

## **Issues in the development of school milk**

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## **1. FAO's Involvement in the Promotion of School Milk**

In 1997, as a result of a number of requests received for information on school milk programmes, it became apparent that there was no forum for the dairy industries in FAO (Food and Agriculture Organisation of the United Nations) member countries to exchange information on school milk. FAO's Commodities and Trade Division has attempted to bridge this gap by using e-mail networks and an associated internet site as media for the exchange of information on this subject area. Consequently, FAO now serves as a world centre for the collection of information on school milk systems and offers advice and assistance to countries wishing to develop such programmes.

As part of this process, FAO has co-operated with a number of national organisations in presenting a series of conferences on the provision of milk to school-aged children. The conferences focus on providing a forum for the exchange of information and experiences between professionals working with school milk programmes. FAO's role in these conferences is principally in the area of planning the technical programme and serving as a central contact point. Topics covered depend on the particular interests of the region in which any given conference is held; however, typically, these would include an international overview of school milk programmes, the role of milk in child nutrition, and the administration and financing of school milk programmes. Since 1998, conferences have been held in South Africa, the United Kingdom, Australia, Thailand, Austria, the Czech Republic, Colombia, Canada, Lebanon, Finland, China, Mexico, Sweden, Iceland, Uruguay and the United States. A number of future conferences are scheduled for coming years: Jamaica (October 2004), China (March 2005), Uganda (September 2005), Austria (spring 2006) and a tenth anniversary conference in South Africa in 2008. Additional requests to assist with conferences are currently being considered. As well as the conferences where FAO was requested to lend its support, a number of conferences have been held independently of FAO over recent years; many of these drew their inspiration from the organisers attending one of the above conferences.

In view of the strong international interest in this topic, the Commodities and Trade Division has established a school milk e-mail list to facilitate discussion and information exchange and has published a number of reports on school milk programmes. The Division is also working to encourage information exchanged on school feeding activities within FAO and between other UN agencies.

Anyone interested in joining either the School Milk e-mail list or obtaining information on future conferences should contact: [Michael.Griffin@fao.org](mailto:Michael.Griffin@fao.org)

## 2. School Milk: A Global Overview

### i) Introduction

The aim of this paper is to give an overview of current experiences of implementing school milk programmes, to discuss general trends in the development of such programmes and to draw conclusions about their future role as vehicles for promoting milk consumption.<sup>1</sup> For some, school milk by definition implies a programme supported, both financially and administratively, by government. For others, school milk is literally the distribution of milk in schools by whatever means: government programmes, promotion by the industry or, simply, commercial supplies of milk to schools. For the purposes of this paper, the latter definition was adopted and consequently the scope data collected during the survey was defined as “milk in schools” and not “school milk programmes.”<sup>2</sup>

For any country, school milk represents only one of the many segments which make up the national dairy market. However, the importance of milk and dairy products in schools lies not just in the size of the market itself, but also in its consumers: children. Children represent an important market, not only because they drink more milk per head than adults, but, also, because dietary habits established in childhood persist into adult life. Thus, children who drink milk and consume dairy products regularly will continue to do so as adults. While the home environment is important in determining preferences regarding food consumption; so is that of the school.

While in some countries the principle of support to school milk from the public purse is still very much alive, in others such subsidies have either been abolished or reduced, often with a consequent negative effect on the amount of milk distributed through schools.<sup>3</sup> In some instances, school milk programmes have re-emerged with support from the dairy industry (farmers, processors, dairy associations) rather than government. In such cases, support may not always take the form of subsidising the milk itself, but rather focus on the promotion of milk drinking in schools, leaving the milk to be supplied by commercial distributors. In instances where the government does not subsidise the distribution of milk in schools, legislation may favour school milk programmes; for example, by specifying the amount of milk which should be made available to children in school lunches or prohibiting the sale of competing products, such as carbonated drinks, in schools.

### ii) School Milk: A measurable phenomenon at the national level?

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<sup>1</sup> The principal source of information used is a survey undertaken by the Basic Foodstuffs Service of FAO's Commodities and Trade Division. The results of the survey are available at: [http://www.fao.org/es/ESC/en/20953/20999/highlight\\_25253en.html](http://www.fao.org/es/ESC/en/20953/20999/highlight_25253en.html) or by contacting: [Michael.Griffin@fao.org](mailto:Michael.Griffin@fao.org). The survey questionnaire was based on a previous one which had been developed by the International Dairy Federation's International Milk Promotion (IMP) Group. Questionnaires were sent to speakers on the conference programme, members of the IMP group and to the Dairy Outlook list – an international e-mail list operated by the Basic Foodstuffs Service. In all, replies were received from 36 countries, viz.:

Argentina; Australia; Austria; Canada; China; the Czech Republic; Denmark; Egypt; Estonia; Finland; France; Germany; Iceland; India; Ireland; Israel; Japan; Kenya; Lesotho; Malawi; Moldova; Namibia; Netherlands; New Zealand; Norway; Philippines; Portugal; Saudi Arabia; Slovakia; South Africa; Swaziland; Sweden; Thailand; United Kingdom; United States; Zambia.

<sup>2</sup> As not all those filling out the survey questionnaire saw school milk in this light, information on commercial deliveries to schools was not covered by all respondents.

<sup>3</sup> Some twenty years after the government-funded school milk programme was abolished in Australia, a survey showed that milk accounted for only 4 percent of beverages drunk by children in schools (Davey).

The importance of school milk within the liquid milk market of the countries surveyed varied markedly. In Thailand, for example, school milk accounts for 25 percent of national milk consumption. Moving down the scale, for a group of countries, school milk represents a significant proportion of the liquid milk market: Japan (9%); the United States (7%); Finland (5%); Lesotho (5%); Norway (4%); Sweden (4%); Canada – Prince Edward Island (3%) and Denmark (3%). For most other countries responding to the survey, school milk represents around one percent of the national liquid milk market. As might be expected, high importance of school milk within the national market is associated with programmes to promote milk consumption in schools. Evidence from Denmark shows that milk consumption in a school increases by 40 percent when a school milk scheme is introduced. Similarly, in Ontario, Canada, fewer than 100 of the province's 4 000 primary schools sold milk in 1987, when Dairy Farmers of Ontario started a school milk promotion programme. As a result of the programme, it is projected that the number of primary schools selling milk in the province will reach 2 900 by mid-2004.

In many countries, the development of school milk programmes has been associated with the growth of the national dairy industry. In some, for example Thailand, China, Brazil and Peru, the provision of milk to schools is specifically linked to national production. In other countries, Indonesia, Lesotho, the Philippines, Saudi Arabia and Swaziland, part of the milk served in schools comes from reconstituted imported milk powder. However, in most cases, there are efforts to replace imported milk with that produced domestically.

### **iii) National Approaches to Milk in Schools**

In many peoples' minds, school milk is synonymous with milk being subsidised, or even given free. The FAO survey shows that in the majority of countries this is the case.<sup>4</sup> However, within the three categories of milk distribution – free, subsidised and full-cost - the scope and operation of school milk systems is extremely varied. Taking, for example, the countries where milk is given free; in some countries – Argentina, Moldova and South Africa – this involves programmes which are limited in size and concentrate on a specific group in the population – such as children from low-income families. In other countries where milk is given free – Finland, Portugal, Sweden and Thailand – such programmes cover a high proportion of the school population: in the case of Finland and Sweden, free milk is provided for children until they complete secondary schooling.

The largest group of programmes covered by the replies to the survey consists of countries which subsidise school milk. Here, in most cases the subsidy is provided by national or local government.<sup>5</sup>

Lastly, 30 percent of the countries responding charge the full-cost for milk distributed to schools. In some countries, dairies distribute milk through schools, as for any other market; however, this may be supported via promotional programmes or government legislation. For example, in the Canadian province of Ontario, milk is extensively promoted in schools. Elsewhere, in Saudi Arabia, the government introduced legislation in 1997 which prohibited

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<sup>4</sup> Caution must be exercised when generalising from the survey results. For example, within a single country, the operation of school milk systems can vary markedly. To take the case of Canada, virtually each of the ten provinces has a distinct policy regarding subsidising milk in schools, milk nutrition education and milk promotion (Nicholas Price-Owen).

<sup>5</sup> In the European Union (EU) member states, school milk programmes are eligible for a subsidy of approximately 20 percent of the cost of the milk used.

the sale of: “low quality foods, e.g., soft drinks...” in schools, which led to milk, fermented milk (laban) and yogurt being sold in their place.

In countries whether school milk is sold at “full-price”, the dairy company supplying the school, or the school itself, may choose to take a lower margin. Thus, a comparison between the prices charged for school milk and the same milk sold elsewhere shows that the discount offered on school milk - approximately a third - is the same in Austria, Iceland and Germany, where milk is subsidised, and Estonia, where it is not. Similarly, school milk in Ontario, New Zealand and Zambia is sold at a discount over standard retail prices. In fact, an examination of the data presented shows that only six countries – China, Lesotho, Malawi, the Philippines, Saudi Arabia and Slovakia - charged the full commercial price for milk supplied to schools.<sup>6</sup>

While most countries either provide milk free or subsidise its distribution in schools, the issue of whether or not milk in school should or needs to be subsidised is increasingly a focal point for discussion. Except in the richest countries, school milk programmes can be an excessive strain on finances and, as a result, activities may decline because of a lack of funds. For example, in the case of Kenya, milk distributed under the government funded school milk programme dropped from 44 million litres in 1989 to 3 million litres in 1997, and subsequently stopped altogether. In richer countries, political decisions to end school milk subsidies, for example the ending of the free distribution of milk in schools in the UK, Australia and New Zealand in the 1970’s, resulted in a substantial drop in the consumption of milk in schools.

In the past, in many instances where milk was supplied free in schools, the distribution system was inflexible and the product itself – typically unrefrigerated white milk – was unappetising. Indeed, some adults dislike drinking milk because of the way it was presented to them during their school years – for example, being left by the radiator in winter or in the sun during summer. School milk, in all its guises, has moved on since then. Frequently, this has meant that systems for distributing milk have become less monolithic and centralised, allowing for regional and local differences to be catered for. Also, as students, or their parents, have often had to bear a higher proportion of the cost, milk has had to be presented in a more attractive way – in terms of refrigeration, flavouring and packaging - in order to maintain sales. In short, milk in schools is being tailored to meet the demands of the consumers – children – rather than simply being presented as a bulk commodity.

#### **iv) Supply and Distribution of Milk to Schools**

The supply of milk to schools can range from a nationally centralised programme, for example in the case of Denmark and Portugal, to a dairy having an arrangement with a single school to supply milk.<sup>7</sup> In a number of countries, apart from the physical delivery of milk to schools, an umbrella body responsible for promotion may facilitate delivery and distribution.

The most common methods of distributing milk are for it to be drunk in the classroom, often at mid-morning break, or for it to be distributed in the school canteen, either at break times or

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<sup>6</sup> In 2000, and therefore after the survey was completed, China began a national school milk programme, which includes an element of financial support from the government via tax concessions. After starting in five trial cities, the programme has spread rapidly and, at the end of 2003, covered 28 cities.

<sup>7</sup> A novel variation on local distribution occurs in Austria, where most school milk is bottled on-farm and delivered by the farmer to schools in the surrounding area.

with meals: breakfast or lunch. In addition, vending machines are used in a number of countries and bringing milk from home is common. Data on the size of packaging used in schools, shows that individual servings of between 200-250 ml predominate, with milk dispensers, usually based on 20 litre sacks of milk, in second place.

One reason often given for the lack of development of milk in schools is that schools are unwilling to take on the administrative burden associated with its distribution. For example, teachers may be reluctant to supervise the distribution of milk in classrooms, perhaps having to collect and account for money, in addition to their other duties. This issue varies in importance between countries, for example, in some countries, school canteens are run by caterers and not by the school administration. The two main groups identified in the survey as being responsible for distributing milk in schools are canteen/shop staff and teachers, with pupils, parents and school janitors forming a secondary group.

Many programmes recognise that the administration of school milk places an extra burden on the school and seek to reduce this. For example, the dairy or distributor who delivers milk to the school may have responsibility for stocking a refrigerated display cabinet with milk. Alternatively, payment may be made by parents to a central organisation, so that the school is not directly involved in this aspect of the programme. In a number of instances, the school children themselves take on the responsibility for distributing the milk and collecting empty cartons within the classroom. In other cases, the school receives a commission on sales of milk which can be used for financing activities or purchasing equipment.

#### **v) Competitive Position of Milk in Schools**

Milk is available to some degree in schools in all the countries covered by the survey. However, in many countries the trend is for less milk to be distributed through school and in the majority of countries milk is not the leading beverage drunk by children in schools. Compared to other drinks, milk occupies a generally weak position in the survey sample: in 60 percent of replies, milk was consumed less than other drinks; in 12 percent of cases, about the same; and only in 27 percent of cases was milk the main beverage drunk in schools. Even where milk is available free to children, evidence from Scandinavia shows that it must still be promoted in order to maintain its position against tap water, which is also provided with meals.

Milk is promoted in schools in three-quarters of the countries replying to the survey. The most common methods used are the provision of refrigerators, educational resources and incentives and promotions. In addition, sponsorship, special payments, provision of dispensers, milk bars and internet were also used. Most of the countries replying to the survey (60 percent) expected that promotional activities for milk would increase in the future, while a further 33 percent expected them to be maintained at current levels. The survey results show that promotional activities are more common, although not markedly so, in primary than in secondary schools. In terms of promotional claims which are made for milk, most campaigns concentrate on the health benefits of drinking milk, stressing calcium, vitamins and other minerals and the importance of milk as part of a healthy diet, while the good taste of milk is a secondary focus.

In terms of availability, fruit juice is the main competitor to milk in schools, with carbonated drinks in second place; however, carbonated drinks were more frequently mentioned as being the most popular alternative to milk. Compared to milk, a lower percentage of competing products are promoted in schools - approximately 60 percent. Some of the promotional

methods favoured for competing products are similar to those used for milk: provision of refrigerators/chilled vending machines; sponsorships and incentives and promotion. Notable differences are the virtual absence of educational resources and a higher incidence of sponsorship and special payments. In 70 percent of countries, competing products were expected to increase their promotional activities in schools; a higher proportion than for milk.

The difference in emphasis between the promotion of milk and that of competing products provides an excellent illustration of where milk's competitive advantage is. Milk's strength lies in the fact that it is viewed as a product which is good for children. This offers wide-scope for the development of educational materials. On the other hand, milk does not have the financial resources to match those of the soft-drinks industry. Similarly, higher profit margins on soft drinks, and incentive payments based on the volume sold, may lead to canteens preferring competing products to milk.

While school milk programmes provide privileged access to an important market – children, the consumers of the future – this privilege also implies responsibilities. In some instances, excessively commercial promotion campaigns may be considered inappropriate by school authorities and other decision makers. For example, handing out *tattoo* transfers with milk in Australia was not approved of by some teachers. Also, programmes that rely heavily on joint promotions with private companies, such as mobile phone providers, or use scratch cards where prizes can be won, may be viewed as inappropriate by some. In most cases, there are no formal regulations governing such promotional activities in association with school milk programmes, therefore providers of school milk need to exercise self-imposed restraint. If not, the same criticism levelled against the rampant promotion of carbonated beverages and snack food to children could also be have a spill over effect and be applied to school milk programmes and their promoters.

#### **vi) World School Milk Day**

Following discussion on FAO's Dairy Outlook and School Milk e-mail lists regarding selecting a particular day on which school milk could be celebrated internationally, consensus was reached amongst members that World School Milk Day would be celebrated on the last Wednesday in September. This date was chosen because schools were open in all the countries surveyed during this month. The end of the month was selected to allow countries in the western hemisphere sufficient time to prepare for this day, as in most of these countries the school year starts in early September. Wednesday was chosen as it was a school day in all countries surveyed. The first World School Milk Day was celebrated in 2000 and it has since become an annual event celebrated in countries throughout the world. The goal is to provide a particular day when attention is focussed on school milk and thereby serve as a mechanism for its promotion. Importance is lent to the event by the fact that other countries are doing the same thing on the same day.

**World School Milk Day** is celebrated in many countries spread throughout the world. For example, in 2003, the *Day* was celebrated in 34 countries ... and the number of countries participating is growing each year. Amongst the countries holding annual celebrations are: Austria, Canada, China, the Czech Republic, Ethiopia, Finland, France, Guyana, Indonesia, Jamaica, Malaysia, Oman, the Philippines, Poland, Sweden, Switzerland, Tanzania, Thailand and the United Kingdom. The wide range of countries - small countries, large countries; rich countries, poor countries - illustrates the universal interest in school milk programmes.

What type of celebrations is held is up to the individual country to decide. Some elements which are common to many of the events are: the distribution of free milk to pupils, running competitions and sporting events, integration of a milk-related activity into the school curriculum to coincide with the *Day*, holding seminars, the distribution of teachers' support material, having a national figure endorse the *Day*/school milk, and the preparation of press releases.

For example, in the **Canadian province of Manitoba**, schools were encouraged to discover more about milk consumption in countries around the world and put their findings into a poster format. Some schools linked this activity to lessons on flags from all the provinces of Canada and from countries around the world. While, in **China**, a series of national press articles were published focussing on the importance of the national school milk programme and why milk should be served during the school day. Elsewhere, in **Ethiopia**, activities to celebrate the *Day* included: providing warm milk drinks to school children; competitions and prizes; nutrition seminars; publicity leaflets; press releases and speeches by local political figures, such as town mayors. In **Jamaica**, visits to milk processing plants by groups of school children were organised and free milk was distributed at rural primary schools ... and, in **Switzerland**, farmers distributed milk and milk shakes to over 140 000 children.

The goal of **World School Milk Day** is to provide a particular day when attention is focussed on school milk and in so doing promote the distribution of milk in schools. At the national level, importance is lent to the event by the fact that other countries are doing the same thing, on the same day, and by the fact that a United Nations agency (FAO) is supporting the activity.

**If your country does not yet participate in celebrating World School Milk Day ... why not start? Celebrations can be at any level – from a single school to the whole country. Give it a try ... you'll enjoy it!**

#### **vii) School milk in the world: What future?**

School milk programmes take many forms. Some programmes concentrate only on milk, whereas in others milk is only one of the elements involved. Funding varies considerably, in some cases programmes are completely funded by government, whereas in others funding is wholly private: in many countries, there is a "middle road" whereby funding consists of a mixture of public and private sources. Even in cases where the government is not directly involved in funding such programmes, public policy, such as nutritional guidelines for school feeding, can have an important impact on the ability of school milk programmes to grow and prosper. Thus, promoting the importance of milk in child nutrition to decision makers – government, school boards, teachers, canteen managers and parents – is an important activity: not forgetting the need to promote milk's benefits to the consumers themselves – the children, and ultimately society as a whole.

Central co-ordination is a key factor in the success of school milk programmes. Left to themselves, dairy companies are unlikely to want to sustain the effort of establishing and maintaining such programmes. Also, a central organisation represents an important contact point for liaison with policy makers; a role that it would be difficult, if not impossible, for dairy companies to pursue individually.

A number of the instances cited above cover school feeding programmes established under aid-funded project assistance. While such assistance brings many benefits and can provide the necessary impetus to get a school milk programme up and operating, it should be remembered that aid-assistance is finite and when it ends can lead to difficulties of sustaining the system once it must depend only on national resources. For this reason, some countries – for example China, India, Saudi Arabia, Malaysia and Oman – represent interesting examples, as their programmes have been begun without any direct financial support from government or external agencies. In such cases, it may well be that the system that eventually evolves will be the one best suited to domestic resources and therefore be the most sustainable in the longer term. In other cases, where limited government funds are available, these may be used best to provide school milk to poorest sections of the student population; leaving other sections of the programme to be self-financing. As already mentioned, the absence of direct government funding to the programme does not mean that government support in other areas, such as setting standards and providing guidelines on good nutritional practices, is not important.

By creating demand, school milk programmes can directly benefit dairy development. This is particularly true in countries with relatively undeveloped dairy industries. In such countries, school milk is seen by farmers and processors as an exciting opportunity to create a consumer base. It is worth remembering that the school milk programme in Japan was instrumental in increasing that country's annual milk consumption (in milk equivalent) from 5 litres/person at the start of the 1960's to over 70 litres today. Imagine if the same result were achieved in China, a country which currently has a similarly low level of annual milk consumption, averaging 6 litres/person.

It must be acknowledged that school milk is not an easy market; nor in many countries is it particularly large. Therefore, it is easy to see why, left to themselves, few dairy companies would want to pursue this market. From the point of view of the milk industry as a whole, however, school children must be considered as tomorrow's adult consumers, who if they do not develop the habit of drinking milk and eating dairy products as children, are certainly not going to develop it later on in life. Therefore, programmes which encourage children to choose milk and milk products should not be viewed only in the light of the actual volume of milk sold, but as an investment in the future demand for milk. In such a situation, it is necessary for members of the industry - farmers, processors, distributors - to work together to promote milk in schools. Indeed, this would seem to be the only way that the milk industry can meet the challenge from competing beverages which are heavily supported by promotional campaigns. While milk may not have the financial muscle of carbonated drinks, the dairy industry has a major advantage over such beverages: its product is considered a necessary component in children's diets.

Milk is an out-right winner when its nutritional role in children's diets is compared to carbonated drinks. In terms of its status in schools and child nutrition, milk also has the significant advantage of being seen in a positive light by both policy makers and parents. Furthermore, in over half of the countries surveyed this is reinforced by national nutritional guidelines which specify daily recommended levels of milk consumption for children.

Experience shows that the fact that milk is more nutritious than competing beverages is not enough for it to maintain, let alone expand, its role in children's diets. School milk programmes, therefore, represent an important vehicle for the promotion of milk. Such programmes are currently seeing a resurgence of interest and are enjoying a renaissance as

more imaginative and appealing ways to presenting milk to children are sought. While school milk programmes still predominantly rely on government support, a number of examples of programmes without a direct financial contribution from government can be cited. Children, and the food they eat, are influenced by an environment much wider than that of the school; however, school-based programmes provide an excellent opportunity to promote milk consumption amongst children and in so doing establish a life-time's habit.