

‘School Milk’ in the Context of the Australian Dairy Industry

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Abstract: Australia, as with a number of other countries with dairy industries, established a national school milk scheme which operated from 1951 to the beginning of 1974 at no cost to the children’s families. The scheme, funded by the federal government and administered by the states, ended abruptly after costs blew out, with resultant losses by the industry. This article describes the limited provision of milk in schools in two states prior to the national scheme and how, after the cessation of the national scheme, dairy industry initiatives in some states were gradually developed to market liquid cow’s milk, including flavoured products, at subsidised prices to school children who were perceived as potential lifelong consumers. The article traces the rise and decline of these schemes in the late twentieth century within the context of moves towards dairy deregulation and its effects on the industry.

Key words: dairy industry, dairy marketing, school milk, dairy deregulation

Introduction

School milk schemes were implemented in Australia and other countries in the twentieth century, with a free national scheme in place in Australia from 1951 (1953 in Queensland) to early 1974. As discussed in a previous article, these schemes were conceived as a means of marketing liquid cow’s milk when sales were poor, prices were low and farmers were suffering hardship, with the advantage that the marketing motive for this expenditure was made palatable to politicians and the public by emphasising the benefit to children.¹ The concept was thus mutually beneficial for as long as governments were prepared to continue to foot the bill. Increased interest in nutrition science in Britain after the First World War, particularly regarding vitamins, led to disagreements between scientists and between rival committees, such as the Advisory Committee on Nutrition and the committee set up by the British Medical Association. Moreover, as John Welshman and other authors have described, studies to assess children’s nutritional status were flawed.² These weaknesses included a focus on the newly discovered vitamins to the neglect of caloric intake and a failure to take into account the complementary effects of school meals where they were available. However, the nutrition debate fed into the desire of government and industry to find a market for liquid cow’s milk,³ especially as an alternative to the politically

unpalatable option of reducing imports of other dairy products from Commonwealth countries during a period of domestic oversupply.⁴ A number of authors who have done extensive research on this question, including Peter Atkins and John Welshman, agree that the establishment of the British school milk scheme in 1934 was conceived as more a solution for the struggling dairy industry than as a health intervention for school children, although both were factors; and it was cheaper than culling surplus cows.⁵ Carin Martiin describes how in Sweden, too, milk marketing during the same period was linked to the needs of the farmers, while appealing to concepts of public health.⁶ Peter Atkins believes that the dangers of contamination and adulteration of English dairy milk was downplayed at this time, when there was no requirement for pasteurisation or tuberculin testing of dairy herds.⁷ This was in contrast to Australia, where school milk was required to be pasteurised from the scheme's inception, but that was a decade and a half after the British scheme began.

Prior to their national schemes, both Britain and Australia already had limited local programmes supplying liquid cow's milk to children. In the case of Britain, some schools had voluntary milk clubs and the Board of Education made provision for free milk to be distributed to needy children through Local Education Authorities. Even before the Education (Provision of Meals) Act of 1906 which introduced school meals in an organised manner, some charitable organisations in London were already providing school dinners to destitute children.⁸ Milk was not considered a necessary part of these meals as it was still viewed as a supplementary food, until trials in the inter-war years by Harold Cory Mann in London and John Boyd Orr in Scotland promoted its nutritional value.⁹ In the case of Australia, in the 1940s New South Wales and Victoria distributed cow's milk to young children at school or in early childhood centres as a nutritional intervention. In New South Wales two state government departments funded and administered separate schemes, the Education Department from 1941 supplying metropolitan and some regional schools with milk for children under twelve years, while the Department of Labour, Industry and Social Welfare provided it to younger children in kindergartens and crèches.¹⁰ During the same decade, a Victorian scheme, funded largely by that state's Milk Board, with some state government funding, provided milk to children in crèches and kindergartens in disadvantaged areas. In 1949 this scheme was extended to children in the first three years of primary education in both state and Catholic schools. All these 1940s schemes mandated pasteurisation and New South Wales required milk to be sourced from tuberculosis-free herds.¹¹

This raises the question of why the Australian free school milk scheme was so much later than the British scheme and the scheme begun in 1937 across the Tasman in New Zealand. In the United Kingdom, overproduction in relation to sales was an important factor in the political will to go ahead with a 'milk in schools' scheme in 1934, when loyalty to the dominions made it politically unpalatable to end or diminish imports of butter and cheese from Canada and Australia. In Australia, different factors were involved, particularly as contracts with fixed prices for butter exported to the United Kingdom insulated producers from wide fluctuations of the market.¹² Despite earlier overproduction, by the time the national school milk scheme was decided upon, there was instead a low point in dairy production in at least one of the dairying states, New

South Wales.¹³ Dairy farmers were struggling. Consequently, while industry spokesmen welcomed the scheme, concerns were expressed about meeting the additional production required without reducing butter exports.¹⁴ A factor which differed from the political situation in the United Kingdom was that Australia had a coalition government in which the junior party, the Country Party, represented a mainly rural constituency. This party, under Sir Earle Page, a medical man turned farmer, had earlier negotiated for influential positions to be guaranteed and maintained in federal cabinet, including the position of deputy leader.¹⁵

In Australia the national free school milk scheme was funded by the Commonwealth (federal) government and administered by the states under the *State Grants (Milk for School Children) Act* of 1950.¹⁶ Under this Act, the Commonwealth additionally made provision for the supply of free school milk to children in the Northern Territory and the Australian Capital Territory. When it was implemented nationally, federal cabinet papers reveal that, apart from one survey during the war years, no needs analyses had been conducted to ascertain whether post war school children had specific nutritional deficiencies that such schemes could address.¹⁷ However, Earle Page alluded to this wartime survey in the debate in federal parliament.¹⁸ Across the Tasman, the New Zealand Milk Board admitted in the 1970s that research conducted when that country's scheme was implemented in 1937 showed no evidence of any nutritional deficiencies there.¹⁹ By 1969, when the federal cabinet discussed continuation of the scheme, both the Minister for Health and the Minister for Primary Industry supported the proposal on the grounds of children's health as well as agricultural considerations and the potential hardship to farmers of any discontinuation.²⁰ Despite the ten year extension, the last year it operated was 1973 and it ended at the start of the 1974 school year.²¹

A further marketing objective of school milk schemes was to create lifelong consumers and thus provide for the long term viability of the market for liquid milk.²² There is no evidence that this goal was ever met.²³ On the contrary, school children typically found the product unappealing, even unpalatable, because of the lack of refrigeration before distribution at the morning break.²⁴ Indeed, a hand-written marginal comment written against an observation on the condition of the milk in a December 1969 federal cabinet document, observed, 'I know this from my own children's complaints'.²⁵ A legion of anecdotal reports suggest children developed an aversion to drinking white milk which continued into later life.

The growth of the advertising industry had previously come at a fortuitous time for a public health sector that was eager to reassure the public that the difficulties in delivering safe, uncontaminated, liquid milk to the consumer's door, without souring, had been largely overcome. Daniel Ralston Block has described this in relation to Chicago in the United States. There a crusading Health Commissioner, Herman N. Bundesen, whose long tenure stretched from 1922 to the 1950s with only a short break, insisted that public health officials should act as salesmen, promoting good health.²⁶ He revamped the weekly departmental bulletin into a visually attractive publication, and was not averse to conducting stunts if they would bring widespread publicity. His 1924 fuelling of a locomotive with dried cow's milk to pull loaded carriages ten miles (sixteen kilometres) to demonstrate that cow's milk provides energy, was front page news. H. Morrow Brown



Figure 1. Child welfare display, Brisbane City Hall, c. 1946. Queensland State Archives, Digital Image ID 2728.

has suggested that the mass promotion in industrial countries of cow's milk as a safe and nutritious drink resulted in a higher consumption of it by children and adults than in the past, creating a change in diet.²⁷ In the various Australian states, dairy companies from time to time promoted white milk in display advertisements in newspapers, extolling it as a safe and nutritious drink,²⁸ and the public health sector also promoted it (See [figure 1](#)).

In the end, the success of the Australian school milk scheme in creating an immediate market for white milk proved its undoing, for escalating cost led to the federal government's sudden cancellation of the scheme. The dairy industry, including producers, processors, transport companies and other ancillary industries, was left with unfilled orders and the loss of a market at the current levels of production.²⁹ This article describes the emergence in the late twentieth century of state based schemes to promote liquid cow's milk in schools, with the twin objectives of increasing the market for this product at the time and fostering the habit of milk drinking for the future, in the hope of turning the young into lifetime consumers. Also described here are strategies used and the reasons for the eventual failure of school milk schemes *per se*, before they changed into merely a part of dairy marketing to target groups. This discussion is set in the context of the rise of neoliberalism and its effects on the dairy industry. The industry's terms 'white milk' or 'market milk' will be used here for liquid cow's milk intended for drinking, rather than for manufacturing. Flavoured products such as chocolate milk will be included under these terms since they are also liquid cow's milk.

Regulation and deregulation

Although the state based school milk schemes of the late twentieth century preceded deregulation, it is relevant to this account to explain the system of state regulation as it existed then, and the nationwide deregulation of the industry on 1st July 2000. Prices paid for white milk were always considerably more than for milk used for making butter and cheese.³⁰ So for decades state governments controlled the production of market milk, licensing dairy farmers and regulating the quality and marketing of the product, thereby creating monopolies within each state.³¹ Although there were differences between states, partly based on the relative proportions of white versus yellow (manufacturing) milk and other endogenous factors, prices were set artificially high, for which consumers had to pay. Geoff Edwards pithily described the process as 'State Governments help farmers milk consumers',³² but John Wilkinson provides grounds for attributing this to the excessive profit made by middlemen.³³ Access by farmers to the white milk market was therefore limited in states in which this milk formed a higher proportion of production, and in some states quotas were used for this purpose. Interstate trading of liquid milk was prevented. The Commonwealth Government, on the other hand, controlled manufacturing milk because of its constitutional powers over international trade, even though some of this was sold in the domestic market. Thus the dairy industry was highly regulated and protected for much of the twentieth century, at state level for liquid milk and at federal level for manufactured milk, so that farmers were less at the mercy of market forces.

Attempts in the nineteenth century and again in the soldier resettlement scheme after the First World War to encourage what Geoff Cockfield and Linda Botterill have called 'yeoman farmers' and increase employment failed to take into account the biophysical conditions of the poor Australian soils and uncertain seasons, the inexperience of the new farmers and their lack of capital.³⁴ Despite the protection of agricultural products at the time, their costs tended to exceed income, leading to the departure of struggling farmers and the amalgamation of farms when other farmers bought them.

The dairy industry and farm incomes were stabilised during the Second World War following the signing of a number of contracts at government level in the late 1930s, whereby the British government agreed to purchase excess butter and cheese from the Australian government at fixed prices.³⁵ These contracts continued into the early post war period and should be seen in the context of other contracts between the two governments on behalf of existing statutory boards for the meat and fruit industries.³⁶ Further factors that affected Australian farmers' incomes were geographical distance from the lucrative white milk markets of major cities and restrictions placed on access to some of these markets, even within the same state. Four examples which illustrate these points are drawn from the Illawarra district south of Sydney, the Richmond River district of northern New South Wales, the Atherton Tableland in the Far North region of Queensland, and around Perth in Western Australia.

As early as 1856 attempts were made to send liquid cow's milk on a five hour trip by steamer from the Illawarra District to Sydney, but this failed as the product deteriorated through lack of refrigeration. It was only when ice was used to maintain quality at about the turn of the century that this mode of transport became successful.³⁷ From the 1890s

most milk produced in the Richmond River district of northern New South Wales was sold for butter manufacture, some of which was for export to Britain.³⁸ The opening of a railway line in 1894 through the district and the development of refrigerated shipping assisted the expansion of local dairying for butter manufacture.³⁹ Farmers could receive a substantially higher price for white milk than for cream for manufacturing, but very little of the farm production could be sold for drinking in the local area because of the small population. Distance and the establishment in 1931 of a restrictive Milk Zone around Sydney created barriers to entry into the lucrative Sydney milk market for Richmond River farmers.⁴⁰ When the Milk Bill was passed in the New South Wales parliament in 1931 giving the Milk Board control over milk sales in Sydney, this involved milk worth an estimated 2,618,500 Australian pounds or 5,237,000 Australian dollars, a substantial amount in today's terms.⁴¹ Country newspapers widely reported the fining of farmers who attempted to circumvent the regulations by bypassing the board and selling directly to suburban distributors.⁴² Also widely reported in rural districts were claims to the Milk Inquiry in 1936 by Mr. Harry Davey, chairman and managing director of the Nepean Dairy Company, about the difficulty of making a living for farmers outside the Sydney Milk Zone.⁴³

Until the influx of American troops to the garrison town of Townsville in 1942, milk produced on Queensland's Atherton Tableland had largely been used for butter manufacture. Local dairies around Townsville could not supply the sudden increase in population so milk was sent on the existing bad roads from the Atherton Tableland to Innisfail on the coast and reloaded onto the southbound mail train to be pasteurised and bottled in Townsville. Initially the milk cans were packed in ice. The introduction after the war of stainless steel refrigerated road tankers, and refrigerated wagons on trains,⁴⁴ enabled liquid milk from the Atherton Tableland to be transported even further afield.⁴⁵ From the milk factory in Townsville, it was eventually sent to towns in north-west Queensland, the Northern Territory and beyond. It has not been possible to substantiate the credible claim that this was the longest milk run in the world. On the other side of the country, Perth's Ayrshire Dairy advertised in a newspaper dairy feature in 1937 that the company was dispatching frozen milk to remote parts of Western Australia and Port Augusta in South Australia. This indicated another way of addressing the problems of transporting a perishable product across long distances, extending the market for farmers.⁴⁶ Clearly there was a market for white milk, when the other option was reconstituting powdered or evaporated products.

As the century progressed, interpretations of the Australian Constitution evolved, leading to Commonwealth dominance in areas once left to the states.⁴⁷ The move to a deregulated dairy market at the end of the twentieth century involved the gradual removal of subsidies under neo-liberal political ideology and the implementation of a National Competition Policy.⁴⁸ Geoff Edwards has described the steps towards deregulation, including state reviews, a federal government structural adjustment package and enabling legislation in the states.⁴⁹ As the dominant force in the dairy industry in Australia, the Victorian dairy industry was the primary driver and principal beneficiary of the process of deregulation.⁵⁰ Before the Second World War, New South Wales had been a major exporter of butter, but subsequently there was a shift to domination of this market

by Victoria.⁵¹ Victorian processors and their shareholder farmers were vocal advocates of deregulation as they believed that smaller producers in other states benefited from subsidies that were not advantageous to the Victorian industry.⁵² As major producers of manufactured dairy products, they had lost their previous access to the United Kingdom market when that country joined the European Union in 1973. Barriers restricted them from competing in the white milk market in the other Australian states and so national deregulation of the dairy industry would be to their advantage. On the other hand, dairy farmers in New South Wales and Queensland feared that under deregulation a 'fair and reasonable' share of the market milk price would be undermined by the power of the major processors.⁵³

Starting even before deregulation there was a progression from an industry of family farms to farm businesses, with greater yields per cow and per farm.⁵⁴ Following deregulation, many farmers dependent on sales of white milk, particularly in states other than Victoria, left the industry and those who remained raised their production per cow.⁵⁵ The federal government's Marginal Dairy Farms Scheme in July 1970 provided federal funds to the states to purchase and sell 'unviable' dairy farms, further progressing the change in the industry from family farms to farming businesses.⁵⁶ The following year, the Rural Reconstruction Scheme was established to enable debt reconstruction or assistance to retain the farm. Yet, as Cockfield and Botterill point out, only a small number of farmers applied for support to leave the industry in the period from 1971 to 1976 and successful applications comprised only 0.1% of farmers.⁵⁷ With deregulation in 2000, a federally funded structural adjustment package provided exit payments to farmers who left the industry and also a Dairy Regional Assistance Program to assist communities that had been heavily dependent on dairying and would be affected by deregulation. This all cost money and so a levy of eleven cents per litre was imposed on retail sales to pay for it. Dairy farmers from Gympie in Queensland were concerned that the powerful Victorian lobby's competition for market share of liquid milk would increase costs to both farmers and the public, benefiting only the Victorian sector.⁵⁸

With the removal of state control and state subsidies under deregulation, and the end of the time limited structural adjustment package, the situation for Australian dairying in the period since deregulation is in marked contrast to that of its major global competitors. In the European Union, as a result of what Meredith Kolsky Lewis describes as well organised agricultural producer groups, dairy farmers have benefited from considerable support, as have other farmers.⁵⁹ In the early 1960s, the Common Agricultural Policy was established out of fears over the European Union's reliance on imported food. It provides a number of financial subsidies and places tariffs on food imports, as well as providing export assistance. A consequence of this was increased production leading to gluts in agricultural commodities, and less efficient farmers have been the major beneficiaries. As the Common Agricultural Policy grew to comprise about half the European Union's annual budget, efforts have been made to reduce Common Agricultural Policy support.⁶⁰

Farmers, including dairy farmers, in the United States receive substantial subsidies under the highly protectionist 2014 Farm Bill, which expanded the trend to greater subsidisation that followed the 1995 Farm Bill (the Federal Agriculture Improvement

and Reform Act).⁶¹ In the period 2010 to 2014, there was a substantial rise in production associated with a doubling of dairy exports from the United States. This has contributed to the distortion of international trade in agriculture, despite the United States' commitments to the World Trade Organisation.

Such has been the influence of neoliberalism on Australian government policies that little has been done to compensate local producers for the unfair advantage in the global marketplace that other governments provide to their farmers through subsidies and the selective removal of subsidies has also affected secondary industries. While those farmers able to tap into the global economy have been able to thrive, many others have had to leave the industry. For some, survival has only been made possible by income generated by salaried jobs outside the industry,⁶² with women in particular contributing to off-farm income. Moreover, a declining farming sector also impacts on the viability of small towns serving dairying communities, leading to service withdrawal by banks and government agencies, including post offices, schools and health services. This reduces the opportunities for off-farm employment in the local district, and creates the need to travel or relocate for work.⁶³

Late twentieth-century state 'milk in schools' schemes

Following the abandonment of the free national scheme at the beginning of 1974, a variety of state based schemes emerged. In January 1978 the Queensland Department of Education began a limited school milk scheme for all pre-school children in the state, whether in government or private centres, packaged in 150 millilitre cartons.⁶⁴ High administrative costs attributed to decentralisation led to the discontinuation of this Queensland scheme at the end of the 1987 school year. Three other state based school milk schemes were established in the 1990s and had initial, if patchy, success. In these states, the industry was prepared to expend money so that children could purchase the product at low cost at school in order to increase the market for liquid cow's milk. According to George Davey, a leading dairy industry figure, money to subsidise these initiatives came not from the state dairy authorities but from sections of the industry. In New South Wales, the funding came from the farmers, with only limited contributions from milk processors, whereas in Victoria the milk processors provided the funds.⁶⁵ No money at all was forthcoming from the federal government. Promotion of the schemes was enhanced by an incentive system to vendors so that higher sales resulted in a higher income.

Unlike the former federal scheme which was cost free to recipients, under the state school milk schemes of the 1990s children paid a low, subsidised price and the product came in cartons instead of glass. The New South Wales dairy industry initiated a marketing programme that included a school milk scheme piloted in the Wollongong area in the early 1990s.⁶⁶ The industry in this state also provided free refrigeration,⁶⁷ ahead of the subsidised refrigeration arranged by the industry in Tasmania. New South Wales state politicians considered the former national scheme a failure in one of its key aims, in that sour milk discouraged children from continuing to drink the product. They believed that the use of refrigeration for the new state scheme would help meet the

objective of encouraging children to become lifelong consumers of market milk.⁶⁸ After the programme was launched across the state in 1998, distribution reached eighty-two per cent of the eligible school population, or over 500,000 children. Prior to the new programme, milk made up less than four per cent of the drinks sold in school canteens, and under the scheme its consumption rose to twenty-three per cent, a six-fold increase.⁶⁹ However, by April 2000 the programme was close to collapse. This followed planning for deregulation of the industry, to be implemented on 1st July, which forced the closure of the organisation that subsidised the programme and the consequent financial difficulties faced by farmers.⁷⁰

The Victorian Milk in Schools programme, also launched state-wide in 1998, provided a carton of cow's milk each day at a cost per child of about seventy dollars per year, which one Victorian state politician deplored as disadvantaging low-income families with several children.⁷¹ This situation suggests that improved nutrition of the young, especially in more vulnerable families, was not the major focus of the Victorian scheme. In any case, earlier research had failed to demonstrate a dietary deficiency which such programmes could address.⁷² Whereas the New South Wales scheme reached eighty-two per cent of eligible children, the Victorian programme achieved only half that distribution rate, at forty-one per cent.⁷³ It is probable that product range was the main factor in the different distribution rates in these two states, although other marketing or distribution factors may also have been involved. New South Wales children had a choice of white or flavoured cow's milk, whereas in Victorian schools the only choice was between full cream white and a low fat product.

Market research was used by the Tasmanian Dairy Industry Authority before introducing a school milk programme to halt the decline in sales of liquid cow's milk in that state. As a result, chocolate flavoured cow's milk was sold in school canteens at a low price in the successful 'Tassie Tiger Cool' campaign, launched in February 1999.⁷⁴ The authority identified adequate refrigeration of this perishable product as a potential problem, many schools lacking the refrigeration capacity for the expected surge in sales. The industry authority consequently dealt with the issue by arranging discounts on the purchase of refrigerators for schools and providing subsidies.⁷⁵ Success was measured by the increased sales of liquid cow's milk and greater numbers of school children consuming it. Despite the success of the Tasmanian campaign in increasing market milk consumption in children, optimistically seen as a potential lifelong market, attempts in other states to revive school milk petered out by the end of the 1990s.⁷⁶ After deregulation of the dairy industry by the federal government on 1st July 2001, dairy companies in some states took over the state based school milk programme, in some cases using the same brand names as were established under the state dairying authorities.

In Western Australia, a survey of stakeholder groups after the deregulation of the national dairy industry indicated strong support for promotional campaigns and state branding of dairy products, in conjunction with the industry's generic national advertising campaigns.⁷⁷ There was less support for reviving a school milk scheme. The input received during the study suggested that establishing any school programme would be logistically difficult and would need to be subsidised, drawing on support from the entire industry, including manufacturers. It would need to be voluntary and tailored to Western

Australian needs. Noting that fifty-four per cent of school canteens were not selling plain liquid cow's milk, the authors of the report instead favoured an infrequent or repetitive campaign in schools to develop this market. Like Western Australia, South Australia never attempted to implement a state based scheme targeting schools.

Television advertising campaigns were launched to create a positive image of fresh or flavoured cow's milk as a 'cool' drink in the New South Wales 'Milk. Cool for schools' campaign and the Tasmanian 'Tassie Tiger Cool' campaign.⁷⁸ A similar advertising campaign ran in Victoria. In New South Wales and Victoria, advertising was part of an integrated campaign.⁷⁹ This involved attention to displaying the products in glass sided refrigerators, competitions involving collecting stickers from milk packaging, and free teacher curriculum kits linked to class work on topics such as nutrition and the environment.⁸⁰ Most state dairy authorities established web sites from which campaign material could be downloaded as an educational resource for teachers. Branding was conceived as an integral part of the promotion of the school milk schemes of the late 1990s in New South Wales, Victoria and Tasmania, with child friendly brand names, promotional characters and attractive packaging.⁸¹

The objectives of the industry subsidised school milk schemes in the states that attempted implementation were relatively consistent, focusing, primarily, on increasing the market by encouraging lifelong drinking of fresh cow's milk by the young, which was in the best interests of farmers, processors and other sections of the industry. Children stood to benefit, too, if they replaced popular drinks with empty calories with a dairy product of proven nutritive value. A secondary marketing objective was the creation of good public relations throughout the community for the product, liquid milk.⁸² It is likely that the goal of creating lifelong consumers was over optimistic, although the causes of the negative image of 'school milk' during the former national scheme were addressed. After dairy industry deregulation and the opening up of interstate markets to producers, marketing to children did not resemble the old school milk programmes but rather became a part of an overall marketing strategy targeting particular groups, as has already been discussed in the Western Australian context.

How the industry spread its influence

The New South Wales school milk scheme targeted individuals identified as 'gatekeepers'. These were persons of influence who could influence implementation of the programme, or who were perceived as opinion leaders. They included school principals, teachers and canteen managers in the schools and nutritionists and key people in the Department of Education.⁸³ In Tasmania, the state dairy authority, a government business enterprise that in 2000 reverted to being a statutory authority, had the assistance of the Education Department and school canteen committees. With participation in the 'Tassie Tiger Cool' school milk promotion left to the discretion of individual schools, the authority distributed promotional packages to schools and visited individual school principals.⁸⁴ These programmes were successful because of what a dairy industry source described as 'the integration of the Schools Milk programmes into the school environment'.⁸⁵

An issue the various school milk schemes raise concerns the unusual access to schools of a commercial entity in what was, in effect, a marketing exercise. This occurred during the national scheme and the limited state schemes that preceded it, and continued under the industry run state schemes of the 1990s. The Commonwealth Bank's access to schools for children's school banking was another example. Consequently, one of the aims of this research has been to ascertain the boundaries between the dairy industry and governments. Similar questions were raised in Carin Martiin's study of Sweden's Milk Propaganda and its access to schools to conduct a 'Milk Day', providing free dairy products and integrated fun activities promoting white milk.⁸⁶ Part of the answer can be found in the establishment by Australian state governments of Dairy Boards under specific legislation in the middle of the century. Other commodity marketing boards were created, but none had the reach into the schools of the dairy industry. The federal free school milk scheme of 1951 to 1974 fostered links and the building of trust between the industry and state education departments which administered the scheme.

Close links continued during the later state schemes. In New South Wales, for instance, the industry provided free refrigerators for storing market milk to schools that participated in the programme, the cost of which came out of a levy on farmers and processors. This levy also covered the cost of dairy promotion through industry provided literature for parents and schools, a website and other promotion.⁸⁷ Other food industries, such as citrus growers, never achieved success in persuading governments to pay for or subsidise their products in schools, despite low fruit consumption by young Australians, and even though this was raised in federal parliament.⁸⁸ There was no integrated industry group with the capacity to lobby for the various fruit industries on the domestic market and, unlike in Britain, there was never any national coordination and subsidisation of the practice of giving young children fruit juice. The dairy industry was particularly well organised, and by the late pre-war period its liquid cow's milk already had a positive image as a 'complete' or 'perfect' food, after memories of it as a source of infection had faded.⁸⁹ In addition, the boundaries between dairy industry promotion and public health promotion were blurred in public perception.

Conclusion

School milk schemes in Australia were primarily conceived to assist the dairy sector by providing a reliable market for liquid cow's milk to assist struggling farmers. A related objective of both the national scheme of 1951 to 1974 and subsequent state schemes was to create an ongoing market of lifelong consumers. In the latter sense the schemes failed. The drinking quality of the liquid cow's milk in the one-third pint bottles used in the free national scheme, after it had been left without refrigeration until morning break, deterred some children from consuming the product later in life. While the 1990s state schemes that used school canteens to sell the subsidised product overcame the lack of refrigeration, children bought less of the plain white product, preferring flavoured products, a new market for liquid milk. Eventually school children became merely one of the groups targeted for marketing.

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