

Milky goodness

Milk is one of the most complete of all foods, containing nearly all the constituents of nutritional importance to us.

By Dr TEE E SIONG

MANY people are aware that milk is a rich source of calcium and that it is important for children to drink milk, to enable them to build strong bones and teeth.

However, many people may not be aware that besides calcium, milk is a nutrient-dense food that is a good source of a wide-range of essential nutrients. Children should therefore consume milk and milk products as part of their daily diet for optimal growth and development.

Many people mistakenly believe that milk is only for young children. When they become adolescents and adults, milk is unfortunately often left out in their daily meals. Other beverages such as fruit juices, soft drinks and cordials appear in their fridges and dining tables.

In the Malaysian Dietary Guidelines (MDG) 2010, milk and milk products are recommended for consumption by all persons above two years of age. These foods are placed at level 3 of the food pyramid, at the same level as meat, poultry, fish and eggs, thus indicating their importance.

This article discusses the seventh key message of the MDG, which recommends the consumption of adequate amounts of milk and milk products every day. I have also provided several thoughts of my own.

Choose the appropriate type of milk

There are various types of milk available in the market. Milk products include products prepared from milk, such as milk shakes, yoghurts, cheeses and ice cream. Read the label of milk packages to identify the type of milk that you need.

Fresh milk is directly obtained from cows and often heat treated (pasteurised) and sold in packets (in refrigerated condition) as their shelf-life is short. Fresh milk generally contains about 3% of milk fat.

Ultra-high temperature (UHT) is another way of treating milk, in which milk is subjected to high heat treatment for a few seconds. Such products have a longer shelf-life of up to several months. Flavoured milk is pasteurised or UHT milk to which a permitted flavouring substance has been added.

Full cream milk powder is milk from which the water has been removed. Full cream milk powder contains more than 26% of milk fat.

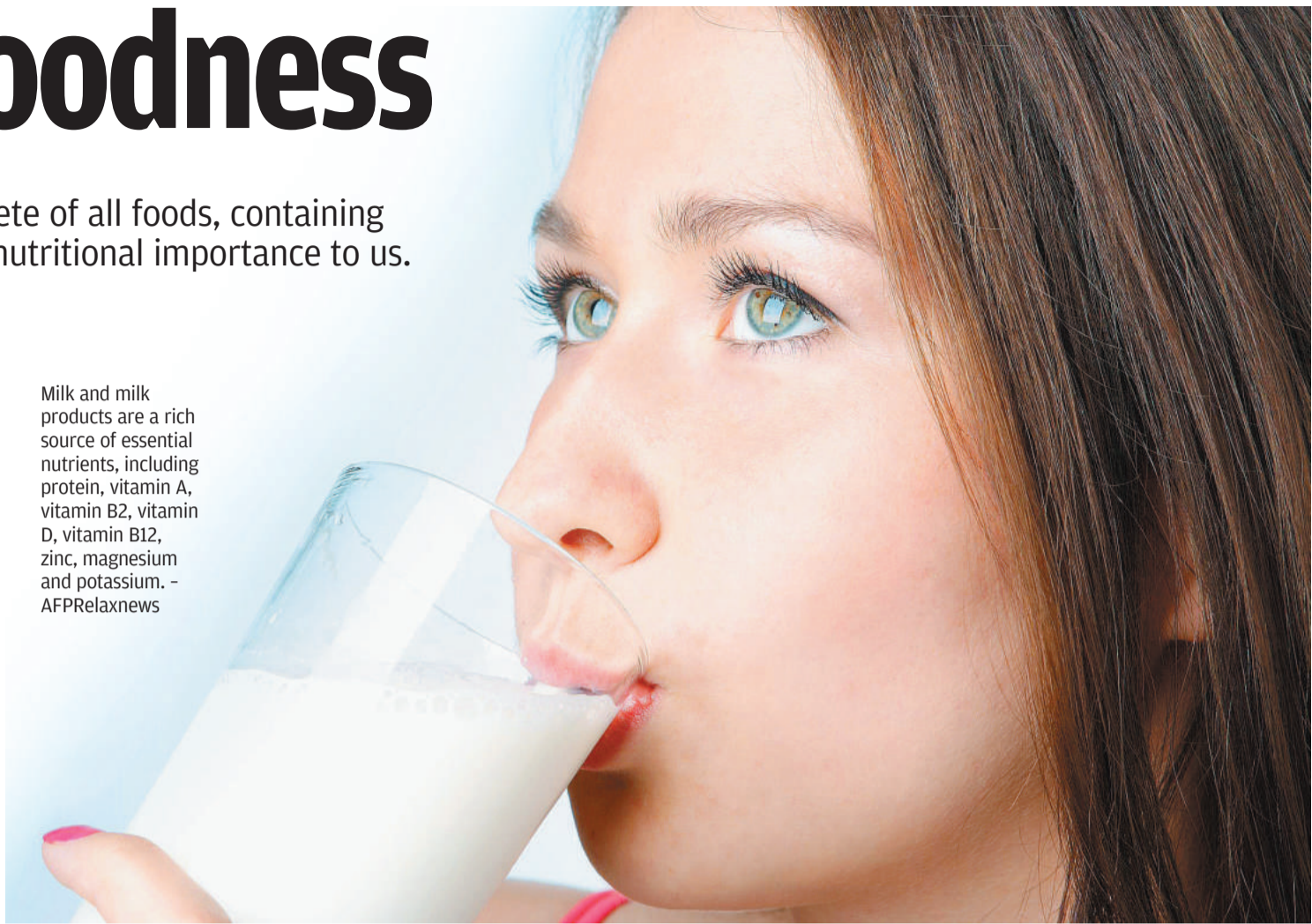
Milk powder for children has been formulated so that the nutrient profile is closer to the needs of children one to nine years of age. While it may be true that children at this age is generally able to consume full cream milk powder, milk powder for children has been formulated to meet the rapid growth and development of young children. They also contain other value added components. It is hoped that this milk will be preferred over other less nutritious beverages.

Sweetened condensed milk and sweetened condensed filled milk (in which milk fat has been replaced by vegetable oil or fat) are highly evaporated milk to which sugar (up to 40%) has been added. After dilution, such products have very low nutrient content and should not be considered as milk products. They must not be used for feeding infants and young children.

Evaporated milk is the product where part of the water has been removed by evaporation. It is used more for culinary purposes such as in the preparation of desserts.

Low fat milk is milk which contains not more than 1.5g of fat per 100ml of milk. Skim or non-fat milk is milk without the milk fat but with most of the other essential nutrients intact. It is useful for those who want to limit their intake of energy, fat and cholesterol. These types of milk are not appropriate for

Milk and milk products are a rich source of essential nutrients, including protein, vitamin A, vitamin B2, vitamin D, vitamin B12, zinc, magnesium and potassium. - AFP/Relaxnews



children because they need the fat and fatty acids contained in milk.

Nutritional value of milk

Milk and milk products are encouraged to be consumed in the dietary guidelines because they are a rich source of essential nutrients, including protein, vitamin A, vitamin B2, vitamin D, vitamin B12, zinc, magnesium and potassium.

Of particular significance is that milk and milk products are also rich sources of calcium that is readily absorbed.

Calcium is used for building bones and teeth and in maintaining bone mass. Vitamin D functions in the body to maintain proper levels of calcium and phosphorus, thereby helping to build and maintain bones. Thus diets rich in milk and milk products help build and maintain bone mass throughout the lifecycle. This may reduce the risk of osteoporosis. The intake of milk and milk products are especially important to bone health during childhood and adolescence, when bone mass is being built.

Milk and milk products are also convenient to consume and relatively readily available. Their consumption should be encouraged for all groups of the general population through the life cycle.

Recognising the nutritional value of milk and its importance to school children, the School Milk Programme (SMP) was introduced in the country in 1985. Over the years, SMP has continued to be implemented as a free or subsidised programme, depending on the group of children. It is anticipated that SMP will provide nutrients to the needy children while playing a very important role in inculcating and maintaining milk drinking habit until adulthood and beyond.

It is most unfortunate that there have been intermittent problems in the implementation of the programme, especially in relation to poor storage of the milk packets. This has resulted in isolated cases of food poisoning among some children.

In 2011, the programme was rebranded and known as "1Malaysia School Milk Programme". I certainly hope that the storage problem can be seriously looked into and resolved so that SMP will continue to benefit the school children.

Sugars in milk - look at the bigger picture

Plain milk is generally recommended. It is however quite acceptable to give flavoured milk, if the situation warrants, to children and the elderly, for instance.

Flavoured milk is milk to which flavouring substances (eg vanilla, chocolate) have been added. The nutritional content of flavoured milk is similar to that of plain milk. The main difference is that flavoured milk may contain some sugar, added to counter the taste of some flavours used, e.g. the bitter taste of cocoa.

There is no need to totally avoid consuming flavoured milk as the additional sugar does not really add to total sugar (and hence calorie) intake in the long term. Indeed, for children who refuse to take plain milk, the use of flavoured milk may be useful in encouraging milk consumption, resulting in more nutrient intake. These children may indeed be having overall lower sugar intake because the flavoured milk they consume will displace other sugared beverages that have much lower nutritional value.

There is therefore no necessity to be overly alarmed about some amount of added sugar to children's milk. It is not wise to stop giving this milk to their children.

Doing so would result in their children missing out the important nutrients that are contained in milk. Sugar may need to be added to this milk for technological reasons, as well as to make milk more acceptable by children. The amount of sugar that is permitted to be added is controlled by a specific food law in the country.

Yes, it is indeed not desirable for children to have excess intake of sugars. However, it is important to stress that in the reduction of excessive sugar intake, it is more important to reduce intake of foods (that we can consume these in large amounts) containing high amounts of sugar, eg many desserts, cakes and local *kuih*. There are also foods with "empty calories" which are high in sugar and hardly other nutrients, eg flavoured sugary drinks.

Drinking milk does not cause obesity

Milk contains fat, saturated fat and cholesterol too. Should we stop drinking milk because these will make us fat? Certainly not. Drinking milk according to the amounts recommended in the food pyramid does not make a person fat. There is no need to be overly concerned with the fat and cholesterol in milk. We should not stop giving milk to children just because of the fat it contains. In reality, children need fat.

Yes, it is indeed not desirable for us (and children too) to have excess intake of fat as it contributes to calorie intake of a person. One should consume less of foods that are high

in fat and oil, eg fatty meat and products and fried foods. And many Malaysians love these calorie-laden foods that are major contributors to the overweight and obesity problem in this country.

Similar to the situation with sugar in milk, one should look at the overall calorie intake from all food sources rather than be overly concerned with any one particular food. It is important to look at the overall nutritional profile or content of a food rather than a specific component in food. In the case of milk, the overall positive nutrient content should be viewed positively.

Lactose intolerance

In the condition called lactose intolerance, a person is not able to digest the lactose present in milk due to a lack of the enzyme lactase in the body. The symptoms that may occur include flatulence, bloating, abdominal pain, and diarrhea when milk is consumed.

The exact extent of lactose-intolerance among Malaysians is not well documented.

Persons with lactose intolerance need not give up milk and milk products completely as small amounts of such foods can often be tolerated. Some ways to make intake of milk and other dairy products more tolerable are to consume the milk in small quantities (approximately ½ cup) at intervals throughout the day or to choose fermented dairy products (eg yoghurt or cheese) rather than milk.

Let the MDG 2010 guide you and your family members in adopting healthy eating habits and an active lifestyle. The complete MDG is obtainable from the Ministry of Health website: www.moh.gov.my/v/diet. The Nutrition Society of Malaysia has also made available leaflets of these MDG suitable for the public (www.nutriweb.org.my).

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