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by

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Demand for Organic Food: Focus Group Discussions in Armidale, NSW*

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Abstract

In Australia, the retail value of organic food production was estimated at A$250 million, with farm gate value at around A$90 million, and exports at around A$40 million. The current share of organic sales in total food sales in Australia is about 1 per cent. The growth rate in organic production was forecast to continue at 10-30% per annum. Despite the positive outlook, there are concerns about consumer confusion over product recognition, organic certification, and misleading advertising. To understand how demand for organic products is changing, it is important to investigate consumer attitudes and knowledge about these issues. The objective of this study is to identify issues that may hinder or promote demand. Given the qualitative nature of these issues we use a focus group study to probe consumers. The results suggest that consumers are in general concerned about the use of chemicals, the treatment of farm animals and the environmental impact of food production. Organic food consumers are more knowledgeable about organic foods as well as being more tolerant of higher prices and inaccessibility. The results also suggest that increasing consumers' awareness of organic farming and certification as well as the availability of organic foods may be the most effective ways of moving organic foods into mainstream.

Key Words: organic agriculture, consumer perceptions, organic certification, focus group.

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Introduction

The demand for organic products worldwide has expanded rapidly, boosted by the heightened awareness of environmental problems, health concerns, the recent series of highly publicized food scares, and the debate over genetically modified (GM) foods (Davies, Titterington and Cochrane 1995, Dmitri and Greene 2002, Tregear, Dent and McGregor 1994, Willer and Yussefi 2002). Promotion by mainstream retailers and major food manufacturers as they move into organic product lines has also been a contributing factor to demand growth. Worldwide demand for organic foods was estimated to be grow at around 10-20 per cent per annum in the next few years, with sales reaching $US 29-31 billion in 2005 (Kortbech-Olesen 2003).

In Australia, the retail value of organic food production in 2002 was estimated to be worth A$250 million, with farm gate value at around A$90 million and exports at around A$40 million (Monk 2003). The current share of organic sales out of total food sales in Australia is about 1 per cent, compared with about 3 per cent in the United States (Grothers 2000, Barstow 2003). The growth rate in organic production was forecast to continue at 10-30% per annum, with the strongest growth in beef, milk and horticulture (Monk 2003). Australia also imports some organic products in the order of A$5 million annually (McCoy 2002). Despite the positive outlook, there are recognized problems facing the Australian organic industry in terms of consumer confusion over organic certification and product recognition, and misleading claims and advertising (Alenson 1997, Dumaresq and Greene 1997).

Limited product range, high price premiums, and lack of availability of organic foods in conventional supermarkets are also thought to be important factors limiting demand (McCoy 2002, Lyons, et al. 2000, Peterson 2001). To understand demand for organic products, these issues have to be investigated. A key research question is: who are the organic consumers? Why do they buy organic? Are they representative shoppers or a fringe niche? How do consumers feel about the price premiums generally required of organic foods? And how important is organic certification to consumer confidence? The objective of this study is to answer these questions via a focus group study. A focus group study is chosen because it is an appropriate method to examine consumer attitudes and knowledge. Four focus groups were conducted to look at a range of consumers: two groups of conventional shoppers, one group of organic food shoppers and one group of consumers who garden.

The Australian organic market, standards and certification

Despite the fact that Australia has the world's largest organic area (mostly pasture and range), the Australian organic industry is rather small in terms of the number of organic farmers and the volume of outputs, compared to conventional production. The number of certified organic farmers nationally was estimated to be between 2,000 to 2,200 in 2003 (BFA 2003), making up about one per cent of the total number of farmers and 1.6 percent of total agricultural land in Australia.

The bulk of organic food (about 80 per cent) is sold through specialty shops and supermarkets (Hassall & Associates 1996, Kinnear 2002). There are also a number of farmers' markets, home deliveries, box schemes, and Community Supported Agriculture (CSA) projects operating around the country (Barber 2002). There is evidence that both supermarket sales and farmers markets are experiencing growth in Australia, similar to the developments in the United States and other parts of the world (Kinnear 2002).

Organic production is generally referred to farming practices that emphasize environmental sustainability andavoid the use of synthetic fertilizers and chemicals. Australia, the United States, European Union and Japan all have their own national standards for organic certification with specific production requirements. These standards are deemed equivalent to one another in major aspects (May and Monk 2001). In Australia, organic agriculture is defined in the Australian National Standard for Organic and Biodynamic Produce (OPEC 2002) and certification is administered by Australian Quarantine and Inspection Service (AQIS) under the auspices of the Organic and Biodynamic Program. It is based on a third party inspection/certification model, whereby production, processing, and labelling of organic produce are overseen by AQIS-accredited certifying organizations.[1] Currently, Australia has seven AQIS-accredited organic or biodynamic certification organizations (NASAA 2003). They include:

- Bio-Dynamic Research Institute (BDRI) with the Demeter label

- National Association for Sustainable Agriculture Australia (NASAA), accredited by IFOAM and USDA
- Australian Certified Organic Pty Ltd (ACO)/ Biological Farmers of Australia (BFA), accredited by IFOAM and USDA
- Tasmanian Organic Producers (TOP)
- Organic Food Chain of Australia
- Organic Herb Growers of Australia (OHGA)
- Safe Food Queensland (SFQ).

These certification organizations conduct physical inspections of farms, storage and transport facilities, processors, manufacturers, input suppliers and other operators involved in the supply chain. Once certified, farmers can use the certifying organisation's label and certification mark on their produce. There are two levels of certification: in-conversion and certified organic. "**Certified in-conversion**" means that the produce has been produced in compliance with the organic standard for at least a year after admitted to the certification program. A produce can become "**certified organic"** if all requirements are met for at least three years. The aim of organic certification is to help consumers to distinguish organically produced products from conventionally produced products with specific labels, and hence protecting consumers against fraudulent and unsubstantiated product claims (OPEC 2002).

Focus group research and the focus groups

A focus group is a carefully planned discussion designed to obtain participants' perceptions on a well-defined area of interest in a non-threatening environment. It is typically comprised of seven to ten people who are purposely selected[1] because they have certain characteristics in common that relate to the topic of the focus group study. In general, the focus group is repeated several times with different people to obtain diverse viewpoints on a subject. It is not designed to reach consensus. Normally, it starts with three to four groups and may be continued until theoretical saturation is reached, ie no more new information is received (Krueger and Casey 2000). Although a focus group study is often used as a tool for aiding survey design, it has increasingly

[1] Because of this selection process and the sample size, the focus groups do not constitute a random sample and the results are not suitable for making inferences or predictions (Krueger and Casey 2000).

being used as a tool for qualitative research, particularly in social science and marketing research (Morgan 1998, pp. 40-42).

In this research, a focus group study was conducted in Armidale, NSW.[2] Armidale was chosen in part because it is both a potential major producer and consumer of organic foods and in part because we were interested in assessing the opportunity for the development of an organic sector in rural Australia. Rural demand is of interest because previous studies done in Australia focused more on regional and metropolitan cities such as Brisbane, Rockhampton and Melbourne (Lyons, et al. 2000, Lyons, et al. 2001, Donaghy, et al. 2003). Limited availability of organic foods in the rural areas is of particular concern.

There were altogether 36 participants in four different groups. The numbers of participants in each group varied from seven to ten. There were nine and ten, respectively, in two groups of non-organic consumers, seven in a session made up mostly organic food consumers, and ten in a session for home gardeners. Due to limited supply of organic foods in the rural areas, it is of interest to find out the extent to which home grown foods are meeting some of the demand for organic food. This design enabled us to investigate more diverse views and to compare results between groups. Summary of the socio-demographics of the focus groups is provided in the Table 1. Compared to NSW/Australia, the focus groups are generally older, more educated and with higher incomes.

The aim of the focus group study is to find out how rural consumers feel about food consumption in general and how they feel about organic foods in particular, as well as how much they know about organic food. We also wanted to know what factors impact food choices, whether conventional or organic foods. In addition, we asked both organic and conventional shoppers what they knew about organic certification, what organic foods people bought and why, and how they perceived the price premium for organic food in order to identify differences in their perceptions and motivations.

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[2] Armidale is a University town, home to the University of New England with 22,000 residents. The main industries are education and agriculture. It is located 567Km north of Sydney, 467Km south of Brisbane and approximately 170Km inland from the coast. With an elevation of 3200 feet, it has four distinct seasons. Temperatures range 12 to 27 degrees Celsius in warmer months and 0 to 16degree Celsius in cooler months. In the heart of winter, the temperature often goes down to –6 degree Celsius Rainfall is summer oriented with an annual average of 80mm.

Question 1. What are the most important characteristics of food that you pay attention to when you go grocery shopping?

The answers to this question (Table 2) varied depending on the socio-demographics of the participants, such as whether a family member had a health problem or food allergy, whether the family had young children, whether they were vegetarians, and whether they were constrained by budget. Overall, the most important characteristics of food that people pay attention to are: sensory appeal (taste, flavour, texture, smell, look), freshness, variety, nutrition, costs, convenience and serving size, where the food come from, and how the food is produced.

"Probably fresh vegetables, balanced diet, I'm always conscious of balancing vitamins, minerals, proteins. Cost comes into it. When you've got kids, what people in the household like to eat, people's preferences, comes into it, too."

For those families experiencing health problems (eg diabetes) or food allergies/sensitivities (eg MSG sensitivity), they needed to know what was in their food and they often checked nutrition labels (especially low fat, low sugar, low salt, and MSG-free).

"Freshness is the very first thing that comes to my mind. I also look at the sugar content just because my husband is diabetic and because of that also the salt and fat content in food, so I keep my eye on that sort of thing. But freshness is the main thing, speaking of veggies and meats and fruit. I don't really take much notice of how packaged it is or it isn't."

Some emphasised their preference for organic or unprocessed foods. Others preferred seasonal, locally grown or Australian made foods. Quite a few participants grew their own vegetables, because they have more flavour and fewer chemicals. Some were hesitant to use the term "organic" to describe their home gardens because they are not sure about the manure they used.

"One thing I might add is I tend to eat what's in season as well, so, and I also grow awfully good stuff in my garden. When it's in season it's also fresh, and I also like to know the history of what the food is, if it's local or Australian made."

For those who identify themselves as organic consumers, personal health, environmental concerns, animal welfare and protecting small farms and rural communities are all part of the selection criteria.

"I like to look at the food, I like to smell it, and I like to taste it. With grapes, I like to taste a grape or something like that. I like to be informed too, I ask questions, where it's from and that aspect of it. And from an animal point of view, I'm interested in the welfare of the animals as well as the environment the food is coming from, so I'm pretty selective in that way. I don't really care too much about the cost because I believe the benefits and the health far outweigh that aspect in the long term, my health is more important in the long term than the short term economic gain."

For non-organic consumers, the main consideration for food choices appears to be related to sensory appeal, especially taste and flavour. A majority of organic consumers in this study were vegetarians; therefore, nutrition was a very important consideration. It was clear that some participants had very strong views about the food they ate, while others are not so selective.

"I try and buy as little processed food as possible, we're vegetarian. We don't mind cooking from scratch using grains and fresh vegetables. As far as vegetables go, freshness is a priority, sometimes the cost. Packaging I don't like, things that are overly packaged and that have unnecessary hype on the packet which then again puts the price up twice from what it would otherwise need to be because it's presented in an attractive way with a gimmicky toy or something. Mainly unprocessed as much as possible."

From the discussions, it was also apparent that people often had conflicting goals concerning their food choice. Most organic consumers wanted to purchase as much as organic food as possible, but were often constrained by budget, what was available in the market or by the time that was required of them to shop around. For families with young children, the choice often is dictated by what the children would eat, rather than the nutritional content of the food or tastes and preferences of the adult shoppers. Another potential conflict is that people want to have a healthy lifestyle but often are either too lazy or too busy to do the right thing.

"I've got an idealistic view of what's the most important characteristics of food for me, and then I've got a practical and real, real feeling of what's the most important characteristics of food for me. I mean I'd love to eat healthy and low fat content [*one participant laughs*], all those things that you get thrown at you as a kid and right through, but for me, the ideal and the practical, I think I'm lazy, and what's the easiest, comes, oh just this time and next time I'll do better, I mean that's just the way it is."

Some also thought that a little healthy (organic) choice was not going to offset their other bad habits (such as eating fatty food or junk food, drinking or smoking) and make any difference to their health. For students, budget was the most serious constraint on food choice because of price premiums associated with organic products.

Question 2. What does the term organic mean to you?

This question was asked to find out about the participants' perceptions of "organic", ie what comes to their mind when they hear the word "organic". In general, most participants mentioned: "free of chemicals, pesticides and residues," "healthiness," "wholesomeness" and associated these with the physical attributes of food products (Table 3).

"For me, it's free of chemicals and pesticides and residues, and it's clean food. It's healthy and fresh, but I don't know about if it's fresh so much these days when I see there are lots of items that are pre-packaged and marketed with a trade mark organic but I'm sure that the BFA and NASSA that they are monitoring these companies that put this stuff out under that trade mark term and I trust them to keep up with the ethical standards that are assumed by that word organic."

However, to some it means "growing in tune with, in harmony with nature", "ethical", "sustainable", and "small scale production", which are related to the production process.

"It's something that is grown in congruence with nature, so it's sustainable. I like the ethics behind that. To me, I guess I equate organic with healthy. And probably better for you, I feel better about eating it."

To few, it conjured up more stereotypical images of "home grown fruit and vegetables", "small and imperfect", "knobby little apples, little wormy things' and "hippies and their alternative lifestyles". There is also some mentioning of GMO in the discussions that it is unnatural and goes against the concept of organically grown.

"Organic to me means something that's grown or raised without using any chemicals, pesticides or anything like that. It also conjures up thoughts of home grown to me, organic."

There was some scepticism among the participants about organic foods, especially in one group of conventional shoppers. These concerns included lack of confidence in certification and doubts about the ability to produce sufficient food without synthetic fertilizers and pesticides.

"I suppose when I see organic, free of, free of pesticides and herbicides, but I also question what is organic or not organic because there are so many things coming into it. So even when it says something organic on the label I just wonder, how organic is it? Is there stuff in the water, you know the air we breath has got pesticides and herbicides in it that we never had seventy years ago. I don't know, but I sort of, more than saying what it means to me, I question what organic actually is and when it becomes organic, or when it's not organic. It's more of a question that comes to me than an answer."

"I agree with the general understanding of growing without pesticides and herbicides. To say the word by itself, maybe it conjures up marketing. It's a bit like the word natural [*one participant laughs*] and it doesn't really mean natural anymore it means maybe less processed, and that it might keep chemicals out of it. But what are chemicals when you do organic chemistry? And where's the difference between this chemical when you call it an organic, you know, [word missing here] chemicals. So I'm sort of, I think it's good to produce foods that are free of harm-causing chemicals but people have been pickling with vinegar for centuries. That's a chemical as far as I'm concerned. I come from a long line of farmers and I can't see the difference much between super phosphate and chook poo. *Participants laugh*. I think the word has been hijacked by marketing people to drop the idea that something is better for you. We'd probably be a fairly hungry world without some of these chemicals and fertilizers."

Question 3. What does organic certification mean to you?

We asked participants about organic certification to understand how important it was in their perceptions, confidence and behaviour towards organic foods. Most participants said that organic certification means labels, trademarks and logos, which, in turn, mean "a stamp of approval" and "some sort of guidelines, standards and regulation", and it's an important tool for building up faith and trust in the origins of the product (Table 4).

"Organic certification means to me that the food has met the requirements, has been grown and stored and met the requirements of different organizations certifying it. I understand there are several different organizations in Australia that you can get certification for and that [word missing here] the requirements that they're growing, and they've also undergone regular testing to make sure that people aren't cheating the system as well and just putting organic labels on inorganic food."

"Organic certification means to me that the producer is following guidelines and is being monitored by whoever is doing the certification. I think they also paid to have their soil tested quite frequently to go into certification and to me, if they're passionate enough to do that, then I think I'm going to have more respect for them and I'm willing to consume their products."

However, there was also some scepticism about organic farming and certification. Some cast doubt on the level of guarantee, the level of packaging, the distance of transport, the emergence of large corporate organic farms, the possibility of contamination from neighbouring conventional farms, the ability of organic farming in providing food security to growing population.

"To me, there's a difference between what I understand when I go to the shop and say this is organic. I know enough that there are always criteria that farmers have got to satisfy to have the product labelled as organic or chemical free, to be grown in this way. That's what it means to me when I see it on the label, but I guess, I would hope it to mean something more, like growing in tune with, in harmony with nature and in sustainable communities, those kind of more general and utopian kind of ideas in a way. So you know, I guess going further I'm a bit concerned about the industry side of the organics, because all you have to do is meeting the minimum criteria to be allowed your produce as organic. The spirit of what was originally the concept of organic food, so the difference between the industry and the philosophy in a sense."

"From what I understand a farm can be deemed organic when neighbouring farms are not adhering to organic farming practices".

One participant commented that organic certification is about the production process, not the product; therefore, there was no guarantee that the products were not treated with chemicals after leaving the farm. There were also questions about what was required to certify that milk and meat were organic. These comments confirmed previous research findings that consumers desire more information.

"It means they are producing basically something that doesn't harm its environment or the end consumer, but I don't really know how this certification is granted, as a consumer. And in fact, I wouldn't mind finding out about that."

"I haven't ever seen organic certification on anything, so I suppose I don't look at the things that would have that on. *Laughs.* But to me, it would mean that it had met some sort of criteria. Who the criteria is laid down by or whatever I don't know"

Question 4. What organic foods do you buy? Where? And Why?

In terms of what people buy that is organic, fruit and vegetables appeared to be the main category, followed by staples such as flour, cereals, legumes (kidney beans, lentils and cannelloni beans), pasta, milk, yoghurt, tea and coffee, and juice. Soya milk and tofu were mentioned a few times as key organic purchases because of vegetarian diet or food allergies. Although a variety of organic products were being purchased, the list was still quite limited compared with conventional foods that are available in the supermarkets. Indeed, participants tended to mention only a few things that were more readily or regularly available to them. Only two of the participants were 100% organic consumers.

In general, participants acquired organic foods from a variety of outlets, including supermarkets such as Coles, health food shops, organic specialty shops, fruit and vegetable markets, farmers markets, home delivery, box schemes, and directly from local farms or friends. Some participants also grew some of their own vegetables. "So it's basically where ever is available." Most organic consumers tended to hunt around for organic food in different places, but some purchased only what was available at supermarkets (Coles or Bi-Lo). Since there appeared to be limited choice for organic consumers in Armidale, what was consumed was dictated by what was available.

"I find it really hard to access. If it were more readily accessible, that would be my choice for sure."

However, there were also other considerations (Table 5). For example, organic staple foods (flour, cereals, grains) were bought because they made up a major portion of food consumed and hence were expected to provide the most benefits in terms of avoiding chemicals. Some participants bought certain organic products because of the amount of sprays that are required if conventionally produced. Bananas, broccoli, onions, and soya products are some examples.

"When I buy tofu it's always organic tofu too, it's got the reputation of being grown with quite a lot of pesticides, so they are the foods that I make the efforts of buying organic. Same thing with broccoli too [*someone else here says yes in agreement*], apparently they've got that reputation of being sprayed with chemicals, so for foods for which I know which have the reputation of being dirty foods when traditionally grown, they're the ones that make the efforts to buy organic."

Some bought organic foods because they tasted better. For example, organic lettuce, tomatoes and carrots were said to have lot more flavour than their conventional counterparts.

For non-organic consumers, the foods that they would consider buying organic were: fresh fruit and vegetables (because they felt they will be unprocessed and hence more likely to be truly organic and because conventional strawberries and tomatoes were perceived as huge but with no taste); staples (flour, rice, cereals, etc); oils (because of how it is produced); eggs (for concern over animal welfare); chickens (because of the use of growth hormones and antibiotics); and meats (because of biomagnification of chemicals in the food chain).

"I think oil, I'd like to know more about organic oil, because I remember reading something about how oil is produced, and I think it's something like detergent that goes in it, to then extract the oil, and that concerned me, so I'd like to know more about organic oil, and would consider purchasing that. And strawberries and tomatoes, I'm sick of strawberries that are really big but have no taste [*several participants laugh*], and tomatoes that are huge but floury inside or don't have much pulp or juice. So if someone could produce good quality strawberries and tomatoes that are organic and don't have to be enormous, I would buy them."

"I don't eat meat, but if was going to buy anything organic, I would like my meat to be organic because of the high concentration of chemicals as they go down the food chain."

By comparing the reasons given by organic consumers for buying organic foods with the reasons given by non-organic consumers for considering purchase of certain organic foods, it is clear that they are basically the same. That is, they are all concerned about the level or concentration of chemicals, flavour, and animal welfare. It is interesting that concerns over the environment are not mentioned as reasons for buying organic foods by both groups.

"…we grow vegetables at home and grow them organically, so yes I've had organic at home but I don't go and buy, or I don't seek out, I mean I might if I like the look of something buy it, but I do not seek out or choose to buy organic food. I don't particularly value it. And to me I can't see the demonstrated benefit enough for the cost of it. And I don't think it's a realistic way to grow because I do not think the society can be fed by growing organically. But I would prefer to grow my own farm and grow organically because I think it's healthier. I don't like to have pesticides. It's the pesticide issue rather than herbicides or fertilizer."

Most organic consumers indicated a strong preference to get everything organic, but often felt they could not do that because they were simply not available in Armidale. And when they cannot get them, they bought conventional food. They felt they needed to be practical and flexible. This highlights an important issue facing organic consumers in rural towns like Armidale, ie the availability and the quality of organic foods. For an organic consumer, the amount of effort and time that are required to meet their daily needs is tremendous. And because of the lack of supply, substitution between organic and conventional products is frequent and often necessary.

"But just because, you don't want to go running around to a hundred different places, so I tend not to shop very much, and when I do, I just run around Coles and get as much as I can."

Given the demand on people's time in a modern society, it is not hard to see why some people who believe organics is better in many aspects, but are not organic consumers--they cannot afford to shop around. Lack of availability appears to be a main deterrent for further market growth. During the discussions, it became clear that supply sources were becoming even more limited with the disappearance of home delivery services, box schemes, and closing of a local produce market. Supermarkets such as Coles, on the other hand, have increasingly stocked more organic food. For non-organic consumers, since they did not seek out organic products they were hardly aware of any supply sources of organic produce.

"I've had organic food but I've never bought organic food that I know of anyway. The only reason I've had it is because we grow veggies. The reason I don't buy well organic veggies is because they're so much more expensive and I don't think they're worth it. They never to me look as fresh as what other ones do and maybe that's because not so many people buy them therefore they sit there for a lot longer. As for packaged [word missing here] food, I don't look to see if it's organic or not so I don't know if I've bought any or if I haven't. *Several participants laugh*."

Question 5. Do you think there is a price differential between organic and non-organic food? Is it justified?

Most participants agreed there is a price differential between organic and non-organic food, but most of them did not know how much. Several reasons were given for the price differential: lower yields, extra costs associated with certification, small scale production, labour intensive (because of strict production guidelines and difficulties in controlling pests and diseases without chemicals), higher risks and scarcity (Table 6). Most participants thought the price differential was justified since it cost more to grow organic food (Table 7).

"I think there is a price difference, not as much as it used to be 10 years ago. It used to be phenomenal when I consumed in Sydney. I think now, it's probably, to me it feels like about 15% difference, and I think it is justified because I think getting back to certification and guidelines and strict regime that is required to have your soil certified and have your production costs a little bit higher to meet that standard".

Others thought it was justified because they perceived organic food as healthier, more nutritious and more delicious. Some felt it was justified because they believed organic food was more ethical or environmentally sustainable.

"I assume that there is, I'm not sure how much it is. I notice with eggs, free range eggs really have got a huge premium on them compared to the battery hens but I'm willing to pay that kind of premium because I know, well just ethically I wouldn't want battery eggs. I think it is justified because I've known farmers who have grown organic and I know they're not getting rich, so whatever premium they can get is justified for them. On the other hand, it's up to me to decide whether or not I'm willing to pay."

"I don't think that many people, many farmers, take into full account the cost of producing whatever you want, a kilo of wool or a kilo of wheat. The full cost of the environment, of top soil degradation, of putting [word missing here] chemicals on, of somewhere where you've taken those chemicals out, you're digging up countries for super phosphate so you can apply it to your soil, that has to be taken into account in the farm price. So there is a price differential from my experience. I would only probably pay maybe twenty to thirty percent so, so I think you'd find it hard to sell much volume if there's that much price premium, double or triple, I don't think many people would be willing to pay that, but I think it's justified."

Most participants were willing to pay the price premiums. However, one participant pointed out that although the price differential might be justified, it did not necessarily imply that people would be willing, or could afford, to pay more. Some participants thought that organic foods were elitist and only the middle class could afford them. Others argued that organic products were actually cheaper compared to processed food or fast food. They also felt they were cheaper than conventional foods if sustainability and costs of soil degradation were taken into account.

"Is it justified? Yes, if we can prove, like I'm getting in my head organic and non-organic, if we can prove that organic means healthier, better for the environment, if we can prove that it's better on our landscape as against non-organic, of course it's justified. But that, I don't know if it's just a perception with me or whether it's real, that organic is, yes, healthier, better for the environment, that non-organic is actually doing this vast damage to the environment and it's doing bad things to me too, to people. Is it justified? I don't really know."

Another point of view is that price premiums, as a result of scarcity, might be necessary in the short term in order to encourage more production, and would eventually lead to lower prices, making it more affordable to more people. Another comment worth mentioning was that "I'd like to see the government subsidise organic farmers, help them along, make it more accessible to people."

Concluding remarks

A focus group study was conducted in Armidale, NSW to investigate consumer attitudes and knowledge of organic food in rural Australia. The study consisted of four focus groups and five structured questions. The overall results suggest that (1) sensory appeal is the overriding factor in food choice; (2) there are different levels of awareness and understanding of "organic" and "organic certification" among participants; (3) the availability of organic food in rural Australia is a limiting factor in demand; (4) concerns over dietary and health restrictions motivate many organic food buyers; (5) concerns about the level or concentration of chemicals, the environment and animal welfare, as well as taste, are the same motivations behind the consumption of organic foods by organic consumers and potential motivators for non-organic consumers; and (6) both organic and non-organic consumers believe the price premium for organic food is generally justified because of higher production costs, but the differential does restrict purchasing behaviour. In addition, it appeared that the market for organic food in rural towns such Armidale may remain limited due mainly to its short growing season and long distance from major supply centres in Sydney, Brisbane and Melbourne.

Consumer preferences and food choices appear to be influenced by socio-demographic factors such as income, family structure, lifestyles, dietary restrictions (due to health problems or food allergies, or whether they are vegetarians) and some social values and beliefs. Some of these results are consistent with previous findings (Davies, Titterington and Cochran 1995, Lyons, Lockie and Lawrence 2000, Thompson 2000, Tregear, Dent and McGregor 1994). In terms of familiarity with organic and certification, while organic means "free of chemicals", "wholesomeness" and "sustainability" to most participants, organic certification is not as familiar but it is understood to involve standards, guidelines, regulations and enforcement. In terms of availability, it is clear that organic consumers would like to buy as many organic products as possible, but they are often constrained by what is available in the market and the time required to hunt around. As such, it is often necessary to substitute conventional food for organic food or to grow your own produce. The latter is, understandably, not a viable option for most consumers.

In terms of price differential that exists between organic and conventionally produced foods, most participants thought it is justified because organic farming means hard work and lower yields, and many felt it was also more sustainable and more ethical. Price premiums were also thought to be justified because organic products were perceived as healthier, more nutritious, and more delicious. Many participants were willing to pay for the price premiums associated with organic food. However, there were some reservations. For one thing, the higher price may be unaffordable to low income people (such as students). Further, some suspected organic food was over-priced due to unscrupulous middlemen.

The focus groups suggested some differences between organic and non-organic consumers. The main difference is the set of criteria that are used for making food choice. In most cases, the list was much more extensive for organic consumers than their conventional counterparts. Consistent with findings by Davies, Titterington and Cochran (1995), Dmitri and Greene (2002), Storstad and Bjørkhaug (2003), Swanson (1993). Thompson (2000), Tregear, Dent and McGregor (1994) organic consumers tended to consider the effect of their food choice on personal health, the environment, animal welfare and other social issues while non-organic consumers tend to focus more on sensory appeal (eg taste and appearance). Indeed, a few non-organic participants indicated that they would try some organic fruit and vegetables just to see whether they taste better than conventional food. Moreover, availability was a main constraint to increasing consumption of organic food by organic consumers. Thompson and Kidwell (1998) found store choice a main factor affecting organic purchases, but this was in metropolitan area of the US where organic foods are widely available at health food stores and food cooperative. As with Goldman and Clancy (1991), price was not the main constraint for organic shoppers. However, price and negative attitudes were the main deterrents for non-organic consumers. These findings need to be validated using larger, random samples.

If these findings hold up in a larger sample, several policy implications could be drawn. First, given the generally low levels of consumer awareness and understanding of the meaning of organic and organic certification, there is a need for consumer education and information. It is clear from the focus group discussions that the scepticism over organic farming and certification, and hence negative attitudes towards organic foods, is often a result of lack of knowledge.

Education and information programs, if implemented, could try to address consumer concerns over: the level of guarantee, the level of packaging and processing, the distance of transport, the emergence of large corporate organic farms, the possibility of contamination from water, air and neighbouring conventional farms, and the ability of organic farming in providing food security to growing population. Many of these concerns were also identified in Lyons, et al. (2000 and 2001) and Lockie, et al. (2001 and 2002).

Secondly, consumers do have different motivations in making food choices and often they are competing or conflicting. For example, the desire to eat healthy often competes with the desire for convenience or flavour. This means marketers should find ways to resolve those internal conflicts facing the consumers, through their messages and their products. Thirdly, while availability is the main problem for organic consumers, price is a key deterrent for trying organic foods by non-organic consumers. Given that higher prices of organic food are attributable partly to small-scale production and limited supplies, increasing supply and improving supply chain co-ordination appear to be the major challenges facing the Australian organic industry to grow the market. More research, however, is needed to address both the demand and supply side issues in the Australian organic market.

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Table 1. Socio-demographic information of focus group participants

Marital Status	Single Married Divorced De Facto Others	9 12 8 4 3
Highest Degree Obtained	PhD Masters Bachelor Trade certificate/diploma High School Others	9 5 9 5 6 2
Employed	Yes No	34 2
Occupation	University lecturers Researchers AA Students IT Others (non-UNE employees)	8 2 3 6 2 15
Ethnicity/race	/Caucasian	36
Primary food shopper in household	Yes Shared No answer	28 5 3
Dietary restrictions in household	Yes No	16 20
Age of participant	20-29 30-39 40-49 50-59 60+	2 6 15 11 2
Sex of participant	Female Male	23 13
Children under 18 living in household	Yes No	13 23
Annual household income	<30,000 30,000 – 59,999 60,000 – 89,999 90,000+ NA	7 15 3 7 4
Have you ever bought organic food?	Yes No Don't know	30 5 1
When was the first time?	More than 1 year ago More than 3 years ago More than 5 years ago More than 10 years ago No answer/forgotten	4 3 3 18 8
Where?	Armidale Elsewhere No answer	2 23 11
How often do you purchase organic?	Weekly/Bi-weekly Monthly Few times a year Never No answer	14 2 7 3 10
From where do you buy organic?	Supermarkets/ Farmers markets/ Food co-ops/ Health food stores/ Home grown	Most had multiple answers

Table 2. Characteristics of food that are valued by participants

Taste Flavour Freshness Texture Appearance (colour, look)
Health Nutrition High in protein, vitamins and minerals Well balanced diet and high nutritional value (especially for kids) Low fat, low salt, low sugar, MSG-free
Convenience/serving size/variety
Price Value for money
Produced locally or Australian made What is in season
As unprocessed as possible Minimal Packaging As free of preservatives and additives as possible
Something that family or kids will, or like to, eat
Animal welfare Grown with minimum chemicals Low impact on the environment Does not contain genetically modified organisms

Table 3. How participants defined organic

No chemicals at all No pesticides, no chemical fertilisers, no hard chemical sprays Low or as little pesticides and chemicals as possible Chemical free and preservative free No artificial colours and flavours Not genetically modified Not adding nasty things that are going to be nasty to anything else and the surroundings Naturally ripened Grown as close to a natural process as possible Grown in tune or harmony with nature in sustainable communities Wholesomeness if grown in a sustainable way From the earth/ Clean earth/ Healthy soils Recycling of all farm materials Commercially has been certified according to national standards and if home grown, as close to certified minimum standards as possible
Small scale production Seasonal vegetables and fruit Home grown Grown locally Older varieties and non-hybrid Growing and producing produce in as old-fashioned a way as possible Small and imperfect Alternative lifestyles Knobby little apples, little wormy things
More nutritious Natural and healthier Natural and expensive Clean foods
A marketing term to drop the idea that something is better for you

Table 4. How participants defined "organic certification"

Some sort of standards, guidelines or regulations Labels, trademarks or logos There are 2 or 3 different levels of organic certification Producers follow guidelines and are being monitored by certifying bodies Soil testing Strict production guidelines Standards or guidelines are on production process, not product Probation period Organic farmers are routinely and randomly being tested
It is a stamp of approval Trust and faith It means that the farm and the process have been tested and meet certain criteria It means you have jumped through certain hoops It is some kind of reward to organic farmers who have done the right thing and producing smaller yields as a result The food has been grown without chemicals, pesticides in as natural way as possible It means that something is more likely to be free from harm causing chemicals It gives me confidence that what you are reading about is what you are actually eating Certified has the least extra stuff in it I will choose something that is labelled as certified organic over organic It means it is useful and convenient (for buying decisions)
Obviously it has been through experts and the criteria, but I am fairly cynical about certification and the process and what it actually means Who checks the checkers? I am not convinced that it is well policed It's been through some form of checking process, but how far has that process been? Organic certification is the end product of some kind of political compromise The organic standard is not the best but workable
I would go into labels as much as I could, but I don't trust them 100% I don't trust the label completely, but it is likely to be better than something that makes no claim to be organic
I don't really know what organic certification really means I can't remember ever having seen such a description Well, it means nothing to me

Table 5. Reasons for buying or not buying organic foods

REASONS FOR BUYING	REASONS FOR NOT BUYING
Healthier To reduce having health problems later To keep away chemicals To avoid growth hormones and antibiotics in meats	Availability Inconvenience If it is not at where I normally shop, then it won't be on my list I am lazy and wouldn't go out of way to go and chase an organic apple across the country side I am a convenient shopper with 3 children
When they are on special	Price
To help poor organic farmers out there	Not convinced about the benefits of organic or the risks of the non-organic
Avoid allergic reactions to chemicals	Extra cost and extra effort
Taste and flavour	It is not included in my decision making criteria
Environmental concerns	Prefer something that is grown locally and how it is grown
As a way of making a political statement (against multinationals) I am young and idealist, so I think it would be better (for the environment) if more farms were organic	They don't look impressive Small Not fresh
As I get older, I like it cleaner	It is not a realistic way to grow food
	Don't feel the need to since we've survive all this time

Table 6. Reasons for price differential between organic and non-organic foods

Scarcity
Cost of certification
Problems in controlling pests and diseases without chemicals
Lower yields
Higher risks
Small scale production
More labour intensive
More wastage if not spraying
Organic grown chickens need more space
It costs more to get from producer to the market
Mark-ups by middlemen/shops
Extra packaging/wrapping

Table 7. Is the price differential justified?

YES	**NO/ NOT SURE**
Personal benefits For what you get per benefits that you get It is more nutritious It is better quality It is good for the environment It is more ethical It is more delicious It is healthier It makes you feel good for contributing to sustainability and not contributing to soil erosions	It preys on people's fears Over-priced Ripped-off by middlemen Only a certain strata of society (the middle class) can afford it Don't know Don't think that the regulation is strict enough
Growers should be rewarded for hard work	I don't think it is sustainable, I think it is a boutique, fashionable industry
Reflection of real costs It is close to the real cost of production (considering hidden costs of soil degradation in conventional farming) Mass production of food is a false thing (lower cost but poor quality) It is cheap compared to processed, packaged, or take-away food It is cheap if environmental and social benefits are factored into It is cheap compared to taking vitamin supplements Paying higher prices now may encourage supply and eventually lowering prices	No one has proven to me that it is better for me It is a marketing thing for more profits We would not be able to feed ourselves
BUT only if the growers get it BUT I don't think many people would be willing to pay double or triple Only if we can prove that organic is indeed healthier and better for the environment It is justified but 200% more is just too much. It should not cost as much	