DAIRY

Spreads in the current Australian market: butter, dairy blends and margarine spreads

X. Cleanthous, A-M. Mackintosh and S. Anderson

In 2009, 97 133 tonnes of Spreads (segments: Butter, Dairy Blends and Margarine Spreads) were sold in Australian supermarkets (Retail World 2009). Of this, Margarine Spreads held over half the market share (56%), with Butter and Dairy Blends an equal 22% each (Retail World 2009). The volume of Butter sold in Australian supermarkets has been increasing steadily over recent years, and is predicted to keep rising. With regards to growth, there has been a 9.3% increase in the volume of Butter sold over the year 2009, whereas sales of Dairy Blends remained relatively stable (+0.6%) (Retail World 2009). Conversely, the volume of Margarine Spreads sold has decreased over recent years, with a 2.3% reduction observed in 2009 (Retail World 2009). In this article, any reference to the volume of Spreads (as defined above) sold applies to the grocery (supermarket) sector only.

Butter sales were dominated by Private Label (PL) manufacturers (56%, Figure 1) and the manufacturer, Fonterra Brands Australia (36%, Figure 1). Unlike for Butter, PL manufacturers of Dairy Blends held a very small market share of volume sales (4%). Instead, Dairy Blend sales were dominated by two manufacturers, Murray Goulburn (55%) and Fonterra Brands Australia (39%), similar to its share of the butter market.

Sales of Margarine Spreads were split more evenly between PL manufacturers and the manufacturers Goodman Fielder and Unilever, with a smaller contribution from Nuttelex Food Products and Peerless Holdings (7% each, Figure 1).

Key nutrient contributions from Spreads: total fat, saturated fat, trans fat and sodium

Food Standards Australia New Zealand (FSANZ) define butter as containing $\geq 80\%$ milk fat (FSANZ 2010). In contrast to this, dairy blends are spreads in which edible (plant) oils, such as canola, are added to butter to make them softer and easier to spread when removed from the refrigerator. Conversely, margarine is purely plant-based, containing ≥ 80 g/100 g total fat (FSANZ 2010). There were very few edible oil spreads that met this definition of margarine. As such, these products have been labelled as margarine spreads for the purpose of this report.

Given the volume of Spreads sold and consumed in Australia, it is important to consider the nutrient contribution of this category to the food supply. This

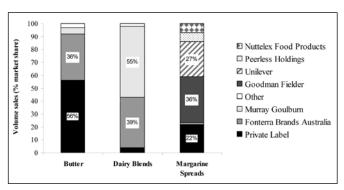


Figure 1. Relative contribution (% total volume sales) of key manufacturers to total volume sales within each segment: Butter, Dairy Blends and Margarine Spreads, in the Australian grocery market in 2009 (Retail World 2009).

Table 1. Sodium content of Spreads in Australian supermarkets¹.

Product type	Segment	n	Sodium (mg/100 g)
Regular	Butter	11	633 ± 84^{a}
	Dairy blends	13	440 ± 81^{b}
	Margarine spreads	44	387 ± 92^{b}
Salt-reduced	Butter	3	303 ± 81^{a}
	Dairy blends	4	264 ± 39^{a}
	Margarine spreads	3	283 ± 15^{a}
Unsalted, no added salt	Butter	8	19 ± 10 ^a
	Dairy blends	2	18 ± 25^a
	Margarine spreads	1	10 ± 0^{a}

¹Data from Synovate Aztec (2010). Mean \pm SD. Different letters within a column indicate a significant difference between segments for each product type - P = 0.001 for regular and P < 0.05 for other product types. There were no significant differences between Branded and Private Label products. Classification of 'regular', 'salt-reduced' or 'unsalted, no added salt' was based on product labels.

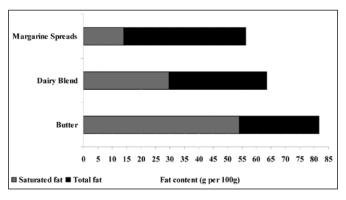


Figure 2. Mean total fat and saturated fat content of Butter, Dairy Blends and Margarine Spreads in the Australian grocery market (Synovate Aztec 2010).

DAIRY

paper provides an analysis of the key nutrients provided by Spreads in the grocery sector (in 2009), specifically total fat (TF), saturated fat (SFA), and sodium (all per 100 g). Data for trans fat (tFA) is also reported.

On average, Butter contained 82% TF, which was significantly greater than both Dairy Blends (64%) and Margarine Spreads (56%) (P < 0.001 for both) (Figure 2). Similarly, the SFA content of Butter (54%, 66% of TF) was significantly greater than that of Dairy Blends (30%, 47% of TF) and Margarine Spreads (14%, 25% of TF) (P < 0.001 for both). The SFA content of Dairy Blends was also significantly greater than Margarine Spreads (P < 0.001) (Figure 2).

A 2007 review of tFA by FSANZ (FSANZ 2007) reported that Butter contained on average 4.1 g/100 g tFA, Dairy Blends 3.4 g/100 g and Margarine Spreads 0.2 g/100 g (laboratory analysed, FSANZ 2007, data on tFA was not available from our primary data source).

For analysis of the sodium content, the Spreads were further sub-segmented according to product type, as specified on the packaging. Within 'regular' salt (sodium) varieties, Butter contained significantly more sodium (per 100 g) than both Dairy Blends and Margarine Spreads (P < 0.001) (Table 1). The sodium content of 'salt-reduced' and of 'unsalted, no added salt' varieties was not significantly different between segments (P > 0.05, Table 1).

Recommended intake of Spreads, and key nutrients: saturated fat, trans fat and sodium.

As a high intake of SFA is associated with an increased risk of cardiovascular disease (CVD) (NHFA 2009), the Heart Foundation (HF) recommends that, for all Australians, SFA be replaced with unsaturated fats (NHFA 2009). One way this can be achieved is to replace butter with margarine spreads (NHFA 2010a). The Dietary Guidelines for Australian Adults (NHMRC 2003) also recommend that unsaturated margarine (spreads) be chosen instead of butter as a spread or in baking. In addition to this, the Australian Guide to Healthy Eating (AGHE) (Kellett & others 1998) recommends that foods, such as butter, which contain high levels of SFA, be limited, and that margarine spreads should be chosen in preference to butter.

A daily serve of margarine spreads is defined by the AGHE as 20 g (1 tablespoon) (Kellett & others 1998). Based on this, if butter was replaced with margarine spreads, this would result in an annual saving of 2.9 kg of SFA per person (calculations based on data from Figure 2).

As a high intake of tFA is also associated with an increased risk of CVD (NHFA 2009), the HF recommends that tFA be restricted to < 1% of total energy intake (NHFA 2009). Keeping tFA to a

minimum can also be achieved by replacing butter with margarine spreads.

With regards to sodium, a habitually high intake has been linked to a higher than average blood pressure, which may lead to an increased risk of heart disease or a stroke (NHFA 2006). Replacing regular (salt) butter with margarine spreads, particularly those that are salt reduced, would therefore also assist in reducing the amount of sodium consumed in the Australian diet.

Consumer behaviour and media messaging

The fact that the growth rate of Butter sales is on the rise suggests there is an increasing demand for butter by consumers. To reverse this, and achieve an increase in the growth rate of the margarine spreads, it is important to understand why Australians are moving towards purchasing butter. In a recent Heart Foundation survey of 1009 males and females aged 30–65 years, product taste and recipe use were the main factors reported by individuals for choosing butter for cooking and/or baking (NHFA 2010b).

Food media has played a major role in influencing choice of butter over margarine spreads for use in recipes. Senior & Lake (2007) audited Australian magazine recipes for spread or oil type used, and



DAIRY

identified that 97% of the 224 recipes sampled specified butter instead of an oil-spread (including margarine spreads). They speculate that the dominance of butter over oil-spreads in these recipes could be due to the perception that butter has superior cooking properties, despite both performing similar functions and often being interchangeable (Senior & Lake 2007).

Similarly, Fonterra reported that the increasing popularity of *MasterChef* and similar cooking programs encourages more consumers to cook at home, and that since butter is a key ingredient of so many recipes, this has led to an increase in consumption, and therefore sales (Retail World 2010).

It is evident that food media can be used to influence consumers' product choices in this category. A recent multimedia campaign by Goodman Fielder to educate consumers about SFA in butter saw a positive change in consumer perception of margarine spreads during the campaign period (Soup 2010). This is an example of how the media can be used to encourage the purchase and consumption of healthier spreads.

Concluding remarks

To decrease the growth of Butter sales (and increase that of Margarine Spreads), it is important to understand what influences consumers' choices and reasons for purchase in this category. Clearly, consumer messaging and promotions can play a large role in directing consumers towards a particular Spread type. The media could be used as a platform to educate individuals about the public health nutrition guidelines for consumption of Spreads, ie unsaturated fat margarine spreads, whether it be for use in cooking, baking or as a spread. This may, in turn, drive an increase in demand for margarine spreads (and a decrease in demand for butter), thereby resulting in a notable reduction in the amount of SFA contributed to the Australian food supply from this category, as well as a reduction in sodium and tFA contribution.

Data sources

Synovate Aztec (Copyright © 2010). Nutritional information for the top 90% of items in the NHFA-defined Spreads category (based on volume sales, including all private label and branded products) was collected by Synovate Aztec (on behalf of the NHFA) from the Nutrition Information Panels (NIP) on the packaging of products available in national supermarket chains (excluding Aldi). NHFA nutritional calculations are based on data collected by Synovate Aztec during the requested time period (2010) within the Australian total grocery market. Data was correct at time of collection; however, manufacturers may have reformulated since then.

References

Food Standards Australia New Zealand. 2007. Review report: trans fatty acids in the New Zealand and Australian food supply: Table A2.1 Summary of mean (and range) total TFA levels found in three studies (FSANZ). Downloaded from www.foodstandards.gov.au on 06/08/10.

Food Standards Australia New Zealand. 2010. Australia New Zealand Food Standards Code. Standard 2.5.1 Milk. Downloaded from www.foodstandards.gov.au/foodstandards/ on 15/07/10.

Kellett, E, Smith A & Schmerlaib, Y. 1998. The Australian Guide to Healthy Eating (AGHE): Background Information for nutrition educators. Australian Government Department of Health and Ageing.

National Health & Medical Research Council. 2003. Dietary Guidelines for Australian Adults. AGPS Canberra ACT.

National Heart Foundation of Australia NHFA. 2006. Summary of evidence statement on the relationships between dietary electrolytes and cardiovascular disease. Downloaded from www.heartfoundation. org.au on 29/01/10.

National Heart Foundation of Australia NHFA. 2009. Position statement: Dietary fats and dietary sterols for cardiovascular health. Downloaded from www.heartfoundation.org.au on 15/07/10.

National Heart Foundation of Australia NHFA. 2010a. How to reduce saturated fat. Downloaded from www.heartfoundation.org.au on 15/07/10.

National Heart Foundation of Australia. 2010b. Draft internal report on The Heart Foundation HeartWatch Survey, January–March 2010.

Retail World. 2009. Annual Report 2009: Market sizes & shares. December.

Retail World. 2010. Butter usage increases with home cooking trend. 21 June.

Senior, N & Lake, V. 2007. Cooking up a storm: the health implications of fats and oils used in popular magazines. Journal of the HEIA.

Soup 2010. Soup Tick Campaign Summary. Goodman Fielder internal report.

Xenia Cleanthous (corresponding author) is Data Analyst – Food Supply, Anne-Marie Mackintosh is Nutrient Standards and Regulatory Affairs Manager – Food Supply and Susan Anderson is National Director – Healthy Weight, National Heart Foundation of Australia; email: xenia.cleanthous@heartfoundation.org.au. □

Innovative packaging solutions for cheese production

Amcor Flexibles Europe & Americas (www.amcor.com) were recently awarded a gold award in the Packaging Excellence category from the Flexible Packaging Association for their contour perforation technology applied on Emmi's Käsplättli cheese pack.

The innovative packaging format consists of a tray with four cavities, each filled with a different type of individually portioned cheese, and is sealed with a lidding film from Amcor Flexibles. As a result of Amcor's expertise in contour perforation, consumers can either peel open the complete pack or, if they want a single piece only, push one individual cavity open and pick the cheese bite they want.

They also received a silver award, also in the Packaging Excellence category, for Kerry Food's *Cheestrings Shots* packed in Amcor Stickpack. The pack combines high barrier properties with easy opening and allows consumption directly from the pack.

The pack features a child friendly easy opening which has been achieved by applying micro-perforation on the top of the pack. \Box