

Understanding food values



Food values can guide us towards health eating habits.

HEALTHY eating guidelines* advise you to eat according to your needs. In order to maintain your body weight, the amount of energy taken in should be balanced with your energy output. These guidelines also emphasise the importance of consuming a variety of foods.

When preparing meals for yourself and your family members, you need to know the nutritional values, or sometimes known as food values, of the items you are selecting.

Choosing what foods to eat during breakfast, lunch and dinner or snacks require understanding of the nutrients contained in the foods.

Understanding the nutritional value of foods will enable you to mix and match meals to ensure that you are eating according to your daily needs.

Knowing what you eat will certainly help you in avoiding excessive consumption as well as not eating enough, both of which result in undesirable nutritional effects.

Hence, the public should make an effort to understand nutritional value of foods. I would urge public health nutritionists to make efforts to disseminate such information to consumers and show them how to use food values. In the meantime, we certainly need to improve the current database of nutrient content of local foods.

What should you look out for?

An inappropriate dietary pattern is an important cause of diet-related chronic diseases such as obesity, diabetes, heart diseases, and so on.

The nutrients that have been "blamed" for bringing about these diseases include excessive intake of energy, fat, cholesterol and sodium and a decreased intake of dietary fibre and certain vitamins and minerals.

Hence, you may want to pay particular attention to the content of these nutrients in foods.

So, am I advocating that everyone uses a calculator to compute how many calories one is taking in each meal and each day? Most certainly not.

I do not want you to count every calorie that you ingest or compute every gram of fat that you consume. I do, nevertheless feel it is vital that you make an effort to have some knowledge of the content of these nutrients in foods.

During the current debate on the consumption of "fast foods", let me first use the example of a meal comprising these foods. If you are a 20-year-old woman and you are considering ordering two pieces of fried chicken, a packet of French fries and a soft drink, you should be aware that this meal will provide 800kcal and 36 grams of fat (which makes up 41% of the total energy).

For your age and sex, your daily requirement is 2000 kcal. You should be aware that energy intake from this meal alone is already almost half (40%) of your requirement. If this meal were your lunch, you are left with 1200 kcal or a remaining 60% to be distributed to your breakfast and dinner.

Similarly, if you are eating in a coffee shop near your office, you should know that eating a bowl of *curry mee* with a soft drink will end up with 700kcal and 37 grams of fat (47% of total energy) in your body.



In general, eating a bowl of *curry mee* with a soft drink will give you 700kcal and 37 grams of fat.

This energy intake is about 35% of your daily caloric need. You should also be aware that this dish may contain a fair amount of coconut milk (*santan*).

These are just two quick examples that highlight energy and fat content. You can be looking out for info on cholesterol level, sodium (salt) and sugar content, and so on. I am suggesting that you make mental notes and calculations of these levels and adjust your intake of these nutrients from other foods the rest of the day.

I am suggesting you pay more attention to what you eat rather than choosing foods based on taste and your desire.

Finding information on nutritional value of local foods

So where do you find such information on nutrient content that I mentioned above? For a "fast food" chain outlet, it may display such food values. Or hopefully, in the near future, you will find such information (voluntarily or otherwise) in most of such outlets.

What do you do when you are eating in a mamak stall or *kopitiam*? I really doubt we are ready to ask these vendors to declare the amount of nutrients in their dishes. Maybe some day. But for now, you will have to look for such information elsewhere.

The nutritional content of local foods are contained in the publication entitled *Nutrient Composition of Malaysian Foods* (Tee et al., 1997). This is a 300-page publication jointly published by the Institute for Medical Research (IMR), Universiti Kebangsaan Malaysia, Universiti Putra Malaysia and Malaysian Agricultural Research Institute (MARDI).

The book contains information on energy and 18 nutrients for 600 raw and processed foods as well as 200 cooked dishes and meals. The former group of foods includes common daily items such as rice, bread, milk, fruits and vegetables. The latter group includes a variety of popular hawker foods and snacks and franchised fast foods.

Professionals use this book for a variety of food and nutrition-related activities. The use

of such data for educating the people on food values is a clear example. Nutritionists also use the data to determine the nutritional intakes of individuals or population groups.

A dedicated computer software may be used to compute these intakes and compared with recommended intakes.

For the public, I would suggest you use the database uploaded by the Nutrition Society of Malaysia on its website for a more user-friendly version. Go to: www.nutriweb.org.my, click on "Food Database" on top of the opening page.

Enter the name of the food or dish you wish to search and select the appropriate food section and click "Do Search".

Data on proximate composition (energy, water, protein, carbohydrate, fat, fibre, ash) or minerals or vitamins can be viewed as per 100 gram of the food or per serving (for example, one plate, one piece, table spoon, etc).

Do explore this database, key in foods that are your favourites and make a mental note of the main nutrients we discussed above.

See for yourself what is the energy and fat content for a bowl of *kari mee*, a piece of *curry puff*, a plate of *char kueh tiau* or *nasi lemak* or a piece of *roti canai*.

Check out these values for a piece of fried chicken, a pizza, dough nut or a burger. Knowing the ingredients and knowing the method of preparation of a food also helps in understanding the nutrient content of these meals.

You can of course also check out the nutrient content of raw foods such as rice, *jagung*, watermelon, *kangkong* and hundreds of others in this database.

Getting the information to the public

Have you sometimes wondered how much calories there are in a plate of chicken rice? Or how much cholesterol is in an egg? Have you wondered where to find such information?

I do feel that the public do not have easy access to information on nutritional content of foods. Such data are available in NutriWeb, but I feel they are underutilised.

In the first place, many people do not have access to the web. Furthermore, I am hoping that the presentation of data in this website can be further improved and made even more user-friendly in the near future. The use of photographs and graphs will certainly enhance this educational tool.

I would urge nutrition professionals to make greater efforts to inform the public on nutritional value of foods. In addition to NutriWeb, all channels and approaches should be employed, including print and electronic media.

All efforts should be made to educate the public on the use of such data when making food choices. With this knowledge, the public will be better equipped to adjust their nutrient intake, to practise healthy eating.

Improving present nutrient database

I started a systematic programme to compile data on the nutritional value of local foods in the 1980s, when I was with the Institute for Medical Research. Foods were purchased from the local markets and chemically analysed in the laboratory for all the nutrients listed.

Several years of work culminated in the book on nutrient composition mentioned

above. It was a tedious project, time consuming and required a considerable amount of budget. However, the database is indeed required for many fields of food and nutrition research and activities.

The current food composition database needs to be improved. More foods have to be analysed, more nutrients need to be included in the database.

I do urge researchers in the various institutions in the country to continue to work on this database. Perhaps IMR can continue to play a lead role, as it did in the past.

This article is not intended to be a detailed guide to the consumer on how to understand and use nutrient content declaration for cooked meals and dishes. This article serves to emphasise the importance of having some knowledge of food values.

It is an introductory note to finding out where such nutrient values can be found, as well as understanding such information and how to use them. It is a call for all to give this serious attention, in terms of getting the information to the people and obtaining updated data.

*Visit the Nutrition Society of Malaysia website, www.nutriweb.org.my, to view the Malaysian dietary guidelines.

■ *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.

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