

# **‘There is Absolutely NO SUBSTITUTE for Fresh Milk’: Dairy Marketing in Australia, Twentieth Century**

**Virginia Thorley**

Honorary Research Fellow  
School of History, Philosophy, Religion and Classics  
The University of Queensland, QLD 4072  
Australia  
Email: [v.thorley@uq.edu.au](mailto:v.thorley@uq.edu.au)

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## **Abstract**

*This article discusses marketing of dairy products in twentieth-century Australia with the focus on liquid cow’s milk or products that could be reconstituted with the addition of water to make cow’s milk for domestic use. The marketing of other processed products of dairy origin, namely, butter, cream and manufactured infant-feeding products (“formula”), will not be covered here. Early in the century when municipal health officials had very real concerns about the cleanliness of dairies and the safety of water supplies for households, public health officials began to regulate dairies. Marketing addressed the concerns of consumers about safety, even decades into the century, and affordability and convenience increasingly developed as strong selling points; underlying all was the concept of cow’s milk as a “complete” food. By at least the 1960s the industry was seeking out opinion leaders to reach its key markets of children and pregnant or breastfeeding women.*

**Key words: dairy products, marketing, Australia, twentieth century**

## **1. Introduction**

Despite the lack of mandatory tuberculin testing of dairy herds in Britain, and other safety issues in both Britain and Australia in the early twentieth century, the dairy industry paradoxically positioned itself as an altruistic provider of good health to children, infants, and pregnant and breastfeeding women. A separate article has discussed in more detail the risk of the transmission of bovine tuberculosis to humans via the milk of infected cows, the progressive implementation of tuberculin testing (“TB testing”) of dairy herds in Australia, and the culling of cows that tested positive. This article describes the messages underlying dairy

promotion in Australia in the twentieth century, and so the themes and trends of cow's milk advertising for general domestic use will be discussed here, rather than cataloguing dairy advertising across the century. In any case, some of the advertising appeared in an impermanent form, pasted to the walls of cafés or on billboards of which little has survived.

Dairy milk products for domestic use consisted of cow's milk in fresh, dried, evaporated or sweetened condensed form, the last three requiring reconstitution by the addition of the appropriate amount of water before use. Condensed milk, then as now, was evaporated milk with a great deal of sugar added. Dried (powdered), evaporated and condensed milks had the great advantage of keeping well, important in the days before household refrigerators were common. Some households were still dependent on ice chests and daily deliveries of ice in the 1950s.

Dairy products advertised for general domestic use were also used to feed babies, either as a home-modified mixture or with a cereal-based or malted patent food added to the bottle, and to moisten baby cereal or crushed arrowroot biscuits. "A simple milk and water mixture with sugar added", as advocated by the influential New Zealander, Truby King, was the preferred form of artificial feeding recommended by the Mothers' and Babies' Health Association (193-?) in the South Australian baby clinics in the interwar years and beyond. It was also preferred by Maternal and Child Health services in other states and by mothercraft writers (King, 1936; Maternal and Child Welfare Service, 1952, 1957; [Department of Health Services], 1984). Where bottled pasteurized milk was unavailable, or if there were any doubt about the quality of the liquid cow's milk available, these texts generally recommended that powdered milk be used instead and made up to a recipe provided by the MCH nurse. Powdered or evaporated canned milks were usually advertised for general household use, occasionally mentioning the feeding of babies among these uses (Eclipse, 1905; Sledge, 1916).

The themes that were identified in the advertising of cow's milk across the twentieth century were: *safety, economy, convenience and taste*, and the concept of the product as *the "perfect" or "complete" food*.

## **2. *The advent of marketing and new concepts about cow's milk***

In a number of Western countries, including Australia, the concept arose in the early twentieth century of dairy milk as a healthy food for mass consumption. Block (2000) described how public health authorities in Chicago sought to inform the public of improvements that made this potential vector for disease safer through better hygiene and transport. Fortuitously for the public health and dairy sectors, these developments coincided with the emergence of a dynamic advertising industry, ready to provide advice on how to promote the product effectively. This was advice that the long-serving Health Commissioner of Chicago, the flamboyant Herman N. Bundesen, applied with zeal on his appointment in 1922. Using weekly health bulletins, the newspapers and what Block described as sheer "hucksterism", Bundesen marketed cow's milk as the "ideal" food (Block, 2000). However, some of his peers in the medical profession were concerned that Bundesen's campaigns overestimated the food value of the milk and underestimated the risks it still carried (Block, 2000).

Nearer home, New Zealand public health promotion from the 1920s to "eat more milk" described it as the leading protective food (Mein Smith, 2003). Mein Smith (2003) has described the development in New Zealand in the 1920s and 1930s of the concept of cow's milk as a "medicine" to foster growth and vitality in healthy children or build up puny individuals. Yet it could only be a medicine if the quality was good. Since

the best quality milk was exported to Britain, the New Zealand domestic supply was subject to less regulation and inspection, and there continued to be local distrust of its quality, particularly in the 1940s. While it had long been successfully promoted by the public health sector as essential for babies and small children, in the middle of the century the typical family generally used it only as an accessory food, not as an essential one, and so campaigns aimed to masculinize it as a drink (Mein Smith 2003).

In developed countries the mass promotion of dairy products, especially fresh cow's milk, meant that the quantities ingested by individual children and adults grew exponentially, changing the diet and exposing the individual to bovine proteins in quantities not usually seen before (Brown, 2000). Previously, quantities consumed were typically smaller and despite this food's safety for many, Brown (2000) associates this dietary change with the increase in allergies to cow's milk and beef, though the factor of better diagnosis cannot be overlooked.

### 3. *Safety*

For many years before domestic refrigeration was available, advertisements for a number of proprietary foods marketed for infant use, such as Allenbury and Hanbury's (1915), Glaxo (1916, 1925, 1930), Neave's Food (1930) and Nestlé (1930), drew attention to their greater safety in comparison with liquid cow's milk from a dairy. Competing claims like these were unlikely to have endeared the baby food companies to the dairy industry, even though their respective products all started on the dairy farm and provided a market to the individual farmer. Nevertheless there were good reasons for concerns about safety as contaminated or soured cow's milk had long been linked to infant mortality and morbidity, especially in summer (Anon., 1898; Editorial, 1905; Armstrong, 1905, 1906; anon., 1907; Wood, 1908). In the late 1890s and early twentieth century, these concerns led to the recommendation of twice-daily deliveries in Melbourne and the regulation and inspection of dairies in Brisbane and elsewhere (anon., 1898; anon., 1910; *History of Queensland Dairying*, 1923). Other factors in "summer diarrhea", or gastroenteritis, included the quality of town water supplies, night soil disposal and overcrowded living conditions because of poverty. While municipal water supplies were being improved concurrently with the introduction of dairy inspection, Mein Smith (1997) argued that the more complex social issues of poverty and overcrowding were largely ignored. Even in the 1940s and 1950s, when pasteurization had increased, it could be undermined when the pasteurized product was put into dirty bottles, either in the processing factory or by careless local vendors after the bulk milk had left the factories, as reported in newspapers in several states (anon., 1945b; anon., 1947b; anon., 1951; anon., 1955).

Attempts were made in Brisbane and Melbourne in the early twentieth century to open milk depots to provide cleaner cow's milk to mothers for infants who were not being breastfed and to provide infant-feeding advice. Families able to pay were charged the full price. These depots, both founded in 1908 and each named for the wife of the respective state governor, were short-lived because of logistical problems. In Brisbane, Dr Alfred Jefferis Turner opened the Lady Chelmsford Milk Institute with pasteurization mandatory during the short time the depot existed (Thearle, 1987). In Melbourne, the Lady Talbot Milk Institute provided cow's milk in stoppered bottles to eligible babies (Sheard, 2005). Public health officials debated pasteurization for the Lady Talbot Milk Institute, but it was only tried briefly and then abandoned, and the bacterial contamination of unwashed bottles became an issue (Mein Smith, 1997). The institute had a model farm where, contrary to its purpose, sanitary conditions were poor (Mein Smith, 1997).

Newspaper and magazine advertisements for fresh, liquid cow's milk were sporadic at the beginning of the twentieth century, since this perishable food staple was provided largely by local farms or companies. When an occasional display advertisement appeared it often took more space than the more frequent advertisements for canned milks for household use. Both the Farmers' and Dairymen's Milk Co. Ltd and the N.S.W. Fresh Food and Ice Co., Limited (1905), from time to time advertised their pasteurized liquid cow's milk in the *Sydney Morning Herald*, one of these advertisements coining the term ' "fresh food" milk'. A large advertisement by another Sydney supplier, the Dairy Farmers' Co-Operative Milk Co. Ltd. (1933), in the inaugural issue of the *Australian Women's Weekly*, appealed to "the wives and mothers of Sydney". The advertisement emphasized the modernity and hygiene of the milk factory. The implication was that the credit for this was due to the manufacturers, and was altruistic, though the push for dairy hygiene had come from the previous generation of public health officials, municipal authorities and state governments. Certainly this company's state-of-the-art factory was worthy of praise from a health viewpoint. The company claimed to be the largest milk distributor in the southern hemisphere and invited consumers to inspect its modern factory. The advertisement cited unnamed international medical authorities to support its claim that "there is absolutely NO SUBSTITUTE for Fresh Milk" (Dairy Farmers' Cooperative, 1933). The text took issue with canned cow's milk, whether dried, condensed or evaporated, claiming it was unequal to the fresh product. The Milk Board, too, took out advertising for the fresh, liquid product during this period (Milk Board, 1935). Trufood full cream powdered milk was advertised as "SAFE milk" in advertising in 1943, while liquid milk from a Brisbane dairy was repeatedly advertised a few years later as pasteurized and "safety-sealed" (Trufood, 1943a; Metro Pasteurized Milk, 1949).

Safety was still emphasized by three advertisers in a 1937 dairy feature that mainly promoted liquid cow's milk as a health food. The Ayrshire Dairy, which sent frozen cow's milk to distant parts of Western Australia and Port Augusta in South Australia, headed its advertisement with, "Don't Run Risks with your milk supply" and the Suburban Dairy told readers to "Use a Safe, Dependable Milk" (Ayrshire Dairy, 1937; Suburban Dairy, 1937). The Australian Glass Manufacturers Co. Ltd. (1937) promoted the use of glass milk bottles for safety, at a time when bulk dairy milk was still ladled out in the street into householders' billy cans.

For its part, the canned milk industry from the beginning of the century emphasized the keeping qualities, affordability, and convenience of these products, messages that continued to appear in the 1940s (Prairie Brand, 1910; Nestle's, 1926; Trufood 1930a, 1933, 1946a). Keeping qualities were an important aspect of safety because of the dangers of soured milk. Condensing the milk and sealing it in cans also provided a solution when more cows' milk was produced than could be used in liquid form. In the 1890s a "condensery" was established at Toogoolawah in south-east Queensland by J.H. McConnel. Nestlé acquired the factory in 1907 and products were exported to Asia (Laudan, 2000). Canned dairy products were promoted by the individual brands. In Queensland alone, seven brands of canned condensed milk were advertised in the 1905 and 1910 issues of the *Brisbane Courier* sampled for this article. Two of them, Empire and Lilybrook, used their origin in lush Victorian dairying districts as selling points (Empire, 1905; Lilybrook, 1905), while another, Prairie, came from the Darling Downs of Queensland. Prairie Brand advertisements warned of the dangers of "fresh milk" for children and used pasteurization as a marketing aid (Prairie, 1910). The other four brands were Nestlé (then spelt without an acute accent), Lowood, Cressbrook, and Milkmaid (Nestle, 1905; Lowood, 1910; Cressbrook, 1910; Milkmaid, 1910). The last-mentioned was another Nestlé brand. In the 1920s, Nestlé advertised the safety of its Gold Medal canned milk by asking. "Do you know what actually happens to your milk before it reaches you?" and emphasizing the "purity and

protection” of the canned product (Nestle, 1926). Trufood (1937) marketing emphasized safety and economy, stating: “The solution of the milk problem. Avoid Danger”. In 1970 safety was still a selling point, with Bear Brand (1970) evaporated milk packaged in a gold-lined can, claimed to be more hygienic.

After it was implemented in 1951 (in 1953 in Queensland), the federal government’s free school milk scheme probably made the need for advertising of liquid cow’s milk less pressing and consumers were reached by way of nutrition leaflets or booklets provided to mothers groups. The national free school milk scheme ended abruptly in January 1974 (Cabinet Minute, 1973), and for a time the dairy industry in some states developed local schemes to engage young consumers (Thorley, 2013).

#### ***4. Economical: a low-cost food***

Economy, safety and convenience were consistent concepts in canned milk advertisements from the 1920s to well after the post-World War II period, usually with one of these ideas being foregrounded. An example is the billboard advertisement for Trufood skim milk from about 1925, which carried the slogan, “Saves Money in the Home” (Figure 1). With the effects on household spending of the Great Depression and World War II, economy mattered. Convenience and economy were the selling points in Trufood’s recurring 1930 advertisement for its dried skim milk, which quoted Queensland government statistics on the value of cow’s milk and the excellence of “separated milk” (skim milk) for children on a value-for-money basis (Trufood, 1930a). Other Trufood advertising for skim milk for household use emphasized cheapness in comparison with milk from the dairy, as well as quality (Trufood, 1930b).





Figure: 1

In its postwar advertising the Trufood company (1946a, 1946b) promoted the idea that its full-cream powdered milk saved money, at a time when money was a concern to many households (anon, 1945a). Later, the Bonlac brand used a clever visual representation to demonstrate the cheapness of its low-fat powdered milk in a 1955 full-page magazine advertisement. Below the heading, "Have all the milk you

need... CUT YOUR MILK BILL IN HALF", the advertisement featured, centrally, an illustration of a large can of Bonlac surrounded by seven one-pint bottles of liquid dairy milk, to support the statement in a text box, "7 pints in every tin" (Bonlac, 1955). The advertisement also included pictures of household uses of the product, provided an ice-cream recipe (a curious choice for promotion of a low-fat product), and discussed the benefits of the fat-free product for weight watching. Good health was associated with use of the product in a section headed. "Health facts about Bonlac" (1955). An advertisement for "non-fat" Bonlac (1957) in the *Australian Women's Weekly* also used the visual image of seven one-pint bottles surrounding a Bonlac can, this time promoting the low cost of four pence per pint (3.3 cents). Health information in the advertisement was attributed to the medical profession. It should be reiterated that a common use for household canned or fresh cow's milk during this period was to make up modified milk mixtures for the artificial feeding of babies (Trufood, 1943b).

### 5. Convenience and lifestyle

Convenience was the predominant message in Sunshine brand advertisements – and this convenience came without sacrificing taste. Sunshine (1940) advertised that this product was "always fresh – always ready for use". Not only could it be quickly made up, the taste was also promoted as "a deliciously rich, creamy flavor" in baked goods. Taste was a selling point in Cadbury's long-running "glass and a half" slogan for its Dairy Milk chocolate. A typical advertisement stated, "You can *taste* the quality! You *know* it's better! – because of pure FRESH MILK" (Cadbury, 1953). The convenience of full cream powdered milk was the selling point in recurrent advertising, with Oak brand's slogan, "I never run out of MILK" (Oak, 1954), and Sunshine's slogan, "Your Grocer sells MILK in its most convenient form: (Sunshine, 1954).

Lifestyle concepts featured in 1970s advertisements, with easy but attractive recipes and slogans such as the long-running, "Carnation your coffee" (Carnation, 1970). Recipes as the focus of advertisements for canned milks were not new (Bonlac, 1955) and in the 1970s they were a common inclusion in advertising for food products (Sunshine, 1970; Sunshine Instant Dried Milk, 1977). Numerous small advertisements by various brands recommended their use in puddings. A Dutch Jug (1977) dried milk advertisement identified users as "high energy people....from ballet dancers to boxers", who needed "one of the best sources of protein" but with reduced fat and calories, while Bonlac (1972) punned that its "non-fat" skim milk powder was "milk that weights for nobody".

During the 1960s and 1970s, as well as promoting household uses, Carnation and Bear Brand also advertised their evaporated milks specifically for infant feeding. Carnation (196-) distributed an illustrated booklet, *Preparing for Motherhood*, to new mothers in maternity hospitals as a key part of its marketing strategy, and both brands mentioned infant feeding in magazine advertising (Bear Brand, 1970; Carnation, 1973).

### 6. Brand names and the health services

The health services unwittingly promoted brands in their advice to mothers, though it is likely the intention was to be evenhanded. Brand names were specifically mentioned as examples of domestic "plain full cream powdered milk" in the artificial-feeding sections of the MCH baby-care books that the states distributed to mothers. The 1950s editions of the Queensland Maternal and Child Welfare manual for mothers, *Care of Mother and Child*, suggested two brands, though brand names were dropped from the editions which appeared in 1972-1980. (Maternal and Child Welfare Service, 1952, 1957; McFarlane, 1972, 1975, 1980).

Brand names for household evaporated or powdered cow's milk are likewise not mentioned in the Health Commission of Victoria (197-) mother book, *Child Care*. However, *Our Babies: From Birth to School*, manual of the Health Commission of New South Wales (1980), listed all the available brands of full-cream, evaporated milks, as well as ordinary full-cream powdered milks and instant varieties.

### 7. The "perfect" food

So much of the advertising focused on safety, usually at the expense of other, unnamed dairies or, in the case of dried or evaporated products, the fresh product, that the reader could be forgiven for questioning whether there was a high regard for dairy products in the Australian community. Certainly the emergence of mass marketing created a positive image (Block, 2000). Positive press for liquid cow's milk appeared as short editorial copy in newspapers throughout the country, sourced from the industry or the health sector. Indeed, a 1923 Sydney demonstration on behalf of dairy products, with banners provided by the Country Milk Supplies Association, was reported as far afield as Cairns in Queensland's far north and Burnie in Tasmania (anon., 1923; anon., 1926). A recurring Trufood advertisement (1930a) used the high regard for fresh cow's milk to support its product, citing Scottish studies on skim milk for children. (The use of skim milk was not suggested for babies, for whom it is unsuitable.) Short incidental items connecting the drinking of cow's milk to present or future achievement included a photograph in the sports pages of the Brisbane *Sunday Mail* of a winning jockey drinking directly from a milk bottle and a Brisbane milk company's recurrent 1947 advertisement with a picture of a young girl captioned, "Miss Australia 1957?" (anon., 1947a).

A 1937 dairy industry feature in the Perth newspaper, the *Sunday Times*, had a health promotion theme. The page was headed, "More Milk Makes a Healthier nation!", other headings focusing on health or affordability. The main photograph on the page showed six school children swigging from milk bottles, the caption focusing on enjoyment. Accompanying the articles, an advertisement by the Metropolitan Milk Board (1937) used the slogan, "The Milky Way is the way to HEALTH", and included other slogans, "MILK for ALL THE FAMILY", and "The finest food to build strong bodies and sound teeth". The advertisement included a picture of a family of mother, father and two children all drinking glasses of milk from the several bottles on the table. An advertisement from G.F. Birkbeck's Ascot Dairy (1937) stated, "A pint of milk is a measure of health!!!" Other advertisements implied risks that could be avoided by the use of the advertiser's product. The vitamin and mineral content and "the nourishing goodness of milk" featured in later advertising (Oak, 1954).

The concept that cow's milk was a perfect food, and a natural one, was reflected in the claims made by opponents of pasteurization in the 1940s and 1950s, that it was "wrong to interfere in any way with Nature's perfect food" (Davis, 1955). One consumer objected to pasteurization on the grounds that liquid cow's milk "is artificially turned from the natural food to one of which the age and cleanliness are quite uncertain" – missing the point of pasteurization (Macdougall, 1943). Dairies continued to promote pasteurized milk for its greater safety and also as a health-enhancing product. A large display advertisement for Oak brand milk stated that "milk is nature's most perfect food, and the milk from the Hunter Valley is among the most perfect milk in the world" (Oak, 1953). According to the advertisement, it was delivered "in the most hygienic way – pasteurized and bottled. Doctors recommend milk to build up health and strength. Doctors particularly recommend pasteurized milk to protect your health. Oak brand pasteurized milk is graded and tested in modern laboratories...." (Oak, 1953).



In the 1990s, television and internet campaigns promoted liquid cow's milk as a complete food or energy source for all ages and leaflets such as "Fresh Ideas" were distributed to a mailing list, to which readers were urged to recruit friends ([Queensland Dairy Authority], 1995-2000). Similar themes continued into the new century.

#### **8. Public health recommendations for dairy intake during pregnancy and lactation**

While other cultures derive dietary calcium predominantly from other sources, dairy products are traditionally the main source of calcium in Australian diets. So advertising to promote intake of dairy products as the preeminent source of dietary calcium is appropriate in this population. Although the role of vitamin D in calcium absorption was known, it was largely ignored in the advertising and advertorials used in dairy marketing.

In Australia through the twentieth century the amount of liquid cow's milk which health authorities recommended be consumed by lactating women was not consistent but usually fell within the one to two pint range, when the old imperial measures were used. An imperial pint was approximately 570 ml, and in dietary guidelines after Australia adopted the metric system of measurements this was rounded up to 600 ml. Some authors on infant care were not specific about quantities, merely suggesting a "simple and nourishing" diet for the mother or wet-nurse, without excess, or that a balanced diet with a glass of fresh milk between meals would be ample (anon., 1916; James, 1923). Assuming three meals a day, this would mean two glasses of milk in the course of a day. Advertising for Trufood powdered milk (1931) suggested "4 pints a week for every member of the family". Later, most authorities recommended specific quantities, while also cautioning against excess. In two 1950s editions, the Queensland Maternal and Child Welfare handbook for mothers, *Care of Mother and Child* (1952, c.1957), advised breastfeeding women to drink "at least 1½ to 2 pints of whole milk a day", that is, 855 to 1,140 mls. A similar recommendation appeared in the infant-feeding booklet distributed to new mothers in the hospitals by the Carnation Company in the 1960s (Carnation, 196-). The Health Commission of New South Wales (1980) set the recommended daily intake in *Our Babies* at 600-900 ml of cow's milk, or the equivalent in cheese or yoghurt. The Health Commission of Victoria (197-) recommended a daily intake of "a litre (1½ pints)", which were not, in fact, mathematically equivalent. In 1983 the official national recommendation for pregnant and breastfeeding women and children in the *Dietary Guidelines for Australians*, which remained current for years, became 600 ml of liquid cow's milk, or the equivalent in other dairy products, lower than the 1950s Queensland recommendations (Commonwealth Department of Health, 1983). For other adults, the nationally recommended intake was 300 mls. The new national guideline of 600 ml was included in the handbook for mothers published by Tasmania's Department of Health Services (1983). At the turn of the twenty-first century Tasmania's Community Nutrition Unit (n.d.) recommended in its *Tuckertalk* manual a higher maternal intake of three to four serves of dairy foods a day, a serve of liquid cow's milk being 250 ml. This raised the recommended maternal dairy intake by 25 to 66.67 per cent above the national guidelines, for reasons that are unclear.

These variations reveal the complex issues inherent in establishing recommendations for calcium intake, the main reason for including dairy products in the diet. Allen (1982) described methods of measuring calcium absorption and the complexities of setting dietary guidelines. Guéguen and Pointillar (2000) provide a useful discussion on the bioavailability of dietary calcium. As this is a history article, readers are referred to other

sources for more detailed discussion (Cook, Dassenko & Whittaker, 1991; Heaney and Weaver, 1990; Jones *et al.*, 2000; Winzenberg *et al.*, 2006; Seiquer *et al.*, 2008).

### **9. Specialty Products to Entice New Consumers**

Just as flavored liquid cow's milk was marketed to school canteens in state-based or industry-based school milk promotions in the 1990s (Thorley, 2013), specialty liquid cow's milks were developed and promoted to other sections of the market, often being separately branded. For instance, the large Dairy Farmers cooperative, which marketed dairy products in New South Wales, Queensland, South Australia and Victoria, used the OAK brand for its flavored products. Other specialty dairy products in the liquid milk range, produced by this and other companies, included "lite" (low-fat), skim and high-calcium products and a product with added omega-3 fatty acids.

### **10. Finding opinion leaders**

The dairy industry in Australia took the opportunities that presented to provide free nutritional material to various organizations and institutions, as opinion leaders in the community. One of these organizations was the fledgling Nursing Mothers' Association (NMA, now the Australian Breastfeeding Association), based in Melbourne. The early board members received a stock of nutrition materials from the Victorian dairy industry in the mid- to late-1960s, and for some years dairy promotional material was a component of the folios of reference materials issued to the association's newly qualified breastfeeding counsellors. Typically of the time, there was no questioning of the information as industry promotion, as it was assumed to be factual and objective. The provision of free promotional materials to the NMA for its breastfeeding counsellors, who would be consulted by pregnant or lactating women, was symptomatic of the industry's apparent generosity to, and influence upon, trainees in other fields such as nutrition (Thorley, 2007). Later the Tasmanian dairy industry built up its promotion of its School Milk scheme in schools by targeting key people (Thorley, 2013).

### **11. Conclusion**

Through the twentieth century in Australia marketing of dairy products for general household use began with an emphasis on safety, in an era when measures were just beginning to improve food safety, especially in regard to perishable products. As the century progressed, the safety message continued for some time, in tandem with an increasing emphasis on affordability and convenience, especially during the Great Depression through to the years immediately following World War II. The concept of cow's milk as a "perfect" food and even manufactured versions of it as "natural" was a recurrent theme. Information from the dairy industry was often presented to target groups as factual health information, a successful way of marketing an industry.

## References

- Allen, L.H. (1982). Calcium availability and absorption: a review. *American Journal of Clinical Nutrition* 35(4), 783-808.
- Allen & Hanbury's (1915). Advertisement for Allenburys [sic] Foods, *Woman's Budget*, 19 June, 4.
- Anon. (1898). Impure milk and infant mortality. *Intercolonial Medical Journal of Australasia* 3, 20 February, 106-111.
- Anon. (1907). Infant mortality in Tasmania. *Australasian Medical Gazette*, 20 April, 205-206.
- Anon. (1910). [Report] *Brisbane Courier*, 7 January, 7.
- Anon. (1916). The Australian baby. In Lady Hackett (Ed.), *The Australian household guide* (pp. 46-47). Perth, Western Australia: E.S. Wigg & Son Limited.
- Anon. (1923). Benefits of milk: novel demonstration in Sydney. *Cairns Post*, 16 Jan., 5.
- Anon. (1926). For the children: benefits of a milk diet. *Advocate*, 8 May, 16.
- Anon. (1945a). People worse off than before war. *Courier-Mail*, 24 January.
- Anon. (1945b). Dirty milk bottles bring Health Dept. threat. *Sunday Mail*, 22 July, 5.
- Anon. (1947a). Advertisement. *Sunday Mail*, 9 March, 9.
- Anon. (1947b). Report dirty milk bottles, says doctor. *Courier-Mail*, 7 November, 3.
- Anon. (1951). A flaw in the Free-Milk-for-Children Scheme: facilities for washing bottles "are inadequate". *News*, 17 August, 8.
- Anon. (1955). Don't use that dirty milk *The Argus*, 1 September, 5.
- Armstrong W.G. (1905). Some lessons from the statistics of infant mortality in Sydney. *Australian Medical Gazette*, 20 October, 512-520.
- Armstrong W.G. (1906). The health of Sydney. *Australasian Medical Gazette*, 20 October; 548, 205-206.
- Ascot Dairy (1937). Advertisement. *Sunday Times*, 27 June, 22.
- Australian Glass Manufacturers Co. Ltd. (1937). Advertisement. *Sunday Times*. 27 June, 22.
- Ayrshire Dairy (1937). Advertisement. *Sunday Times*, 27, 22.
- Bear Brand (1970). Advertisement. *Australian Women's Weekly*, 15 April, 14.
- Block D.R. (2000). Hawking milk: The public health profession, pure milk, and the rise of advertising in early twentieth-century America. In H. Walker (Ed.), *Milk: Beyond the Dairy: Proceedings of the Oxford Symposium on Food and Cookery 1999* (pp. 86-92). Totnes, Devon: Prospect Books.
- Bonlac (1955). Advertisement. *Australian Home Journal*, 1 June, 22.
- Bonlac (1957). Advertisement. *Australian Women's Weekly*, 6 February, 50.
- Bonlac (1972). Advertisement. *New Idea*, 2 December.
- Brown, H.M. (2000). The health hazards of milk. In H. Walker (Ed.), *Milk: Beyond the Dairy: Proceedings of the Oxford Symposium on Food and Cookery 1999* (pp. 259-267). Totnes, Devon: Prospect Books.
- Cabinet Minute, Welfare Committee (1973). Canberra, 10 December. Decision No. 1756 (WEL).
- Cadbury (1953). Advertisement. *Australian Women's Weekly*, 17 June, 44.
- Carnation (196-). *Preparing for motherhood*. [Melbourne]: Carnation Company.
- Carnation (1970). Advertisement. *Australian Women's Weekly*, 22 April, 66.
- Carnation (1973). Advertisement. *Australian Women's Weekly*, 14 November, 69.
- Commonwealth Department of Health (1983). *Dietary guidelines for Australians*. Canberra: AGPS, 7.
- Community Nutrition Unit (n.d.). "Breast is best for baby, but what is best for me?" In [Hobart]: *Tuckertalk Manual*, DHHS.
- Cook, J.D., Dassenko, S.A., & Whittaker, P. (2001). Calcium supplementation: effect on iron absorption. *American Journal of Clinical Nutrition*, 52 (1): 106-111.

- Cressbrook Condensed Milk (1910). Advertisement. *Brisbane Courier*, 26 January, 3.
- Dairy Farmers' Co-Operative Milk Co. (1933). Advertisement. *Australian Women's Weekly*, 10 June, 16.
- Davis, J.G. (1955). *A dictionary of dairying*. London: Leonard Hill Limited, 2<sup>nd</sup> edition. Cited in "A brief history of dairy processing in Australia" (n.d.), 2.
- Department of Health Services (1983). *Parenthood*. Tasmania: Department of Health Services, 7-9.
- [Department of Health Services] (1984). *Child health handbook*. Tasmania: Department of Health Services, Division of Public Health, 8-22.
- Dutch Jug (1977). Advertisement. *New Idea*, 20 August, 54.
- Eclipse Dried Milk (1905). Advertisement. *Brisbane Courier*, 20 October, 2.
- Editorial (1905). Infant mortality. *Australasian Medical Gazette*, 20 September, 461.
- Empire Condensed Milk (1905). Advertisements. *Brisbane Courier*, 8 Sept - 20 Oct.
- Farmers' and Dairymen's Milk Co. Ltd. (1905). Advertisements. *Sydney Morning Herald*.
- Glaxo (1916). Advertisement. *Sydney Morning Herald*, 8 November, 6.
- Glaxo (1925). Advertisement. *Woman's Budget*, 21 March, 17.
- Glaxo (1930). Advertisement. *Australian Women's Mirror* [hereafter *Mirror*], 24 June, 2.
- Guéguen L., & Pointillart, A. (2000). The bioavailability of dietary calcium. *Journal of the American College of Nutrition* 19, suppl. 2, 1195-1265.
- Health Commission of New South Wales (1980). *Our babies: from birth to school* [Sydney]: Health Commission of New South Wales, 42.
- Health Commission of Victoria (197-?). *Child care*. [Melbourne]: Health Commission of Victoria, 197-.
- Heaney, R.P., & Weaver, C.M. (1990). Calcium absorption from kale. *American Journal of Clinical Nutrition* 51 (4), 656-657
- History of Queensland Dairying Together with its Problems of Production and Marketing: Definite Recommendations for the Betterment of the Industry: As Examined and Adopted by a Special Committee of Investigation Appointed by the Queensland Council of Agriculture* (1923), December: 3-5.
- James, W. H. (1923). *Home nursing and ailments of children: a handbook for mothers*. Warburton, Victoria: Signs Publishing Company: 324.
- Jones, G., Riley, M., & Dwyer T. (2000). Breastfeeding in early life and bone mass in prepubertal children: a longitudinal study. *Osteoporosis International* 11: 146-152.
- King M.T. (1936). *Mothercraft*. Sydney: Whitcombe and Tombs, 4<sup>th</sup> ed.: 124-130, 138.
- Laudan R. (2000). Fresh from the cow's nest: condensed milk and culinary innovation. In H. Walker (Ed.), *Milk: beyond the dairy: proceedings of the Oxford Symposium on Food and Cookery 1999* (pp. 86-92). Totnes, Devon: Prospect Books.
- Lilybrook Condensed Milk (1905). Advertisement. *Brisbane Courier*, 7-21 October.
- Lowood Condensed Milk (1910). Advertisements. *Brisbane Courier*, 6-22 January.
- Macdougall H (1943). Pasteurized milk [letter]. *The Argus*, 29 October, 5.
- McFarlane J. (Ed.) (1972, 1975). *Care of mother and child*. Brisbane: Department of Health, MCW Service.
- McFarlane J. (Ed.) (1980). *Growing: care of mother and child*. [Brisbane]: Department of Health, MCH Service, 36-37.
- Maternal and Child Health Service Queensland (1952, c. 1957). *Care of mother and child*. Brisbane: Department of Health and Home Affairs, MCW Service: 42-46.
- Mein Smith, P. (1997). *Mothers and king baby: infant survival and welfare in an imperial world: Australia 1880-1950*. Basingstoke, UK: Macmillan Press: 55.

- Mein Smith, P. (2003). New Zealand milk for 'building Britons'. In M.P. Sutphen and B. Andrews (Eds.), *Medicine and colonial identity* (pp. 79-101). London and New York: Routledge, 2003.
- Metropolitan Milk Board (1937). Advertisement. *Sunday Times*, 27 June 1937, 22 S.
- Milk Board (1935). Advertisement. *Australian Women's Weekly*, 13 July, 44.
- Metro Pasteurized Milk (1949). Advertisement. *Sunday Mail*, 15 May, 14.
- Milkmaid Brand Condensed Milk (1910). Advertisement. *Brisbane Courier*, 31 Jan., 3.
- Mothers' and Babies' Health Association (193-). *The Australian mothercraft book*. Adelaide, South Australia: Rigby: 67
- N.S.W. Fresh Food and Ice Co. (1905). Advertisements. *Sydney Morning Herald*.
- Neave's (1930). Advertisement. *Mirror* 1 April, 41.
- Nestlé Condensed Milk (1905). Advertisements, *Brisbane Courier*, 29 Jan., Sept.-Oct.
- Nestle Gold Medal Milk (1926). Advertisement. *Mirror*, 26 Oct., 31.
- Nestle (1930). Lactogen advertisements. *Mirror*, 21 Jan., 26 and 25 March, 22.
- Oak Brand (1953). Advertisement. *Muswellbrook Chronicle* [NSW], 23 October, 5.
- Oak (1954) Advertisements, *Sun-Herald* [Sydney], 19 Sept., 71; 3 Oct., 51; 17 Oct., 79
- Prairie Brand (1910). Advertisements. *Brisbane Courier*, 6-28 January.
- [Queensland Dairy Authority] (1995-2000). Fresh ideas.
- Seiquer I., Mesías, M., Muñoz Hoyes, A., Galdó, G., & Navarro, M.P. (2008). A Mediterranean dietary style improves calcium utilization in healthy male adolescents. *Journal of the American College of Nutrition* 27 (4), 454-462.
- Sheard, H. (2005). *Victoria's baby health centres: a history 1917-1950*. Master of Education thesis, University of Melbourne.
- Sledge Brand Milk (1916). Advertisement. In Lady Hackett (Ed.), *The Australian Household Guide* (p. xix). Perth WA: E.W. Wigg & Son, Limited.
- Suburban Dairy (1937). Advertisement. *Sunday Times*, 27 June, 22.
- Sunshine Milk (1940). Advertisement. *The West Australian*, 15 April, 5.
- Sunshine Milk (1954). Advertisements. *Gippsland Times* {Victoria}, 1 April, 2; *Sun-Herald*, 18 April, 33.
- Sunshine Milk (1970). Advertisements. *Australian Women's Weekly*, 22 April, 6 May.
- Sunshine Instant Dried Milk (1977). Advertisement. *New Idea*, 20 August, 110.
- Thearle, M.J. (1987). *Alfred Jefferis Turner 1861-1947: his contribution to medicine in Queensland*. MD thesis, Department of Child Health, University of Queensland, 210-212.
- Thorley, V. (2007). *Australian mothers' decisions about infant feeding: an historical analysis of public health advice, marketing, and other factors influencing their choices, 1900-2000*. PhD thesis, School of History, Philosophy, Religion and Classics, University of Queensland, May.
- Thorley V. (2013). For the benefit of whom? School Milk Schemes in the context of dairy marketing, unpublished MS.
- Trufood advertisement (1931). *Barrier Miner*, 9 December, 4.
- Trufood (1930a). Advertisement. *Mirror*, 1 April, 45.
- Trufood (1930b). Advertisements. *Mirror*, 8-27 July.
- Trufood (1933). Advertisement. *Australian Women's Weekly*, 10 June, 24.
- Trufood (1937). Advertisement. *Courier-Mail*, 4 Feb., 37.
- Trufood (1943a). Advertisement. *Sunday Mail*, 24 Jan. and other dates.
- Trufood (1943b). Advertisements. *Argus*, 22 Feb., 10 March.
- Trufood (1946a). Advertisement. *Courier-Mail*, 23 July - 27 August.
- Trufood (1946b). Advertisement. *Argus*, 22 August, 8.



Winzenberg, T., Shaw, K., Fryer, J., & Jones, G. (2006). Effects of calcium supplementation on bone Density in healthy children. *British Medical Journal* 333 (7572 ), 775.

Wood, E.J. (1908). The prevention of summer diarrhea in children. *Intercolonial Medical Journal of Australasia*, 20 Jan.: 38-42;

**Figure: 1**

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