**

This review of the status of nutrition labelling in selected South-East Asian countries shows that there is no mandatory nutrition labelling for general foods in countries in the region. These countries only require mandatory nutrition labelling for foods for special dietary use, foods that are enriched or fortified, and foods making nutrient claims. Voluntary nutrition labelling is permitted but should follow the prescribed format. The format and requirements for nutrition labelling differ widely for countries in the region. Some countries, such as Malaysia, closely follow the Codex guidelines on nutrition labelling, in terms of format, components to be included and mode of expression. Other countries, such as the Philippines and Thailand, have drafted nutrition labelling regulations very similar to those of the NLEA of the United States.

Since 1998, countries have introduced or are in the process of introducing voluntary nutrition labelling for a variety of general foods and guidelines for nutrition claims. Malaysia, for instance, has proposed a new regulations that would require mandatory labelling of four major nutrients in a wide variety of foods. It is noted that the newly introduced requirements in countries in the region are not in the format proposed by Codex. None of the countries, except for Malaysia, has proposed the use of Nutrient Reference Value (NRV).

It is expected that regulatory activities related to nutrition labelling and nutrition claims in countries in the region will further increase in the near future. These would include greater attention to ‘health’ foods and health claims. There is also greater demand from consumers for regulations on nutrition labelling as well as clearly stipulated requirements for nutrition and health claims. The manufacturers would also welcome clear guidelines on these matters to facilitate marketing of their products within the requirements of the law.

There are efforts by authorities of countries in the region to harmonize the development of nutrition labelling and nutrition claims. However, in reviewing the various developments in the past year, it would appear that a great deal remains to be done in this effort toward harmonization.

**References**