

What's for Dinner? An exploration of changes in eating habits and dietary acculturation among new migrants to Australia

AMES Vision

Full participation for all in a cohesive and diverse society

Acknowledgements

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Executive Summary

One of the first things newly arrived migrants need to do after they arrive in Australia is to ascertain what type of food is available, where they can purchase familiar or traditional foods and if it can be prepared in a similar way to their home country. There are numerous factors that can impact upon whether new migrants establish healthy eating patterns, including income, limited English, and a lack of familiarity with local foods, shopping practices and cooking methods.

Research indicates that new migrants have a strong desire to maintain their traditional meals and eating practices. However, the influence of dietary acculturation particularly over the first two to three years of settlement, means that some migrants may make changes to their diets because of the lack of availability of ingredients, influences from children and the price of food. Others may make significant changes and move to more western style diets characterised by energy dense and processed food¹.

The aim of this survey was to find out whether newly arrived migrants attending AMEP (Adult Migrant English Program) classes had changed their dietary habits since coming to Australia. It explored whether respondents maintained traditional eating and food practices, how often they ate fast food, whether they walk for exercise, perceptions around the cost of food and where they do most of their shopping for fresh produce like fruit and vegetables.

Overview of findings

About the respondents

- 65% of respondents had been in Australia for less than two years.
- 81% had arrived on a migrant visa and 13% on a humanitarian or refugee visa.
- 63% were educated to university or similar level.
- 72% lived in households where at least one person had a job.

Maintaining food practices and the influence of dietary acculturation

- 57% ate traditional/home cooked meals every day.
- 83% shared a meal with their family more than three days per week.
- More than eight out of ten (82%) ate breakfast every day.
- 67% of respondents ate vegetables every day. Those who ate traditional meals were more likely to consume vegetables daily.
- 47% of respondents never ate from one of the five top fast food chains, while 41% had eaten from these food chains one or more times per week.
- 35% of respondent rarely or never consumed soft drinks, while, 60% consume soft drink at least one or more times per week.

¹ High density and process foods are often foods, which are cheap, rich in fat, sugar, and other refined carbohydrates (Holmboe-Ottesen & Wandel, 2012).

Health profile

- 40% of respondents stayed the same weight, while 38% had put on weight.
- 84% per cent of respondents said that their health was good to excellent

Physical activity

- 46% of respondents walk every day for exercise

Purchasing food

- 63% purchase their fruit and vegetables from the supermarket.
- 51% of respondents thought the cost of food was expensive in Australia and 43% felt it was about right.
- 79% of respondents read food labels when buying packaged food.

Introduction

Upon arrival in Australia either as a skilled migrant or humanitarian migrant, there is a need to tend to the basic necessities of life. These include finding a place to live, earning an income, finding a school for children and learning English. According to Gallegos (2010) food and its relationship to health and wellbeing is rarely mentioned, but for new arrivals learning how to find and procure familiar foods in a new environment and understanding unfamiliar foods is a fundamental part of settlement.

There are many challenges new migrants face in relation to food. These include learning about new types of food, where to source ingredients and how to navigate the built and social environments in terms of transport and the proximity of food retailers to their home. For migrants from non-English speaking backgrounds (NESB) maintaining traditional food practices in conjunction with exposure to new foods can be confronting.

Food security is often a problem for new migrants and refugees who are disadvantaged in the housing and employment markets. Low incomes and lack of transport may have a significant impact on the ability to access and purchase food. New arrivals may rely on television advertising to help them identify commonly eaten foods. The types of foods advertised tend to be fast foods, processed foods and soft drinks (Gallegos, 2010). Living in areas where there is limited availability of fresh foods and/or the prohibitive cost of purchasing fresh foods when compared with processed foods can have a significant impact upon the types of food choices people make. There is some evidence to suggest that migrants who arrive from developing countries are replacing traditional healthier foods and physically active lifestyles with more sedentary living and Western- style food which tends to be high-density and more processed (Williams & Harris: 2010).

A number of researchers have referred to the “healthy immigrant effect”. This concept notes that migrants are generally healthier and have a health advantage when compared with the native born population. This phenomenon is present even though the majority of migrants coming to Australia are from developing countries. Evidence suggests that health screening, and/or a preference for skilled migrants means that the healthiest and wealthiest migrants are more likely to migrate (Kennedy et al 2015). The findings of a systematic review undertaken by Popovic-Lipovas & Strasser (2015) found that the healthy migrant advantage was relatively short lived and did not last long due to acculturation practices. The authors cite studies in the US and Canada that found that within a short period of time migrants health behaviours, dietary practices and lifestyles become similar to the settlement country.

High energy diets, sedentary lifestyles and improvements in the standard of living are linked with weight gain and obesity. After arrival, some migrants choose energy dense foods, snacks and sugar sweetened beverages. In their home country energy rich and highly processed foods are seen as status foods which very few can afford. There is evidence to suggest that these types of foods in the new country are not only more available and affordable, but are likely to speed up the process of dietary acculturation (the process that occurs when members of a minority group adopt the food choices and eating patterns of the host country) in terms of shifting from traditional food stuffs to

adopting decreased fruit and vegetable consumption and lower levels of physical activity (Holmboe-Ottesen & Wandel, 2012, Popovic-Lipovas & Strasser, 2015)

Upon arrival migrants from high income countries tend to have lower body mass index (BMI) than the host population. Groups with higher education levels tend to experience a smaller increase in BMI and/or assimilate at a slower rate than groups with lower education levels. Maintaining the traditions of the home country and greater integration into ethnic group networks seems to slow the process of attaining higher BMI levels (BMI 25 to 30 overweight, over 30 obese, over 40 morbidly obese, over 50 super obese). An individual's cultural background in terms of values, norms and beliefs significantly influences diet and physical activity choices (Hauck et al, 2010).

Individuals who are overweight or obese are at higher risk of lifestyle related diseases such as heart disease, cancer, type two diabetes and other chronic health conditions. Humanitarian migrants and refugees tend to be over-represented in chronic disease prevalence rates; this may be complicated by limited formal education and low literacy levels. Migrants from a Mediterranean, South Asian, South-East Asian, African or South Pacific Island background are more likely to develop diabetes or coronary heart disease. The types of food consumed, coupled with recommended levels of physical activity are fundamental to preventing and managing chronic health conditions (Gallegos, 2010).

A recent report published by AMES Australia (2015) titled *Small Towns Big Returns* looked at the role of migrants in the revitalisation of a small rural town in Western Victoria. The report explores the impact of staged recruitment and settlement of Karen people into the area over a number of years. One of the issues that the researchers encountered as part of this study was the need for the Karen to access culturally appropriate food. Initially, the Karen residents would source some food from outside of Nhill in Melbourne. They also continued their tradition of growing their own vegetables. The local supermarket saw a business opportunity to extend its range of goods to include specific food items for the Karen. Maintaining traditional food practices was an important priority for these newly settled residents.

Australia is well known and celebrated for its multicultural cuisine. Migrants bring with them wonderful flavours and new ingredients that builds an eclectic range of tastes, flavours and food experiences. Yet, what is perhaps less known is that it takes some time for them to learn about food in Australia and to adapt their traditional food to the local context. It is a two-way process where new migrants not only learn about and adopt local food practices, but their food culture filters into the broader community making different types of ingredients and produce, as well as cooking styles, available to all.

The aim of this survey was to find out whether newly arrived migrants attending AMEP (Adult Migrant English Program) classes have changed their food habits since coming to Australia. It explored whether respondents maintained traditional eating and food practices in the context of obesogenic environments² that encourage people to eat unhealthily and not exercise.

Methodology

There are a number of population level surveys which monitor diet, food intake and levels of physical exercise. However, these tend to include only a very small numbers of migrants. It is also difficult to ascertain whether respondents are new arrivals or not, with the focus being on cultural background and whether participants speak languages other than English. Large surveys like the Victorian Population Health Survey (n=30,000) conduct approximately 3 per cent of surveys in languages other than English.

This report is based on a survey that was administered to students undertaking the Adult Migrant English Program (AMEP) at all AMES Australia sites in Melbourne in October 2015. The survey was conducted in English and given to CSWE3³ classes made up of students with intermediate levels of English proficiency. In addition to distributing the surveys in class, Distance Learning students undertaking AMEP were asked to complete the survey on-line using SurveyMonkey. In total 334 surveys were completed using both these methods.

The survey consisted of twenty questions; eight demographic questions and twelve questions relating to food and exercise. The areas covered included:

- Consumption of fast food
- Consumption of fruit and vegetables
- Consumption of sugar sweetened beverages (soft drinks)
- Changes in weight
- Walking for exercise
- Breakfast
- Self-reported health
- Consumption of traditional dishes
- Sharing meals as a family
- Cost of food in Australia
- Place of purchase for fruit and vegetables
- Reading food labels on packaged food

It took participants between 5 to 10 minutes to complete the survey.

The survey was piloted by 34 AMEP students undertaking Distance Learning who made some useful suggestions to clarify questions. These suggestions were incorporated into the final version.

² ‘Obesogenic environments’ refer to environments where it is easy to make unhealthy choices resulting in a high intake of energy dense foods and beverages and in reduced physical activity. This includes the heavy promotion of fast food outlets, energy dense snacks, and availability of high sugar drinks to children; the low cost and large serving sizes of such foods; and the transport systems and urban design that inhibit active transport and active recreation (Swinburn & Egger, 2004) .

³ The Certificate in Spoken and Written English (CSWE) is the national curriculum framework for the Adult Migrant Program. CSWE3 students are more proficient in English compared with CSWE I and II that are beginner and post beginner levels respectively.

Prior to administering the survey, teachers were provided with the key concepts and vocabulary to discuss in AMEP classes. This preparation aimed to increase participants' understanding of the context and the concepts canvassed in the survey. Teachers were asked to distribute the survey in class during a specified two week period in October.

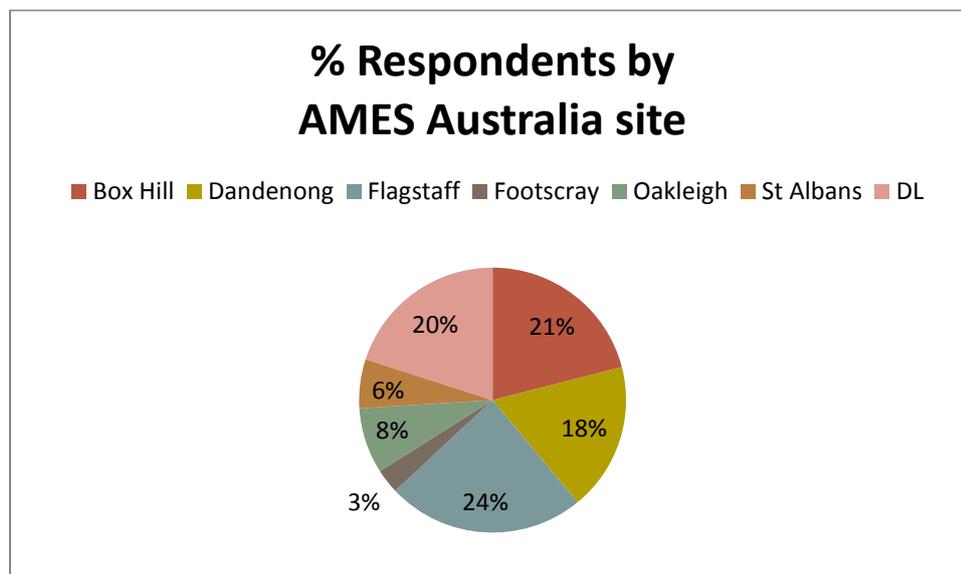
Limitations of the study

This survey provides some useful insights into the way in which new arrivals to Australia navigate the purchase and consumption of food and what this means for their health. Collecting nuanced data via a short paper based survey is problematic particularly when the questions need to be clearly and simply conveyed for ease of comprehension. There was no way to ask detailed questions relating to the number of serves of vegetables because it is too difficult to explain what a serve of fruit and vegetable is in the time allocated. As a proxy, students were asked to provide an indication as to how often they eat vegetables. However, this question does not quantify the amounts and types eaten. Similarly, the question relating to physical activity asks about walking for exercise. Again this question is indicative and provides a proxy as to whether the respondent undertakes physical activity or not. It does not gauge the intensity or the duration of this activity. There was no qualitative data collected which could provide additional qualification on questions.

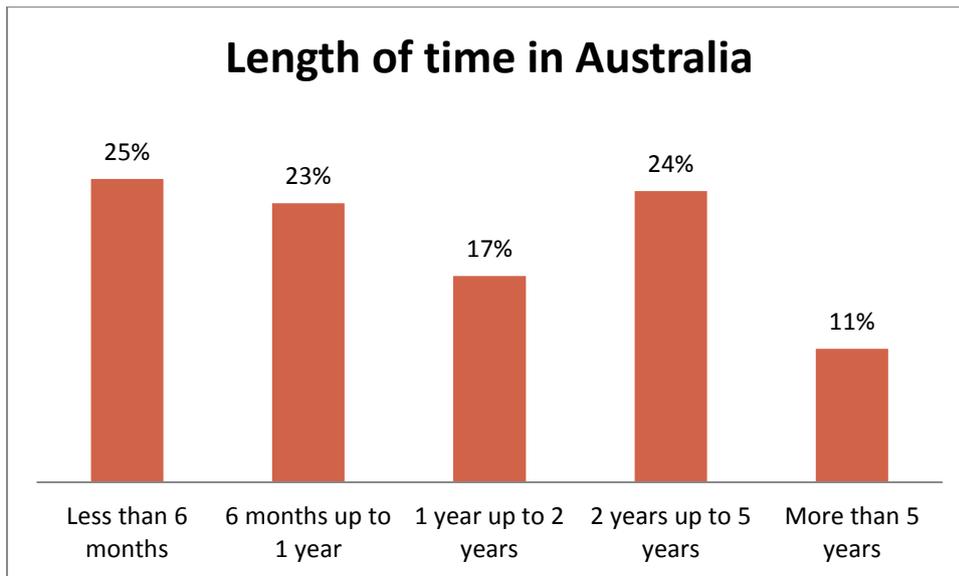
Findings

Demographics

Students from several AMES Australia sites in Melbourne were surveyed. Approximately equal numbers came from the larger AMES Australia campuses Flagstaff, Box Hill and Dandenong. A significant number were completed by Distance Learning students.



Most respondents were new arrivals. Just under half (48%) of those who completed the survey had been in Australia for up to one year, while two-thirds (65%) had been in Australia for less than two years.



In terms of country of origin, just over a quarter of respondent came from North East Asia, a fifth from Southern and Central Asia. The next most populous group came from South East Asia (17%).

Regional area	Frequency	Per cent
North East Asia (China, Hong Kong, Tibet, Taiwan)	88	26
Southern & Central Asia (Afghanistan, Bangladesh, India, Nepal, Pakistan, SriLanka)	71	21
Not stated	56	17
South East Asia (Myanmar, Cambodia, Thailand, Vietnam, Indonesia, Malaysia, Philippines)	53	15
North Africa & Middle East (Iran, Iraq, Syria, Egypt)	26	8
South & Eastern Europe (Bosnia, Bulgaria, Italy, Russia, Slovakia, Greece, Ukraine, Romania, Serbia, Turkey)	22	7
Americas	9	3
Sub-Saharan Africa (Ethiopia, Eritrea)	9	3
Total	334	100

More than three quarters of those who completed the survey were female. This reflects those who attend AMEP classes who are more likely to be female. More than half (57%) were aged 25 to 44 which is the prime age for migration to Australia. More than eight out of ten (81%) arrived on a migrant visa, while 13 per cent were on a humanitarian or refugee visa. Survey respondents were highly educated with just under two-thirds (63%) having a university or similar qualification. More than seven out of ten (72%) respondents lived in a household where someone had a job.

	Frequency	%
Gender		
Male	75	23
Female	258	77
Total	333	100
Age		
18-24	57	17
25-44	189	57
45-54	62	19
55 or older	21	6
Prefer not to say	5	1
Total	334	100
Type of Visa		
Migrant visa	271	81
Humanitarian or refugee	44	13
Other	14	4
Prefer not to say	5	2
Total	334	100
Education Level		
None	1	1
Primary School	3	2
Secondary School	58	17
Trade College or similar	43	13
University or similar	211	63
Other	14	4
Total	330	100
Do you or anyone you live with have a job?		
Yes	242	72
No	86	26
No response	6	2
Total	334	100

Maintaining food practices and the influence of dietary acculturation

Food acculturation

The shared meal is no small thing. It is the foundation of family life, the place where our children learn the art of conversation and acquire the habits of civilisation, sharing, listening, taking turns, navigating differences without offending (Pollan, M, 2014:8).

Pollan (2014) cites research that indicates that obesity rates are directly correlated with the amount of time spend on food preparation. The more time people spend preparing meals at home, the lower the likelihood of being overweight. Home cooking is by far the best predictor of a healthy diet.

Changes to people's diet after they migrate can be complex. In some instances migrants hold onto their traditional eating habits post-migration even when global influences impacting their country of origin generates change (for example, multinational fast food chains). In this context Australia can act as an archive of eating habits with some migrants steadfastly hold onto traditional practices. For other migrant groups, eating patterns adapt to take into account local ingredients and the changing patterns of daily activity (Holmboe-Ottesen & Wandel, 2012).

One of the most significant impacts of dietary acculturation is the challenge to maintain a traditional diet. Migrants usually bring with them their own traditional beliefs and practices related to food and nutrition. Food preferences are also closely linked with cultural identity. The process of dietary acculturation is closely aligned to attitudes and beliefs about food and can be influenced by a migrant's gender, age, country of origin, religion, level of education, employment status and household composition. For example, migrants from low-income countries moving to high-income countries can often go through an abrupt and radical transition in terms of diet (Popovic-Lipovas & Strasser, 2015). Dietary acculturation does not necessarily take a linear trajectory moving from the purely traditional to the dietary habits of the host country. It is about new migrants finding new ways to compose traditional dishes and meals through hybridization and fusion of local ingredients and influences.

Koçturk (2004) undertook a study on food acculturation among new migrants to understand how their food habits had changed after migration. As part of this study she developed a framework in which to monitor this change. There are three different types of food categories. These include:

1. *staple carbohydrates* – bread, rice, pasta, couscous, wheat, sorghum
2. *complementary foods* – meat fish, poultry, eggs, dairy products, vegetables and legumes
3. *accessory foods* – fats, spices, nuts, fruits, sweets, savoury snacks and drinks

Each different culture will have a range of food types within these categories. When looking at how food has changed, it helps to look at each category to see changes and what people have substituted from their host country. For example, a study of Iranian migrants in Sweden found that participants shifted from bread and rice to boiled potatoes and pasta. Other changes included a reduction of fruit and vegetables because they were too expensive and not available. The consumption of desserts, cakes and sweets increased significantly, while savoury snacks like nuts, seed and dried fruit had been replaced with potato chips and popcorn. This study concluded that the three main reasons for making changes to diets were food prices, absence of Iranian foods and the influence of children's preferences (Koçturk, 2004).

Changes in eating patterns

In terms of changes to eating patterns, Koçturk (2004) found that those foods most closely aligned to the migrant's culture (e.g. staple foods) do not change as quickly as accessory foods which are not as closely tied to cultural identity and are largely driven by taste and preference. In relation to complementary foods, it is not uncommon for people to reduce their consumption of beans and legumes in favour of more meat and dairy products. There is also some evidence that new migrants decrease their consumption of fruit and vegetables consumption in favour of energy rich foods (Holmboe-Ottesen & Wandel 2012). Popovic-Lipovas & Strasser (2015) found that many migrants

have a much higher consumption of accessory foods from sugary snacks and soft drinks than in their country of origin. This is because they tend to be cheaper and more readily available.

Sharing family meals has a protective factor on the long term health of individuals and their families. When families share meals together three times a week or more, the food is usually more nutritious, containing more fruit and vegetables and less fried food and sugar sweetened beverages. Sharing family meals has been linked with a healthy body weight. (VicHealth, 2012). Having regular family meals together can not only positively influence eating healthy food but also enhances social connection within the family (Thornton et al, 2012).

When looking at changes to meal patterns, breakfast is the one meal that is most difficult for new migrants to adhere to in relation to traditional food, followed by lunch. Dinner and weekend meals tend to maintain their cultural importance and reflect a family's culinary roots. It is therefore more likely to incorporate traditional food and a time when the family comes together to eat (Gallegos, 2010, Holmboe-Ottesen & Wandel, 2012).

There is some evidence to suggest that eating breakfast is good for weight management. There are several large studies that have looked at the benefits of eating breakfast in terms of nutrition and weight maintenance (Wyatt et al, 2002, Wing & Phelan, 2005). People who eat breakfast tend to have a more nutritious diet than those who skip breakfast (Timlin & Pereira, 2007) The Dieticians Association of Australia⁴ state that people who consume breakfast tend to have better eating habits and make better food choices. They were also less likely to snack during the day on high energy and high fat foods. Skipping breakfast can also lead to reduced mental performance and diminished attention and learning capacity for children attending school.⁵

Some cultures consume two meals each day rather than three. Generally speaking breakfast is traditionally not one of them. These cultures tend to have two substantial meals to ensure that they acquire the necessary daily nutrition⁶. For other cultural groups the change in breakfast eating represents an upheaval to their roles in the family. Wilson & Renzaho (2014) describe how dietary acculturation has impacted upon some African families. The shift towards more of an individualistic society means that families no longer come together to eat a substantial meal for breakfast. Family members are more likely to have different wants and desires and do not feel compelled to eat the same food as the rest of the family. Instead of a prepared breakfast consisting of traditional ingredients families opt for a more "eat and run" approach where one family member might choose weetbix and another toast.

A study (Burns, 2004) undertaken in Australia on Somali women who had been in Australia for less than two years found that since arrival found that 17% of participants had lost weight, 38% had gained weight and 43% had stayed the same weight (a similar trend was found in this survey: see results in the section below). Breakfast in their home land consisted of traditional bread and either sweet or savoury toppings. In Australia it had been replaced by milk and cereal. Staple foods like

⁴ <http://daa.asn.au/for-the-public/smart-eating-for-you/nutrition-a-z/breakfast/>

⁵ *ibid*

⁶ <https://www.betterhealth.vic.gov.au/health/healthyliving/breakfast>

rice, pasta and polenta stayed the same as did complementary foods like meat and vegetables. However accessory foods had changed to include soft drinks, store bought snacks and sweets. The author concludes that these migrant women had largely maintained the structure of their diet with the inclusion of processed foods. Meals were prepared at home and all efforts were made to maintain meal patterns in terms of eating the main meal at midday and a lighter meal in the evening. In many instances alternative food sources replaced traditional ingredients (eg substitutes for camel milk and meat). The participants in this study still maintained a large number of fruit and vegetables in their diet which is contrary to population level trends where less than one in ten Australians eat the recommended serve of vegetables⁷.

A recent Australian study (Wilson & Renzaho, 2014) found that there was dissention between parents and adolescents in relation to food habits and dietary acculturation. Parents had a desire to maintain traditional food practices, while their teenage children preferred Australian food because it was cheap, fast to prepare and tastier. Parents were keen to retain their cultural food habits and limit the consumption of Western foods. They also had a strong desire to maintain the link between traditional food and the symbolism it provided in terms of maintaining family cohesion and closeness.

Fast food and soft drink consumption

As noted in the two studies cited above, accessory foods which include fast foods and soft drinks are the first to change in a new culture Kocturk-Runerfors (cited in Holmboe-Ottesen & Wandel, 2012). The supply and demand for fast foods has increased significantly over recent decades (Thornton et al, 2012). There is some evidence to suggest that individuals from low socioeconomic status and some ethnic minorities are at increased risk of fast food consumption because they live in poorer neighbourhoods which tend to have a higher density of fast food restaurants. Further, being in a social situation where others are eating fast food can also heavily influence fast-food consumption habits (Thornton et al, 2012).

Studies in the US and Canada (Polsky et al, 2014, Mohamed, 2014) corroborate these findings. Neighbourhood retail “foodscapes” or food environments play an important part in determining dietary behaviours and diet related health outcomes. For example, urban environments where there are fewer retail sources (e.g. supermarket, green grocer) for healthy food and more sources of unhealthy food (e.g. fast-food outlets and convenience stores) located in communities with higher proportions of low-income and ethnic minority residents compared with more affluent neighbourhoods. These types of neighbourhoods tend to support unhealthy food choices such as fast food and can often be less expensive than healthier alternatives (Thornton, 2012).

Sugary soft drinks or sugar sweetened beverages like fruit juices, cordials, sports and energy drinks, vitamin waters, sweetened ice tea and soft drinks like Coke, Sprite, Fanta and Pepsi are high in kilojoules and low in nutrients and are easy to over consume⁸. Australians are among the biggest

⁷ The recommended dietary guidelines state that adults should eat five serves of vegetables every day. When looking at population level data more than nine out of ten people do not meet the recommended guidelines (Health Department, 2014).

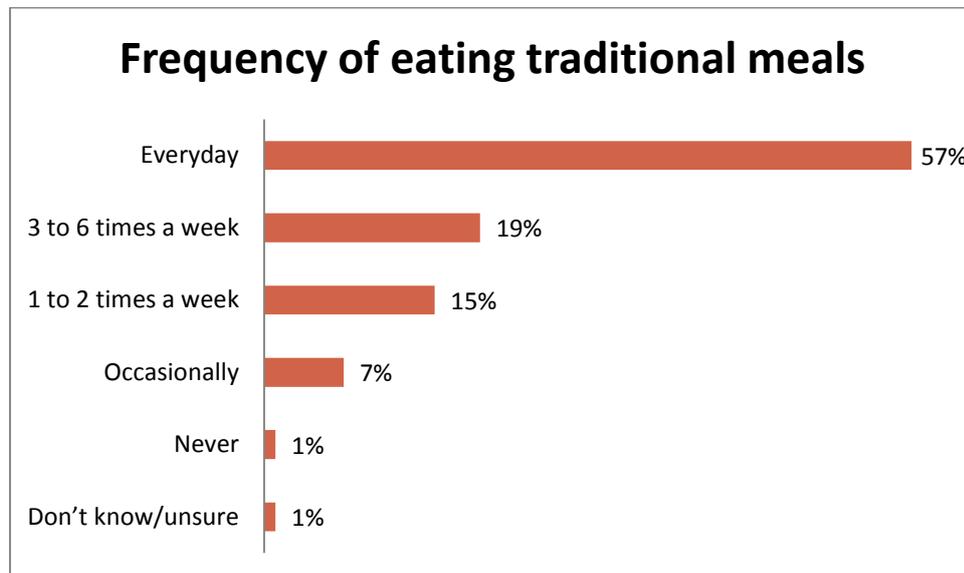
⁸ <https://www.nhmrc.gov.au/files/nhmrc/publications/attachments/n31.pdf>

consumers of sugar sweetened beverages in the world. Those from lower socioeconomic status and non-professionals tend to be the highest consumers of soft drinks. The consumption of sugar sweetened beverages has been linked to increased obesity and diseases such as metabolic syndrome, type 2 diabetes, higher blood cholesterol levels, osteoporosis and bone fractures, and dental caries (cavities) (VicHealth, 2012).

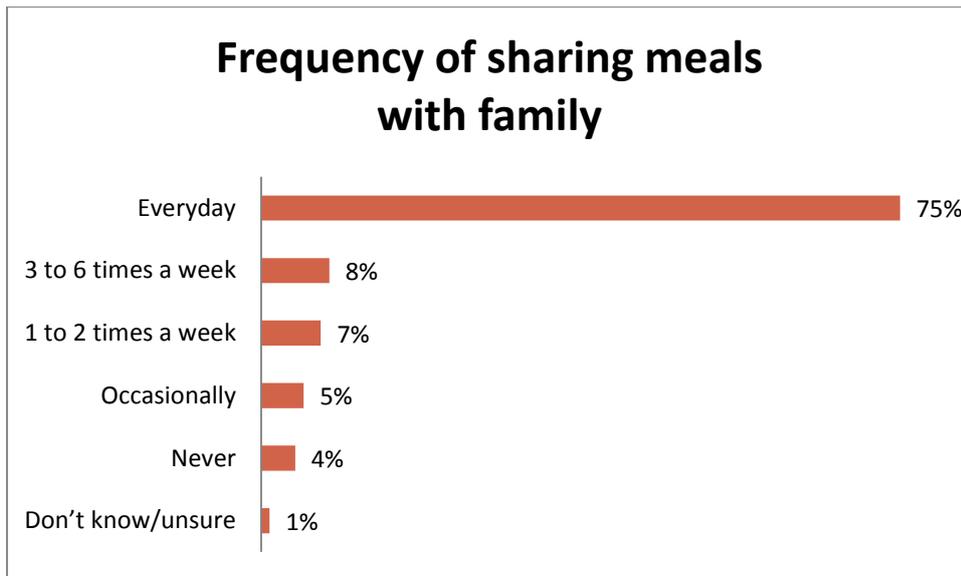
When looking at population level data, people from CALD backgrounds (10.5%) tend to consume less soft drink than those people from non-CALD background (13.4%). Similarly, English speakers (12.7%) are more likely to consume soft drinks than those who speak a language other than English (10.2%) (VicHealth, 2012).

Survey findings on dietary acculturation

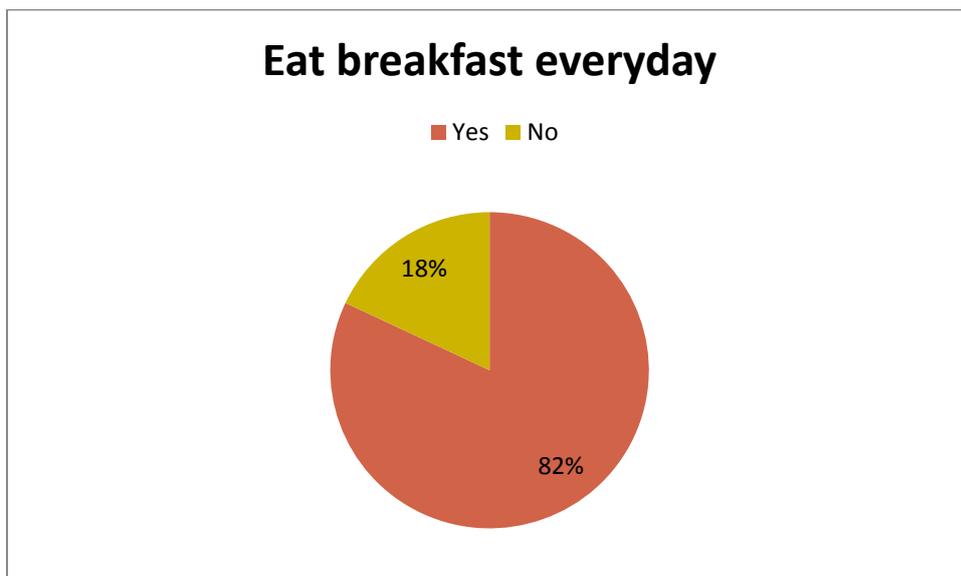
The AMEP survey found that the majority of participants (57%) in this study ate traditional meals every day. Only a minority (8%) never ate or occasionally ate traditional meals. When looking at the differences between age, gender and length of time in Australia all had a similar prevalence of eating traditional meals. The respondents to this survey were new arrivals and it is not surprising that eating traditional meals on a daily basis was commonplace. As noted above, the longer a person lives in the host country the more exposure they have to dietary acculturation and different food practices.



The AMEP survey found that three quarters of respondents shared a meal as a family every day. When looking at those who shared a meal with their family more than three days per week, eight out of ten (83%) respondents stated that they did this. Only 9% said that they occasionally or never shared a meal with family.



The survey findings indicate that eight out of ten respondents ate breakfast. The younger respondents aged 18 to 25 (70%) were less likely to eat breakfast compared with those aged 25 to 44 (81%), 45 to 54 (92%) and 55 plus (95%). In this sample slightly more men (87%) ate breakfast than women (81%).



Although the survey of AMEP students did not ask respondents to stipulate serving sizes, its focus was on how often they ate vegetables. More than two-thirds of respondents said that they ate vegetables every day. When frequency of eating vegetables and consumption of traditional (homemade meals) are correlated it is not surprising that those who eat homemade meals are more likely to eat vegetables every day (63%). Although the trend is to decrease the intake of fruit and vegetables over time as part of the acculturation process, these results indicate that although most were newly arrived (within the last 12 months) they had maintained their traditional diets which included daily serves of vegetables.

How often do you usually eat vegetables	Frequency	Per cent
Everyday	220	67
2 to 3 times a week	45	14
4 to 6 times a week	52	16
Rarely	4	1
Never	5	1
Don't know/Unsure	2	1
Total	328	100

The survey of AMEP students, asked respondent how many times over the last week they ate from any of the major fast food chains including McDonalds, KFC, Hungry Jacks, Red Rooster or Pizza Hut. The survey results indicate that 47% of respondents either never ate these types of fast foods while 41% had eaten from these food chains one or more times per week.

How many times over the last week did you eat from any of these restaurants (McDonalds, KFC, Hungry Jacks, Red Rooster, Pizza Hut)?	Frequency	Per cent
Once	100	30
2 to 3 times a week	34	10
4 to 6 times a week	4	1.3
Everyday	1	0.7
Rarely	14	4
Never	154	47
Don't know/Unsure	21	7
Total	328	100

In relation to consumption of soft drinks the survey of AMEP students indicates that one third of respondents rarely or never consumed soft drinks. However, 60% consumed soft drink at least weekly, with 14% drinking a sugar sweetened beverage every day. When looking at gender differences, more men (68%) than women (57%) drink soft drink weekly. In terms of age breakdown, younger respondents aged 18 to 24 (81%) were more likely to drink soft drinks weekly than the older cohorts (25-44, 59%, 45 to 54, 45%, 55 plus 38%).

How often do you drink soft drinks (for example, fruit juice, cordials, sports drinks, energy drinks, vitamin waters, sweetened iced tea, fizzy drinks like Coke and Pepsi)	Frequency	Per cent
Everyday	45	14
2 to 3 times a week	114	35
4 to 6 times a week	37	11
Rarely	26	8
Never	81	25
Don't know/Unsure	24	7
Total	327	100

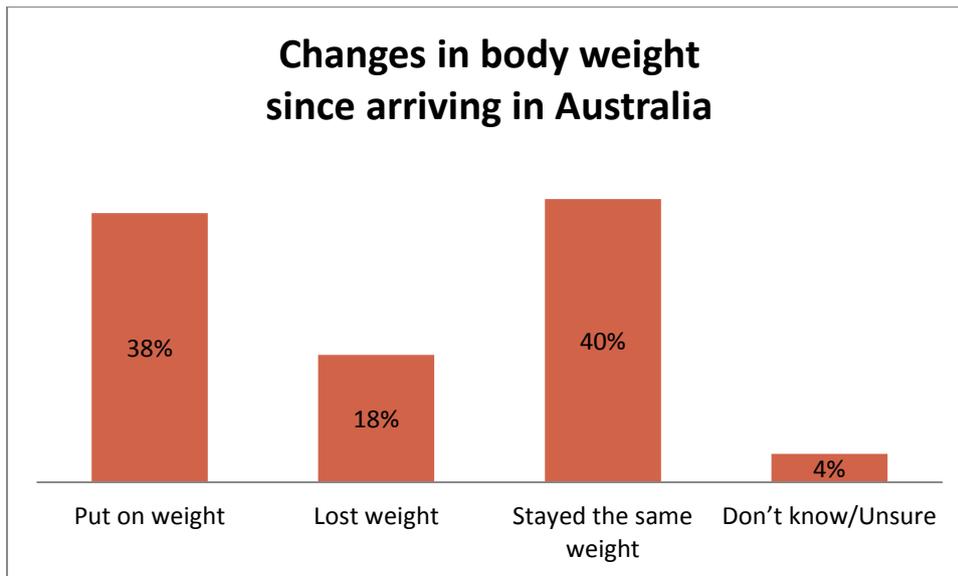
Health profile

Changes in body weight

A systematic review undertaken by Popovic-Lipovas & Strasser (2015) studied the outcomes of women migrants who incorporated high fat and sugar snacks, soft drinks and fast foods into their traditional diet. Findings from a number of studies contained in the review indicate that migrant women gained weight at a much faster rate after migration than when they lived in their home country. The study found that one of the downsides of acculturation was changes in daily life practices. This included the relatively high cost of purchasing healthy foods which meant that they were more likely to buy cheaper processed products high in fat and sugar. The unavailability of traditional foods and ingredients, for example certain types of vegetables and spices, was also seen as an issue in some of the studies. There was also a high level of uncertainty and lack of familiarity with new foods and preparation practices in the host country. Busy work schedules for some women also meant that they found it difficult to maintain healthy dietary habits and so turned to the convenience of fast food or pre-packaged dinners. At the other end of the spectrum those who experienced stress, loneliness, unemployment and feelings of exclusion who turned to unhealthy food for comfort coupled with a lack of physical inactivity gained weight. (Popovic-Lipovas & Strasser, 2015).

Being slim is highly desirable among the white middle class groups in Australia (Gallegos, 2010). However, in other cultures this is not necessarily the case with some groups holding different perceptions of body weight. Wilson & Renzaho (2014) found among African migrants, for example, weight gain was seen as a sign of prosperity rather than a health issue. For other cultures, chubby babies and larger women are a sign of fertility and indicate that the family has enough money to purchase plentiful food (Gallegos, 2010).

The findings from the AMEP survey of new arrivals indicates that overall, 40% of respondents stayed the same weight, while 38% had put on weight. When looking at changes in body weight by length of time in Australia, the data shows a trend that the longer a person is in Australia the more likely they are to put on weight. It is evident from the results that six out of ten (60%) respondents who had been living in Australia for more than five years had put on weight as compared with less than one third (32%) who had been here for less than 12 months.



Self-reported health

According to the Victorian Population Health Survey (Department of Health, 2014) self-reported health status is a reliable predictor of health. AMEP students were asked about their current health status. They were asked to nominate whether they thought their health was excellent, very good, good, fair or poor. Eighty four per cent of respondents said that their health was good to excellent with more than one-third saying that their health was very good to excellent. Only 15% said that their health was fair to poor. There was no significant difference in health status by age or gender.

Self-reported health	Frequency	Per cent
Excellent	26	8
Very good	93	28
Good	155	48
Fair	42	13
Poor	8	2
Don't know/unsure	2	1
Total	326	100

At a population level almost half (47%) of Victorian adults reported their health status as excellent or very good, while 37% stated that their health status was good. Sixteen per cent reported their health status as fair or poor. There were no differences in self-reported health status between males and females. The proportion of adults who reported excellent to very good health status at a higher rate than the Victorian average tend to live in affluent local government areas like Bayside, Boorondara, Glen Eira, Port Phillip, Nillumbik and Yarra. Characteristics of people in these areas with excellent to very good health status were tertiary educated, had household incomes of \$100,000 or more, had low levels of psychological distress, sufficient physical activity and a BMI in the normal weight range. In contrast, those adults who reported fair or poor health tended to live in LGAs with lower socio-economic status such as Brimbank, Greater Dandenong, Hume and Whittlesea (all have high numbers of people born overseas). Those with fair to poor health tended to have primary education only, were unemployed or not in the labour force, had a total annual household income of less than

\$40,000, experienced moderate, high or very high levels of psychological distress, were sedentary or experienced insufficient physical activity and were overweight. (Department of Health, 2014).

Physical Activity

Walking for exercise

Walking has significant physical and mental health benefits. Walking has been shown to reduce the prevalence of obesity, cardiovascular disease, cancer and high blood pressure. It is not only good for physical health it is also good for mental health with evidence suggesting that it improves mood and reduces anxiety and depression (Sinnott, et al, 2011).

There are numerous social benefits attributed to walking. It enables increased social interaction and the development of social capital by creating a sense of community. When more people walk it increases the safety of a neighbourhood with the presence of more people interacting on the street (Sinnott, et al, 2011). Walking is also good for the environment with reduced traffic congestion, pollution and traffic noise⁹.

Walking is something that most able bodied people can do. People can walk as a form of transport (active transport) to get to and from schools, workplaces, public transport and the shops. People can also walk for exercise and recreation purposes. Walking is an exercise that people can easily integrate into their daily routines. It does not require specialist equipment and can easily be undertaken in and around where people live. Walking is the most popular sport and recreation activity undertaken in Australia (Department of Health, 2014).

Research data indicates that people from CALD backgrounds are less physically active than the general Australian population. The prevalence of sufficient physical activity¹⁰ is lower among Australians who speak a non-English language at home (Department of Health, 2014).

According to the VPHS (2011-12) (Department of Health, 2014) at a population level, residents living in the local government areas of Greater Dandenong, Hume, Whittlesea, Melton and Brimbank were the residents most likely in Victoria not to get the required level of physical exercise. All of these LGAs have a large proportion of their populations born overseas, with Greater Dandenong having the highest number 55.1%, followed by Brimbank 46.2%, Hume 29.6%, Whittlesea 31.7% and Melton 23.5% (Victorian average 20.6%)¹¹.

The AMEP survey results indicate that just over a quarter of respondents walked every day for exercise with 46% walking most days and 81% walking at least once a week. Only a very small proportion (5%) stated that they rarely or never walked for exercise.

⁹ http://www.victoriawalks.org.au/Walking_benefits/

¹⁰ The guidelines recommend 30 minutes of physical activity on most days of the week.

[http://www.health.gov.au/internet/main/publishing.nsf/content/F01F92328EDADA5BCA257BF0001E720D/\\$file/brochure%20PA%20Guidelines_A5_18-64yrs.PDF](http://www.health.gov.au/internet/main/publishing.nsf/content/F01F92328EDADA5BCA257BF0001E720D/$file/brochure%20PA%20Guidelines_A5_18-64yrs.PDF)

¹¹ <http://www.greaterdandenong.com/document/18464/statistical-data-for-victorian-communities>

How often do you walk for exercise per week	Frequency	Per cent
Everyday	83	26
2 to 3 times a week	115	35
4 to 6 times a week	67	20
Rarely	11	3
Never	6	2
Don't know/Unsure	45	14
Total	327	100

Purchasing food

Place where fruit and vegetables purchased

The location of food stores in neighbourhoods has a major role in food purchasing habits. Research indicates a strong association between healthy eating and being able to access supermarkets or retail outlets that sell fresh produce. When supermarkets are located close to where people live, fruit and vegetable intake is generally greater (Dubowitz et al, 2007, Story et al, 2008). Residential characteristics such as transportation and physical safety also impact on accessing fresh fruit and vegetables locally. For those who face impediments in their local built environment this may impact their food purchasing choices particularly if they live in areas known as “food deserts”. Food deserts are where supermarkets or fresh food outlets are more than 1.6 kilometres from a person’s home¹². Migrants living in growth corridors on the peri-urban fringe are more likely to live in food deserts because the infrastructure required to service people in these areas may not have kept pace with housing developments.

Thornton et al (2010) mapped the availability of food in advantaged and disadvantaged neighbourhoods. They found that greengrocers were more accessible to those living in neighbourhoods with low disadvantage. Those living in high disadvantaged areas were able to purchase fruit and vegetables more cheaply but overall they had lower availability and opening hours were more restricted.

A report by VicHealth (2012) notes that the barriers to food security are lack of income, high cost of healthy food, high cost of living including housing and petrol costs. In terms of social and cultural barriers language and cultural familiarity and literacy may hinder meal planning, food preparation and access to healthy food.

Most respondents in the AMES survey lived in the local government areas of Greater Dandenong, Whitehorse, Brimbank and Melbourne.¹³ Greater Dandenong is the area that has the greatest level of disadvantage while Brimbank is ranked number three in Victoria according to the SEIFA Index.

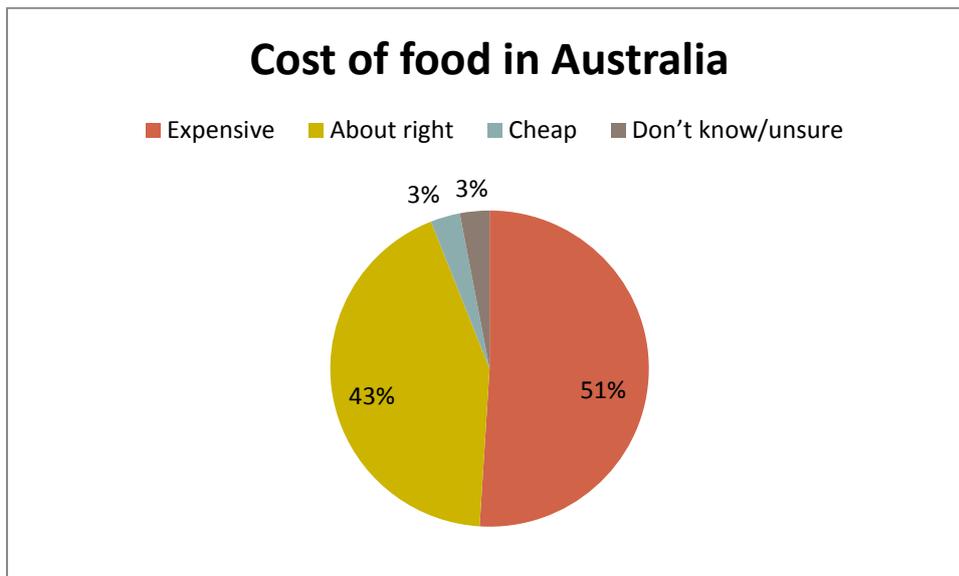
¹² <http://www.abc.net.au/news/2015-07-08/food-deserts-have-serious-consequences-for-residents-experts/6605230>

¹³ The SEIFA Index of disadvantage is derived from Census variables and related to disadvantage. It looks at factors such as low income, low educational attainment, unemployment and dwellings without motor vehicles.
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/2039.0/>

The findings from the AMEP survey indicate that almost two thirds (63%) purchased fruit and vegetables from the supermarket while 34% bought their fruit and vegetables from a market such as the Dandenong, Preston and Queen Victoria market. Green grocers were also used by just under a quarter of respondents. Farmers markets (4%) were the least popular choice.

Where do you or your family buy most of your fruit and vegetables?	Per cent
Supermarket	63
Green Grocer	27
Fruit & vegetable market (e.g. Queen Victoria, Preston or Dandenong markets)	34
Farmers market	4
None of these	2
Don't know/unsure	1

This study asked respondents whether they thought the cost of food in Australia was expensive, about right or cheap. Just over half said that it was expensive and 43% felt it was about right. There was no significant difference between perception of food cost and whether the respondent lived in a household where someone was employed. However, it is worth noting that the cost of food is an important factor influencing food choices.



Read food labels

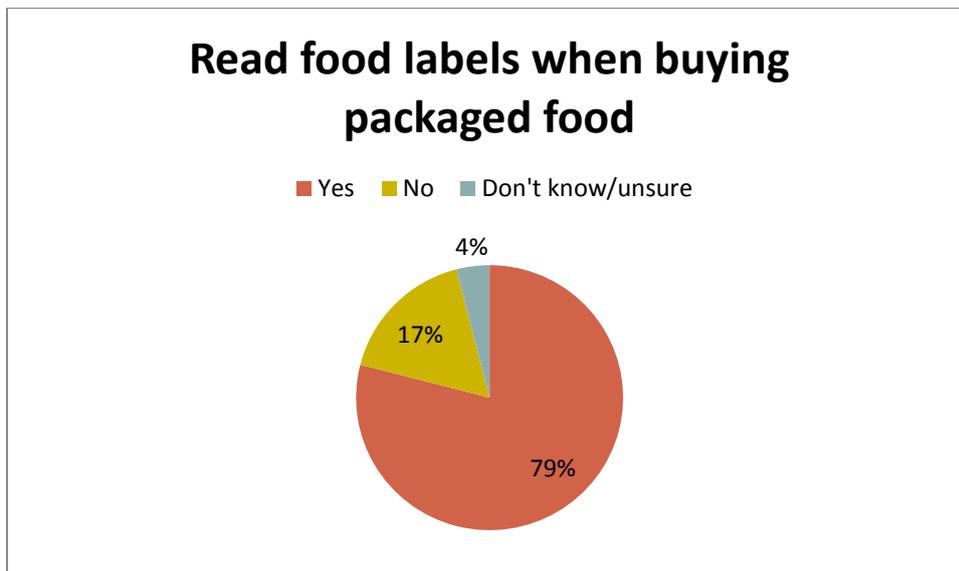
Food labels carry useful information to help consumers make choices about food. Food labels have been positively associated with nutrition knowledge (Cowburn & Stockley, 2005). They provide information about the product name, list of ingredients and nutritional information. In addition, they detail where ingredients are from, where the product is made, a warning to allergy sufferers, use-by and best before dates (<https://www.betterhealth.vic.gov.au/health/healthyliving/food-labels>).

Research on food label use among migrants indicates a lower awareness of food labels and a difficulty reading them particularly when proficiency in English is not high. A study undertaken on Russian immigrants in the US found that many viewed labels as not being clear or easily interpreted. Study participants found it difficult to understand the ingredients and nutritional composition of foods making it difficult to assess the quality and health consequences of certain foods (Lubman et al, 2012).

A systematic review undertaken on consumer understanding of food labels found that in the studies reviewed, most consumers claimed to look at nutritional labels often or at least sometimes. There was some evidence to suggest that looking at labels influenced purchases, particularly for unfamiliar foods. Those most likely to read labels tended to be women with higher incomes and higher levels of education. Consumers with special dietary requirements and an interest in healthy eating were also likely to report higher label reading (Cowburn & Stockley, 2005).

Reasons given for not reading nutrition labels included lack of time, the size of print on packages, a lack of understanding of the terms and the accuracy of the information. Although much of the evidence was based on studies of self-reported label reading, there was some evidence that study participants simply looked at the label without processing the information further (Cowburn & Stockley, 2005).

The AMEP survey results indicate that almost eight out of ten respondents read food labels when buying packaged food, while 17% don't. Given that a large proportion of respondents in this survey were well educated women, these findings are consistent with other research. In terms of gender, the female respondents (82%) were more likely than the male respondents (66%) to read the food labels.



Conclusion

Healthy eating and sufficient physical exercise is the key good health and wellbeing not only for the native population but also for newly arrived migrants.

Generally speaking, migrants who come to Australia are healthier than the native population. Yet, over a short period of time, through a process of dietary acculturation many new migrants face the same challenges as the general population in relation to food choices, maintaining a healthy body weight and ensuring they get sufficient exercise. Australia has increasingly become an obesogenic environment where processed food is cheap, widely available and heavily promoted. Further, sedentary lifestyles mean that many people do not get the required level of physical activity.

The findings from the AMEP survey provide an indication on how migrants deal with the challenge of securing food in a new country. The data from the survey is consistent with other research on how new migrants change their dietary habits. This other research shows that on arrival in Australia (or other new countries) migrants aim to maintain traditional food practices in terms of what they eat, sharing meals with friends and family as well as other rituals such as eating meals at particular times of the day. However, influences from the host country mean that they adapt and/or alter these practices soon after arrival. For some the price of food, the lack of availability of ingredients and influence from children means an increased likelihood of incorporating different types of food into the diet rather than rigidly adhering to traditional cuisine. Most maintain foundation ingredients known as staple foods and complementary foods. The types of foods that are most likely to change are accessory foods and these are in the form of soft drinks, snacks and other types of discretionary foods¹⁴ such as fast food, desserts and confectionary. The survey results showed that less than half (41%) the respondents ate at one of five fast food chains at least once a week, while 60% consumed some type of soft drink at least one or more times a week.

The survey indicates that the participants in this study ate vegetables every day. This is probably connected to the fact that most eat traditional/home cooked meals. Another protective factor for health and wellbeing is sharing family meals. More than eight out of ten respondents shared a meal with their family more than three days per week.

When looking at self-reported health eight out of ten reported either excellent to good health. Slightly more respondents had either stayed the same weight (40%) as compared with those who said had put on weight (38%).

In relation to purchase of fresh produce like fruit and vegetables almost two thirds shopped at the local supermarket. Just over half (51%) thought that the cost of food in Australia was too expensive and almost eight out of ten (79%) respondents read food labels when buying packaged food.

In terms of early settlement, the findings from this survey indicate there has been some change to the eating habits of those surveyed. Most respondents had been in Australia for less than two years.

¹⁴ The *Australian Dietary Guidelines* describes discretionary foods as being: "foods and drinks not necessary to provide the nutrients the body needs, but that may add variety. However, many of these are high in saturated fats, sugars, salt and/or alcohol, and are therefore described as energy dense "
<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4363.0.55.001Chapter65062011-13>

Although the majority ate traditional/home cooked meals almost every day, there was evidence that those in this survey sample were starting to incorporate soft drinks and fast foods into their diets.

Migration and acculturation have a significant influence on the food consumption of new migrants to Australia. It is clear that many maintain healthy aspects of their diet but may also be influenced by food trends in the host country. There is a case to be made to undertake culturally appropriate health promotion activities on food and nutrition to support and advocate healthy food habits.

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