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Invited commentary:

It's time to determine the cost of a healthy diet in Australia

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Key words: Food, cost.

Economic factors are important determinants of food security. In terms of food access, financial resources determine an individual's ability to procure food; on the supply side, the cost of food is equally important. The interplay of these two factors, financial resources and cost, is perhaps the most immediate and important determinant of what people do (or do not) put into their shopping trolleys or purchase at the takeaway and ultimately eat – if you cannot afford it you cannot eat it even if you want to!

There have been a number of studies of food cost undertaken in Australia. The current paper, which describes the development of a Healthy Food Basket for Victoria, is the latest study in a body of research on this topic. The authors of all these studies need to be commended for grasping the nettle on this issue in the absence of any national initiative to assess and monitor the cost of healthy food in Australia. The proliferation of such studies, including the Healthy Food Access Basket Studies in Queensland,¹ the development and use of the Illawarra Basket in Wollongong,^{2,3} and basket studies in South Australia⁴ and the NT,⁵ highlight the need for a national consensus and approach to this important public health indicator.

The National Food and Nutrition Policy (1992)⁶ has as one of its basic tenets:

“to increase the availability of nutritious foods especially in remote areas, to increase the affordability of nutritious foods for economically disadvantaged people, and to increase the understanding of food and nutrition”.

In 2001, the Australian Health Ministers endorsed Eat Well Australia:⁷ the National Public Health Nutrition Strategy, and its Indigenous component, the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (NATSINSAP). These strategies support the need for national and individual food security; in other words, the need to assure the supply of and access to healthy, affordable and culturally appropriate foods for all Australians. Eat Well Australia identified a number of populations that were particularly vulnerable to food insecurity. These included “people on low incomes; people with disabilities; chronically ill people; frail older people; refugees; alcohol or drug

abusers; and homeless people". Food security is thus, in principle, a key aim of our national nutrition policy and strategy. While the Nexus Report,⁸ the consultation for a national food and nutrition monitoring system, did not directly highlight the need to collect the price and availability of food, food security was nominated in the report as a priority.

There is growing evidence of the link between cost of food, food consumption and health. The relative low cost of high-energy, nutrient-poor foods has been proposed as a key driver of the high prevalence of obesity in low-income populations.⁹ There are data from the United States (US) that show a strong positive relationship between the increasing cost of fresh fruits and vegetables and the development of obesity in children.¹⁰ Research, again in the US, indicates that varying food cost can be an effective strategy for improving the consumption of healthy foods.¹¹ The strong message is that food cost is a major determinant of food intake and subsequent health outcomes.

Food cost data have many uses:

- Examining the relationship between variations in food cost (either intended or unforeseen), food expenditure and health, for example the relationship between food cost, expenditure and chronic diseases such as obesity.
- The development of public health nutrition policy. For example, the Healthy Food Access Basket (HFAB) survey is used to advocate to all stakeholders for the improvement of the food supply in remote Aboriginal and Torres Strait Islander communities.
- The development of healthy living standards, inclusive of food, to be used in the determination of social policy including minimum wage and welfare allowances.¹²
- Monitoring the impact of environmental stresses such as drought or hurricane on the cost of fresh produce and patterns of consumption.

Food costs are markers of food supply directly related to national, community and individual food security. Above all, the monitoring of food cost should be part of a wider public health drive to ensure equity in access to health-enhancing resources and the enjoyment of a healthy, productive and happy life.

What is the most current data on the cost of a healthy diet in Australia? The HFAB team in Queensland recently reported¹ both cross-sectional and longitudinal data (from the start of the survey in 1998) on the cost of a basket of food to meet the nutritional needs of a family of six for two weeks. These data demonstrate the relatively high food cost experienced in rural and remote communities. Importantly, these data draw an economic line in the sand in terms of the cost of healthy food in both urban and rural and remote Queensland. Interestingly, the data also demonstrate an increase in the cost of fresh foods over and above the consumer price index (CPI) in the order of 20-40%. These increases have occurred after the imposition of the goods and services tax (GST). The impact in terms of food purchase and health of these changes in the cost of fresh foods are yet to be examined.

In policy terms, our national nutrition policy recommends the consumption of healthy foods but little is known about the

affordability of these foods. Similarly, social policy provides financial support but is poorly informed about nutrition and health needs or any understanding of the cost of healthy food. The Illawarra Healthy Food Price Index Study³ showed that the current cost of a basket of nutritious food to feed a family of four amounts to at least 32% of the average weekly earnings and 33% of welfare payments. The Household Expenditure Survey 2003/04¹³ shows that on average Australians spend 17% of their total income on food. Theoretically, at the poverty level, the total income goes to pay the obligate expenses and the cost of necessities – one-third for food, one-third for housing and one-third for other necessary expenses.¹⁴ So at the bare minimum food should account for no more than 30% of household income. The determination of indicative budgetary standards for a nutritionally adequate diet has been described by Saunders et al. 1998.¹⁵ The work of Saunders and Williams has begun the process of establishing realistic estimates of costs for healthy food that can be incorporated in the determination of government allowances. The recipients of such allowances are often among the most vulnerable of our community who bear a large burden of disease and for whom food is often a discretionary expense.¹⁶

What food cost datasets are available? Food cost data are collected for commercial purposes. Such data, although not inaccessible, can often have limited use because of commercial sensitivities and expense. The cost of food is monitored through determination of the CPI. Every four months the cost of a representative basket of 11 groups of goods and services including food is collected by the Australian Bureau of Statistics (ABS). Price data is collected from a wide range of retail outlets in the major cities only. The food group includes all expenditure on food and beverages for human consumption other than alcoholic beverages. While the CPI data are not collected with a direct focus on health and represent costs only in the capital cities, the food group covers all "core" food groups specified in the *Australian Guide to Healthy Eating*. However, it should be noted the CPI basket also includes foods that are less nutritionally desirable.

There have been purposive studies of healthy food in Australia. Apart from specialised methodologies, for example store turnover studies in Aboriginal and Torres Strait Islander communities,¹⁷ these studies have largely been audits of the cost of a basket of foods to meet the nutritional needs of a family of specified size. In this respect, these studies are comparable in type to the Thrifty Basket Study in US¹⁸ (although the latter is a much more highly developed methodology).

Criticisms of the methodologies used in these studies have been:

- The sampling techniques and sizes.
- The foods contained in the baskets are specific to certain communities and may not be more widely appropriate.
- Family size may not be appropriate.
- The need for the baskets to be updated to represent the revised Nutrient Reference Values and perhaps reflect more than 70% of energy needs.
- The data collection process can be dependent on health workers for whom this is not core business.

It is argued that HFAB may be more relevant to Aboriginal and Torres Strait Islander communities. Alternate baskets have been developed. The Illawarra Healthy Food Price Index² has been developed in New South Wales. Now there is the current study of a Healthy Food Basket for Victoria. These baskets are essentially variations on a theme with differences in range of vegetables, cuts of meat and type of seafood. They provide, however, a sound basis for the development of a methodology that could be used nationally if, indeed, a basket methodology was deemed the most valid, reliable and cost-effective method. It may be possible to use other cost data for food that is routinely collected, such as the CPI, once these data have been modified to reflect nutritionally desirable rather than commonly purchased foods.

It is important that the cost of a healthy diet in Australia is monitored. The process to develop a system to monitor the cost of healthy foods can be said to have begun with the National Health and Medical Research Council's review of Recommended Dietary Intake as Nutrient Reference Values (NRVs) in 2005 and the recent announcement of Commonwealth funding for the updating of Australian core food group modelling. Further considerations in developing a national monitoring system are:

1. Standard methodology – flexible for family size and composition, including commonly consumed foods and appropriate to the lifestyle of the general population but able to be modified to reflect local differences in patterns of food purchase and consumption.
2. Process of collection – How and who will collect food cost data? Can we use data already routinely collected?
3. Lead agencies – There is the potential for the sharing of expertise and cost between the States and Commonwealth.

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