

## **Buying local food and drink: Understanding barriers to purchase**

### Abstract

Despite a growing trend towards the purchase of locally produced food and drink and the many perceived benefits of consuming it, (e.g. support for local producers, reduced food miles, sustainable production, freshness, taste, health, safety, quality), consumption levels typically remain low. An online survey of 307 Australian shoppers was undertaken. Factor analysis reveals that key barriers to purchasing of local food and drink are primarily associated with inadequate marketing and distribution strategies, (not being well promoted, information on where to find it not being readily available, such produce not being clearly branded or labelled as local, the range of products being limited). Secondly, lack of assurance and trust that the product is actually local or that all of the ingredients are local is a barrier for some consumers. Finally perceived inconvenience is also associated with low purchasing levels, including the need to travel too far to do so, the extra effort required, being too time-consuming and inconvenient. There is also a perception that local food and beverage is expensive. Recommended strategies for stimulating the purchase of local food and drink by overcoming such barriers include improvements in the marketing and distribution of local food, greater affordability, availability, convenience and assurances.

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In response to growing concerns about global industrialised food production and distribution systems, consumers across the world are seeking food sources in closer proximity to where they live or local food; however others have acknowledged that local does not necessarily mean sustainable (Chambers, et al. 2007; Guthman, 2004; Hinrichs, 2000). Concerns around existing global food production and distribution systems include detrimental impacts on the environment, lack of sustainable production and distribution, and health and safety concerns (Dukeshire et al. 2011; Eden, Bear, & Walker, 2008; de Jonge et al. 2008). Issues that have gained public attention in the food production and processing arena include “organic certification, local provenance, and the humane treatment of animals in food production”, and more recently, increased emphasis on sustainability, reducing the carbon footprint and food miles (Johnston et al. 2011, p. 295).

The term “local food” is most commonly used to “describe local food systems or short food chains where the food is produced near the consumer” (Roininen, Arvola, & Lahteenmaki, 2006, p. 20). Local producers have an opportunity to gain a distinct competitive advantage as consumers become increasingly aware of what they are eating and concerned about where their food is grown and produced (Darby, Batte, Ernst, & Roe, 2008; Dukeshire et al. 2011; Hunt, 2007; Roininen et al. 2006). Local producers can benefit from these trends by developing stronger relationships with consumers and producing higher value specialty food items, thus attracting higher margins (Gorton & Tregear, 2008; Selfa & Qazi, 2005). Moreover, local food systems benefit local economies by aiding rural development and generating local employment (Roininen et al. 2006). However, local food in Australia remains a niche market with the two major supermarkets, Coles and Woolworths dominating the grocery sector.

Studies of local food consumption have identified that key drivers include numerous societal, economic and environmental benefits such as supporting local farmers, producers and the local economy, preserving agricultural land, greater food security, reduced food miles, more sustainable and humane production, and improved traceability, freshness, taste, nutritional value, health, safety and quality (Adams & Salois, 2010; Bean & Sharp, 2011; Bellows, Alcaraz, & Hallman, 2010; Chambers et al. 2007; Dukeshire et al. 2011; Kemp et al. 2006; Knight, 2013; Roinenan et al. 2006; Schneider & Francis, 2005; Selfa & Qazi, 2005; Stephenson & Lev, 2004; Zepeda & Deal, 2009). Other drivers of local food include nostalgia, authenticity and convenience (Onozaka & McFadden, 2011; Tregear, 2002).

Despite recognition of the many benefits of locally produced food and drink and positive attitudes toward purchasing local food, a significant gap has been found between reported intentions and actual consumption behaviour (Fisher, 1993; Kemp et al. 2010; Knight, 2013; Schuman & Presser, 1981; Young et al. 1998). This gap may be partially explained by social desirability bias, however barriers have been identified in the literature including the perception that local food is more expensive and a lack of willingness to pay a premium (Chambers, et al. 2007; Roinenan et al. 2006; Stephenson & Lev, 2004). For example, very few US consumers are prepared to pay more for local food and when they do the premium is only 10% or less (Schneider & Francis, 2005). Other barriers include inconvenience, lack of awareness, lack of easy identification, reduced choice and variety, seasonality and limited availability, poor quality and poor appearance (Chambers et al. 2007; Corporate Research Associates, 2005; Dukeshire et al. 2011; Knight, 2013; Marenick et al. 2010; Pearson et al. 2011). For example, Dukeshire et al. (2011) found that consumers want to purchase local food but feel limited in their ability to do so due to perceptions that supermarkets are “mediocre”

sources of local food, difficulty in recognising local food, local foods are not in season, or there is limited choice. Moreover, lack of ready availability creates a significant barrier to consumption of local food by today's time-poor and convenience-oriented consumers (Chambers, et al. 2007; Stephenson & Lev, 2004).

Studies of local food have revealed that age is the primary demographic predictor of consumption with older people being more likely to purchase local food (e.g. Dukeshire et al. 2011; Khan & Prior, 2010; Knight, 2013). Prior research has revealed that females tend to eat more healthy food, are more concerned and knowledgeable about nutrition, and more involved in food purchasing and preparing food than males (Knight, 2013; Wolf et al. 2005). Moreover, females express "higher levels of support for locally grown and non-genetically modified food" than their male counterparts (Knight, 2013, p. 31). Education and income level have also been found to moderate consumption of local food for use at home (Marenick et al. 2010). Wolf et al. (2005) found that patrons of farmer's markets were more likely to be female, married and educated to the postgraduate level, while Knight (2013) identified that older women with higher income and education levels were more likely to support local food initiatives. However, Nie and Zepeda (2011) argue that the influence of income on local food has not been consistent. Likewise, Knight (2013) contends that socio-demographics have a limited role in explaining food purchasing intentions.

Whilst there have been a number of studies on the drivers of local food buying, the purpose of this paper is twofold: firstly, identify key *barriers* to local food purchase and differences across demographic groups; then secondly, identify strategies for overcoming these barriers. Understanding barriers to local food and drink consumption will provide producers and marketers with information necessary to make improvements to product offerings and related marketing mix variables (e.g. price, distribution and promotion) and to develop communication messages which address any obstacles.

## **Methodology**

An online survey of 307 local South East Queensland (SEQ) residents was conducted with an established and professionally managed consumer panel of 200,000 active participants (The ORU, 2012). Screening revealed that 69% of respondents were the main shopper, 25% were the joint shopper, and 6% were an occasional shopper of food and drink for their household. The main purposes of the survey were to measure current consumption of local food and identify key drivers and barriers to consumption of local food. Questions for the survey were based the review of the literature on local and regional food and further informed by three focus group sessions of local SEQ residents (e.g. Parker, 2010; SERIO, 2008).

**Respondent Profile.** Females represented 66% of the survey population and the majority of respondents were in the 55 years and older age bracket (32%), followed by the 45 - 54 year age bracket (27%) and 35 - 44 years (25%). Younger people, aged 25-34 years (12%) and 18-24 years (5%) were under-represented in the study. Less than one-fifth of respondents (18%) reported an annual household income (before tax) of AUD100000 or above. Respondents reporting an income between AUD60000 and 100000 comprised 24% of the survey population and those reporting an income between AUD20000 and 60000 accounted for another 35% of respondents. Respondents with an income below AUD20000 comprised 5% of the survey population. The majority of respondents in the study were tertiary educated (42%), with the next largest group being technically trained (29%), followed by people educated to secondary school level (27%), and then primary school level (2%).

Data were analysed using SPSS version 19.0. For the purpose of this paper focusing on barriers, descriptive statistics was conducted for consumption and items measuring barriers to consumption. Principle components factor analyses with varimax rotation was conducted on items measuring barriers. Cronbach's Alpha was conducted to test for item reliability. Demographic differences were identified through independent samples t-tests and ANOVAs. Levene's test was used to check for homogeneity of variances and post-hoc tests (Tukey HSD) were used to determine the pattern of differences between groups. Differences were deemed significantly significant if the *p*-value was less than 0.05.

## Results and discussion

In line with previous studies, there was lack of agreement on what the term 'local food and beverage' meant (Pearson et al. 2011). Just under half of the respondents agreed that local food and beverage is grown or produced in a particular local area (e.g. Gold Coast), while about one-third considered that local food and beverage is grown or produced in a particular region (e.g. SE Queensland). In terms of distance, about 40% of the respondents agreed that local food or beverage is grown and produced within 80 kilometres of where they live, 30% within 45 kilometres, 20% within 15 kilometres of where they live, and only 10% within 5 kilometres of where they live.

One-fifth of respondents (21%) reported that they had not purchased any local food or drink for use at home during the past three months. The most common frequency for purchasing local food and drink for use at home over the past three months was 1-5 times, with just under half of the respondents (47%) reporting that level of purchasing frequency. Very few respondents (18%) reported purchasing local food and drink for use at home more than 10 times over the past three months, reflecting low levels of interest in locally grown food.

In keeping with previous studies of purchase of local food for at home consumption (e.g. Marenick et al. 2010), analysis of variance revealed that people with higher levels of education (tertiary or technical trained) were more likely to have purchased local food and drink for use at home in the past three months than people with lower educational levels (primary or secondary level) ( $F(3,303) = 3.5, p = 0.02$ ). However, there were no significant differences in purchasing frequency of local food and drink for at home use in the past three months across gender, age groups or income levels. These findings support other studies which have found limited relationships between socio-demographics and local food consumption (Knight, 2013; Nie & Zepeda, 2011).

Respondents were asked to nominate their three main reasons for not purchasing local food and drink for either at home or out of home consumption. Top of mind reasons for not purchasing local food include price (27%), lack of availability (17%), not clearly labelled as being local (7%) and not eating out as often (7%). Some respondents indicated that they do not know the origin of the food they buy (5%), while others do not purchase local food and drink because it is too far to travel or too time-consuming to do so (2%), the quality is inconsistent (2%), and there is a lack of variety (2%). Next, respondents who reported they had purchased local food and drink less than 6 times in the past 3 months ( $n = 279$ ) were asked to indicate their level of agreement with a bank of potential barriers (Table 2). Factor analysis revealed three factors, with the first factor labelled "lack of marketing and distribution", the second factor labelled "lack of assurance of trust" and the third factor relating to perceived non-monetary and monetary barriers labelled "high transaction costs".

**Lack of marketing and distribution.** Key barriers to purchase of local food and drink are primarily associated with inadequate marketing and distribution. Between half to two-thirds

of respondents agree that local food and beverage is not well promoted (68%), information on where to find local food and beverage is not available (65%), local food and beverage is not clearly branded as local (63%), local food and beverage is not being readily available (60%), local food and beverage is not well labelled (56%), and the range of products is limited (50%). No significant differences were found across gender, age, income and education levels with respect to perceptions regarding the lack of marketing and distribution of local food and drink.

**TABLE 2: Barriers to Local Food - Factor Analysis and Reliability Testing and Means**

Construct/Items	Variance Explained	Factor Loadings	Cronbach alpha coefficient	Mean*
<i>Lack of marketing and distribution</i>	44.9%		0.92	
Not clearly branded as local		0.87		4.8
Not well labelled		0.87		4.6
Not well promoted		0.85		4.9
Information on where to find it is not available		0.84		4.9
It is not readily available		0.73		4.7
The range of products is limited		0.52		4.3
<i>Lack of assurance and trust</i>	13.1%		0.86	
Not good quality		0.87		3.1
It is a fad		0.75		2.9
Cannot trust it is actually local		0.69		4.0
Food and drink is sometimes better elsewhere		0.69		4.0
Not well packaged		0.68		3.5
I cannot trust that all of the ingredients are local		0.61		4.1
<i>High transaction costs</i>	9.8%		0.88	
To do so is time consuming		0.83		3.9
It is inconvenient		0.83		3.9
It requires extra effort		0.82		4.0
I have to travel further to do so		0.80		4.2
It is expensive		0.48		4.6

(KMO = 0.92,  $\chi^2 = 3136.6$ , d.f. = 136,  $p = 0.00$ ).

\*Mean based on 7 point agreement scale with 7 = strongly agree and 1 = strongly disagree

**Lack of assurance and trust.** Just over one-third of the respondents agree that they cannot trust that the product is actually local (36%) or that all of the ingredients are local (38%). In particular, younger consumers aged 18-24 years are more likely to agree that they cannot trust that all of the ingredients are local than people over 25 years of age ( $F(4,274) = 2.54$ ,  $p = 0.04$ ). Not being well packaged (14%) or of good quality (10%) and being a fad (11%) were found to be lesser barriers to purchase of local food and drink. However, males are more likely than females to agree that local food is not well packaged ( $t = 2.7$ ,  $p = 0.01$ ;  $\mu = 3.8$  vs. 3.4), not good quality ( $t = 3.0$ ,  $p = 0.01$ ;  $\mu = 3.4$  vs. 2.9), and a fad ( $t = 3.6$ ,  $p = 0.00$ ;  $\mu = 3.4$  vs. 2.7). No significant differences were found across income and education levels with respect to lack of assurance and trust related to the purchasing of local food and drink.

**High transaction costs.** A key barrier to local food purchasing is the perception that local food and drink is expensive (55%). Interestingly, there are no statistically significant differences across income levels in terms of perceptions of the expense of local food and drink, reflecting price sensitivity and budget consciousness among Australian consumers. There is a degree of perceived inconvenience associated with purchasing local food and drink with 42% of respondents agreeing they need to travel further to purchase local food and beverage, 40% agreeing that purchasing local food and beverage requires extra effort, 38%

finding purchasing local food to be time-consuming, and 35% considering purchasing local food to be inconvenient. No significant differences were found across gender, age, income and education levels of with respect to the perceived high transaction costs associated with purchasing local food and drink.

## **Implications and Conclusions**

In line with previous studies of local food, the findings of this study reveal that the major barriers to purchasing of local food are associated with a lack of effective marketing and distribution, lack of assurance of quality and trust that the product and ingredients are actually local, as well as, perceived high monetary and non-monetary transaction costs (Byker et al. 2010; Dukeshire et al. 2011; Knight, 2013). Local food and drink products need to be made more readily available and clearly labelled and branded as being local. Given, Australian consumers are keen to support local growers and producers, appeals to support local farmers, producers and retailers may be persuasive. Clear promotion, branding and advertising of local food in media such as local newspapers, radio stations and regional food websites will assist consumers in knowing where to find local products. In addition to better marketing, local food and drink needs to be more visible, readily and conveniently available in local retail outlets, including the provision of a wider range of products (Dukeshire et al. 2011). To meet latent demand, availability should be increased in large supermarkets, local specialty stores, farmer's markets, local cooperatives, roadside stalls, farm gates, small supermarkets, restaurants and cafes. Strategies for increasing the visibility of local food and drink which are yet to be fully exploited in Australia include designated retail outlets, designated areas in local supermarkets, and taking the product to the consumer via mobile units/displays showcasing local food in regional shopping centres, food fairs and festivals.

Consumers are seeking assurances that the local food they purchase is of a good quality, and that it is actually locally produced and the ingredients are sourced locally. Clear labelling and certification of the local origin of the food and information on production methods will serve to allay concerns and build trust. Local food certification schemes such as the Red Tractor scheme in the UK are not yet well established in Australia. Improving the quality of local food through improved production, handling and transportation methods and communicating quality will positively influence consumer preferences. Moreover, marketing communications should focus on key drivers of local food including support for local growers and producers, freshness, good taste, seasonal products, sustainable and humane production, reduced food miles, traceability, nutritional value, and healthy, wholesome and natural products.

Increasing purchase of local food relies upon reducing the perceived high transaction costs. Making the product more affordable does not necessarily mean price reductions, rather strategies such as smaller portion sizes and price per portion labelling can make products more acceptable to price-sensitive consumers and those with limited budgets. Provision of smaller quantities will also allow consumers to try local food in smaller quantities before committing to larger purchases. Making local food more readily available when and where consumers purchase will reduce the high transaction costs associated with inconvenience, time and travel. Understanding barriers to consumption of local food and drinks will allow growers, producers and retailers to more strategically and effectively market and distribute local food and drink and respond to consumers' demands for authentic, traceable, readily available, and good quality products. Further research should more fully explore consumers' concerns regarding local food and identify strategies for providing reliable information, greater availability and affordability of local food and assurances of quality and localness.

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