Sunflower Products: Good Nutrition for Consumers?

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Consumption of traditional sunflower oil is in decline in Australia. "Good nutrition" advice is one of several factors contributing to this fall. Consumer perceptions of dietary fats are generally poor and awareness of the nutritional properties of sunflower oil is low. This paper explores the potential role of nutrition as a tool for the promotion of sunflower-based products.

Margarine Market Trends

Historically the major use for sunflower oil in the Australian market has been in margarines and margarine-spreads. Consumption of spreads over the last decade has fallen substantially, by about 25 per cent, and further declines are expected. There are several factors driving this decline. For example, bread - the major vehicle for margarine consumption, was once a staple food for Australians, but its consumption is now in decline. Consumers are demanding more alternatives. Whereas once sandwiches were the preferred option for lunch, the city food halls now offer an exciting array of cuisines from around the world, often with rice or pasta as a base. Hamburger buns and pizza bases are now major uses for flour but are not complemented with margarine.

Although breakfast remains the major opportunity for spread consumption, again change is afoot. Fewer people now consume breakfast. For those who do, there are increasing numbers of alternatives to traditional foods such as bread with margarine. A muffin with coffee is standard fare for North Sydney office workers. Breakfast now comprises an increasing proportion of MacDonalds business.

Modern nutrition advice is one of the most negative influences on margarine consumption. "Eat less fat" is a nutrition message which has struck home with consumers

and margarine is particularly vulnerable to it. 'Visible' fats, such as margarine and oils, are easy targets for fat reduction unlike 'hidden' fats found in baked goods, snack foods, take-aways and cheese. "Reduced-fat spreads" may meet consumers' demands for less fat but are not good news for the sunflower industry.

Nutrition arguments do not just revolve around the total amount of fat consumed but also the type of fat. Sunflower oil was the dominant oil used in vegetable oil-based spreads when polyunsaturated oils were launched in Australia in the 1970s. This dominant position came under significant challenge with the development of the canola industry and the launch of canola spreads into the Australian marketplace a decade or so ago. More recently olive oil has been used in premium margarines and spreads. Canola and olive oils were positioned with strong health benefits. This was not countered by similar arguments in favour of sunflower oil. In consumers' minds canola and olive oils are the healthier options.

Good Nutrition: Threat or Opportunity?

Superficially "good nutrition" appears to be a threat to the sunflower industry. Closer analysis will reveal it is an opportunity. However, this opportunity will only be realised when consumers are adequately informed about the latest scientific information about the health implications of dietary fats, especially those rich in polyunsaturated fats such as sunflower oil. What are the facts? And who is responsible for distilling these down and disseminating them to consumers?

Dietary Guidelines for Australians

There are two major guiding influences on nutrition messages relating to dietary fat - the Dietary Guidelines for Australians and the nutrition policies of the National Heart Foundation.

The Dietary Guidelines for Australians are produced by the National Health and Medical Research Council and are updated every decade or so. They are designed as a series of nutrition messages aimed at improving the health of the population. When these were first promulgated in the early 80s the message about fat was a simple one - just "eat less fat". The implication was that fat was bad for health. Nutritionists passed this message on to their clients; women's magazines told the population at large; food companies reinforced it with nutrition claims on food packaging. However, there was a problem – the message was wrong.

The scientific rationale for the guideline was that the consumption of fat was associated with increased risk of coronary heart disease, breast cancer, bowel cancer and obesity. By today's standards the evidence supporting these disease links was weak. When bigger and better scientific studies were conducted dietary fat was turned out to be a relatively benign component of the diet. One such study was the famous Nurses Health Study involving a cohort of over 80,000 nurses in the United States which has now been followed up for over 20 years. The researchers found no associations between fat intake and cancer of the breast or bowel. Also, no association was found between total fat intake and coronary heart disease. However, the *type* of fat was found to be related to heart disease - saturated fat increasing risk and polyunsaturated fat *decreasing* risk.

Findings that polyunsaturated oils, such as traditional sunflower oil, decrease the risk of coronary heart disease were not new. In fact, these results were entirely in line with earlier findings on the effects of dietary fatty acids on blood cholesterol - a major risk factor for coronary heart disease. Saturated fatty acids increase blood cholesterol, polyunsaturated fatty acids decrease it - well researched in the 1950s and 1960s but unfortunately not incorporated into our first dietary guidelines. Why? Because of the complexity of the issues and the difficulty in communicating them. One major problem with nutrition guidelines has been the tendency to oversimplify messages to promote consumer understanding. The unintended consequence of this was to misrepresent the role of dietary fat in human nutrition.

Fortunately the NHMRC has slowly set about getting the story right. Ten years ago the Dietary Guidelines for Australians were reviewed and the fat guideline was changed to

increase the emphasis on fat type. The new guideline read "eat a diet low in fat and, in particular, low in saturated fat". More recently dietary guidelines for both children and older Australians were developed which did not mention any need to restrict total fat, just saturated fat.

The Dietary Guidelines for Australians are currently under review and the early indications are that the fat guideline will have two elements – a moderate (rather than low) intake of total fat and a restriction of saturated fat. The slow evolution of our dietary guideline for fat away from a focus on total fat in favour of fat type has been positive for vegetable oils. However, unsaturated oils are still perceived as "less bad" than saturated fats rather than good in their own right.

Heart Foundation Policies

While the Dietary Guidelines for Australians still do not specifically advocate increased intakes of polyunsaturated fats, this step has now been taken by the National Heart Foundation. The Foundation's recent review on dietary fats and coronary heart disease is the most rigorous ever conducted in Australia and, importantly, employed an evidence-based approach. The Heart Foundation found polyunsaturated fatty acids to be the most protective class of fatty acids against heart disease and recommended that they comprise 8-10 per cent of dietary energy. This compares with the current content of polyunsaturated fatty acids in the Australian diet of just 5 per cent of energy. In other words, the Heart Foundation is recommending an increase in the polyunsaturated fat content of the Australian diet of between 80 and 100 per cent.

The major source of polyunsaturated fatty acids in the Australian diet is sunflower-based margarines and spreads. Dietary modelling by the Heart Foundation has demonstrated that, in order to consume 8-10 per cent of dietary energy as polyunsaturated fat, people need to consume a sunflower-based spread regularly. This represents a rare opportunity for the sunflower industry. The most respected source of nutrition information for consumers in Australia is advocating regular consumption of sunflower-based spreads. If

this information can be effectively communicated to both health professionals and consumers sunflower oil will gain respect for its nutritional qualities.

Fat-Soluble Nutrients

The general public is largely unaware that the polyunsaturated fatty acids, linoleic acid and alpha-linolenic acid, are actually essential nutrients in the diet. These are not the only essential nutrients found in sunflower-based spreads. Sunflower oil is an excellent source of vitamin E and it is not surprising that sunflower-based spreads are the major source of vitamin E in the Australian diet. Spreads are also rich in vitamins A and D, making spreads a major source of no less than five essential nutrients in the diet. How many other foods can make such a claim?

In the United States health authorities have developed a comprehensive new set of recommended dietary nutrient intakes for a healthy population. They urge increased intakes of vitamin E and, especially, vitamin D. How will such recommendations be implemented in Australia if the general public consumes less of the best source of these nutrients in our diet - spreads? Currently our intakes of vitamins D and E are falling in line with the decline of spreads consumption.

Expert opinion and consumer understanding about fats and fat-soluble nutrients are out of kilter. There is a compelling case for increased consumption of sunflower-based spreads by the Australian population. Only the Heart Foundation is really primed to take this message to the general public. Perhaps the sunflower industry and margarine companies should consider assisting the Heart Foundation in its educational activities about dietary fats.

Sunflower Products for the Future

Unilever's Flora pro-activ provides a good example of a sunflower-based product of the future. It has a strong health positioning. Flora pro-activ's novel component is plant sterols, which inhibit the absorption of cholesterol from the intestine. The result is a clinically proven cholesterol-lowering effect. The decision as to which oil should form the base of Flora pro-activ was not a difficult one – traditional sunflower oil, rich in vitamin E, rich in the polyunsaturated fats advocated by the Heart Foundation, cholesterol-lowering in its own right.

Flora pro-activ was the first new polyunsaturated sunflower-based spread launched by Unilever in Australia for many years and it has been a remarkable success in the Australian marketplace. Since its launch in June 1999 Flora pro-activ's sales have steadily climbed such that it now commands a value share of the spreads market of 13.8 per cent, the most successful launch of a margarine product for more than 25 years.