

Beyond organic: consumer interest in new labelling schemes in the Central Coast of California

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Abstract

Producers are interested in developing labelling schemes that go 'beyond organic' to address ethical criteria not included in the US Department of Agriculture organic standards. However, consumer interests in labels that are not as widely available as organic in the market are poorly understood. This study reports results of focus-group research and a survey of 1000 households in the Central Coast region of California to determine which standards consumers are most interested in supporting through their purchases. The results indicate that standards for the humane treatment of animals have the highest level of support, followed by a standard for local origin, and for a living wage for workers involved in producing food. Logistic regression analysis suggests that humane is more likely to be chosen by women, European-Americans, younger people and frequent organic purchasers. Locally grown was preferred by older people and households with children. A living wage for workers involved in food production was selected more often by Latinos. Although a characterization of trends is not possible due to a cross-sectional design, the results suggest some potential directions for producers in this region who are willing to supply unmet consumer demands for ethical criteria. There are three basic directions that new and emerging labels may take with respect to US national organic standards: (1) separate from organic; (2) institutionally separate, but tightly integrated with organic; and (3) intended to supplant organic. The success of each of these strategies will depend on how much trust consumers continue to place in government oversight of organic food. The

study results also suggest that the movement for a more sustainable food system would benefit from devoting more attention to issues of animal rights and social justice.

Keywords Ethical consumerism, humane, local, living wage, organic, eco-labels.

Introduction

Consumption plays an increasingly important role in social and political life. Many people define themselves in terms of consumption choices (Fox and Lears, 1983; Bourdieu, 1984). Perhaps more importantly, the numbers of ethical or political consumers, that is, those who make consumption choices informed by values concerns are increasing (Micheletti, 2003) while other traditional forms of political activity are on the wane.¹ The main vehicles for the communication of ethical values associated with products are labels affixed to the commodities. Such labels serve three primary functions. First, they provide consumers with information about product characteristics that are not immediately apparent or verifiable by consumers themselves. This enables consumers to make choices about which apple to purchase based not only on visual cues (e.g. size and colour) and experience of past consumption (this variety tasted good the last time), but on the invisible characteristics of production, such as labour relations. Second, they can serve as a mechanism for implementing public policy objectives, such as reducing the use of pesticides. Third, they can increase producer revenues, either through

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¹Forms of political activity such as petition signing, demonstrations and occupations levelled off during the 1990s, but political participation through consumer actions increased significantly (Stolle *et al.*, 2005).

facilitating a price premium for growers or by providing a market niche for increased sales. Ethical consumption based on product labels constitutes a small, but rapidly growing, share of the food market.

The organic² foods label is one of the oldest and most successful eco-labels,³ dating back to the 1970s in the US, and consumers have responded quite positively to it. Sales of organic food in the US have increased at a rate of 20% or more since 1990 (Dimitri and Greene, 2002), and similar growth rates have been observed in some European countries and Japan (Kortbech-Oleson, 2003). This boom in the organic market, while positive in many respects, has created one problem and failed to solve another. The problem created is loss of revenues for the pioneering farmers of the organic farming movement. The problem that remains unaddressed is the actual meaning and significance of the organic label.

While the growth of the organic market has resulted in increased revenue for producers in general, the mostly small-scale growers who pioneered the organic movement are finding it progressively more difficult to benefit from this growth, either in terms of price premiums or market share. While organic foods once sold for much higher prices than similar, conventionally produced foods, these prices have declined recently in some sectors. For example, the average organic premium for Concord grape concentrate in the US declined from 40% in 2000 to just 16% by 2004 (Gauley, 2004).⁴ More than half of respondents in a 2004 survey of US organic growers reported they did not sell all of their products at a premium (Organic Farming Research Foundation, 2004).

Several factors contribute to this trend. One is that growers and processors have been attracted by price premiums and increased the amount of land in organic

production, both in the US and in other countries supplying US markets. As a result, the supply of some products has exceeded the number of consumers willing to pay more for organic food. Prices are then lowered to induce consumers to buy more, and bring demand closer to production levels, particularly at the peak of production (Carman and Klonsky, 2004). Another factor in declining prices is the entry of large companies, such as General Mills, Danone and Coca-Cola into the organic industry (Sligh and Christman, 2003). These multinational corporations enjoy economies of scale that allow them to produce the same products at lower costs. In addition, large organic retailers, such as Whole Foods Market Inc. and Wild Oats, have been acquiring smaller chains, and centralizing their supply chains. They are increasingly buying produce only in volumes large enough to supply their distribution centres, rather than individual stores. This has the effect of cutting off marketing channels that were previously available to smaller-scale, organic growers.⁵

A second issue is the meaning of organic itself. Current national standards prohibit certain inputs, such as pesticides, genetically engineered organisms, and sewage sludge, but say nothing about some of the other ideals of the organic movement, such as the preservation of small farms (Pollan, 2001). Certifiers of organic produce are not allowed to require growers to meet more than the minimum requirements, according to the US Department of Agriculture (USDA) National Organic Program's standards, which were implemented in October 2002. This is a change from the 1990s, when organic certification was conducted by state, regional and private organizations, and their standards varied (Guthman, 2004). Therefore, any claims related to other ethical criteria such as humane or socially just must be separate from the organic standard.⁶ In addition, the

²'Organic' generally refers to food that has been produced without the use of synthetic inputs, such as pesticides, antibiotics or hormones, and with the use of practices that improve the soil (Food and Agriculture Organization of the United Nations, 1999; Brennan *et al.*, 2003).

³We use eco-labels as a collective term to include eco-, geographic, fair-trade and ethical labels.

⁴Organic kiwifruit growers in California have experienced a similar narrowing of the price of their product compared with conventional kiwifruit, and expect this trend to continue (Carman and Klonsky, 2004).

⁵Many growers are also frustrated with the costs and paperwork requirements of national regulations.

⁶The USDA's guidance to producers states that additional claims are allowed, but only if they are truthful, and not under the jurisdiction of other agencies (USDA, 2002). By contrast, four international verification systems, including the International Federation of Organic Agriculture Movements, are exploring the development of social standards in sustainable agriculture (Social Accountability in Sustainable Agriculture, 2004).

variable transparency of and weak scientific evidence for some organic claims, such as promoting and enhancing biodiversity, may eventually cause a crisis of confidence in the organic label (Allen and Kovach, 2000).

The loss of revenues along with the spurious meaning of the organic label has prompted many of the pioneers of the organic farming movement⁷ to look for ways to differentiate their product. For example, growers, retailers and wholesalers in California have organized a number of meetings since 2002 to discuss the possibility of creating a new label, because it would be impractical for each of them to differentiate and market their product individually. This effort coincides with a phenomenal increase in consumer interest in purchasing differentiated food products. In addition to the expanding market for organic foods noted above, vegetarian and fair trade products are also proving to be popular with consumers. During a five-year period ending in 2003, sales of vegetarian foods doubled in the US (Tatge, 2004). Fair trade coffee, only recently introduced in the US, is experiencing an average annual sales growth of 72% (TransFair USA, 2005). This kind of increased consumer concern about the production practices of products over the last two decades is also reflected in longitudinal survey data (Imkamp, 2000; Stolle *et al.*, 2005).

It follows, then, that new labelling schemes with strong consumer interest may provide a way for growers committed to ecological and ethical practices to cope with the changing organic industry. Such labels may provide a valuable alternative marketing channel for these producers and enable the prioritization of additional social goals, as retailers continue to respond for consumer demands for ethical products. They might also garner a price premium, which would help ethical producers to maintain their economic viability in the face of increasing competition from multinational corporations.

Yet, while there is abundant research on which types of consumers prefer organic and why they choose this label (e.g. Jolly *et al.*, 1989; Goldman and Clancy, 1991; Thompson, 1998; Williams and Hammitt, 2000; Lockie

et al., 2002), there is a lack of information regarding consumer preferences for different types of labels. In particular, few studies, to our knowledge, have explored consumers' relative preferences for ethical criteria that are beginning to emerge in the marketplace.⁸ This type of research could be of use to those working in the alternative agrifood movement. For instance, one reason for the lack of consensus among those working to develop a label that goes 'beyond organic' is that there is limited information on the criteria in which consumers are most interested in supporting through their purchases. Given the increased role of political consumerism, it is crucial to understand the criteria likely to appeal to people interested in political action through the market.

In this article we report on our research on people's relative preference for various labelling criteria. We first lay out our research methods and analytical approach, then present our results on consumers' preferences for five labels: local, humane, living wage, US-grown and small-scale. We show which demographic and other factors were associated with preferences for which criteria, and discuss the implications for current efforts to develop eco-labels. We found interesting and unexpected patterns both in which labels were preferred overall, as well as distinctive differences based on gender, ethnicity and other variables.

Methods

Research was conducted in the Central Coast region of California.⁹ California is of particular interest to the study of consumption and food trends because it comprises the world's sixth largest economy and ranks sixth

⁸An exception is Loureiro and Hine (2002), who studied consumer willingness to pay for Colorado-grown, organic and genetically modified organisms-free potatoes.

⁹We defined this area to include five counties south of San Francisco: San Mateo, Santa Cruz, Santa Clara, San Benito and Monterey. This comprises the study area for a US Department of Agriculture funded project that supported this investigation. This study was part of a larger project to explore consumer interests in the food system, which found that although food safety and nutrition were the top concerns, consumers also wanted more information about the ethical issues involved in how their food is produced, primarily through labels (Howard, 2006).

⁷These growers tend to be deeply committed to the ideals of sustainability, and practice a much more diverse agriculture on a smaller-scale than most others (Guthman, 2000).

among nations as an exporter of agricultural products. It has long been a leader in alternative agrifood movements, and its 1978 organic law was used as a model for the rule that became federal policy in 2002 (Allen, 2004). The Central Coast region in particular has a very high density of organic consumers and growers, as well as organizations¹⁰ serving these groups. As a result, it is likely to be on the leading edge of the selective purchase of foods based on other eco-labels, in addition to organic.

Selection of label criteria

Prior to designing the survey, we conducted five focus groups in spring of 2003. As the purpose of the focus groups was to improve the relevance and resonance of the criteria to include on the survey, we do not report extensively on focus-group findings in this article. Seventy per cent of the participants were women, and 30% of participants classified themselves in minority ethnic groups.¹¹ The questions posed to focus-group participants explored unmet consumer needs regarding the food system. We asked them what was good about the current food system, what was bad about the current food system and what information they would like to know, if available. These discussions were audio recorded, transcribed, and then statements were coded into categories. The transcripts were subsequently analysed for themes that linked these categories, and which were discussed in all five of the groups. The themes identified included safety, nutrition, environmental impacts, humane treatment of animals, locally grown, a living wage for workers, safe working conditions for workers and US-grown.

Based on further analysis of these results, we chose five potential standards that are not currently addressed by the USDA Organic standards, but could potentially

be implemented by organic pioneers and those with similar operations.¹² We briefly defined the resulting standards, based on the focus-group participants' descriptions of the concepts. These were:

- Humane: meat, dairy products or eggs from animals that have not been treated cruelly.¹³
- Living wage: provides above-poverty wages to workers involved in producing food.
- Locally grown: grown within 50 miles of the point of purchase;
- Small-scale: supports small farms or businesses;
- US-grown: grown in the US.

We did not include a label that incorporated all of these standards because we wanted to find out where these potential components ranked relative to each other with consumers.

Survey methods

A written survey instrument was pre-tested with respondents recruited in front of a small, independent grocery store in the region. The five study counties were then sampled using names and addresses supplied by a marketing firm, USADATA. The eight-page survey booklet was mailed to 1000 households in April 2004, using a modified Tailored Design Method (Dillman,

¹²Most focus-group participants expressed strong interest in the safety and nutrition of their food. However, while some sustainable growers do make claims related to these topics, they are highly controversial given current scientific evidence for them. Furthermore, the US Food and Drug Administration strictly regulates food related health claims, so these were not considered realistic options for producers, and were not evaluated. Environmental impacts were also excluded as at least some issues, such as synthetic pesticide use, are currently addressed in the USDA Organic standards and it would be difficult for a new label to compete in this area. Although focus-group participants had similar concerns for both adequate wages and the safety of workers, to avoid confusion on the survey we chose to evaluate just one of these, and included wages because they were discussed more frequently. Locally grown and US-grown both refer to the distance that food travels, but members of focus groups expressed very different reasons for their interest in these standards, so we included both of them.

¹³The USDA Organic standards require 'outdoor access' for animals but this is not well-defined, and certifiers currently allow confinement at levels that are objectionable to a majority of organic consumers (Center for Food Safety, 2006).

¹⁰For example, Organic Farming Research Foundation, California Certified Organic Farmers, Ecological Farming Association and Community Alliance with Family Farmers.

¹¹Focus-group participants were recruited in person, in front of a diverse set of retail food outlets in the Central Coast region. Two groups were recruited at supermarket chains, while the others were recruited from a farmers' market, a discount grocery store and a natural foods store, respectively, in order to ensure that we included a wide variety of food consumers.

2000).¹⁴ By July of 2004 we received 475 surveys, resulting in a response rate of 48.3%. It is likely that non-responders were less interested in food issues than those who responded. While this may compromise the ‘representativeness’ of our respondents, these are the types of people that are more likely to initiate consumer-driven changes in the food system, and may therefore be of more interest for identifying potential new niche markets. A section of this survey instrument was designed to quantify the level of support for these standards in the general population, utilizing a forced-choice, paired comparisons method. A paired comparisons format more closely resembles the types of decisions people face in a retail market than a Likert scale, and also prevents respondents from scoring all items in a list identically (Clarke *et al.*, 1999; Hanley *et al.*, 2001). The introduction to this section was worded, ‘If two food products were in front of you and were identical except for these standards, which one you be most likely to buy? Please circle one’. This was followed by the definitions for the five standards described above. For example, survey respondents would be asked to choose between small-scale and US-grown, along with an option to select ‘neither one’. With five potential labels we were able to present all possible comparisons with 10 survey items ($T_5, 4 + 3 + 2 + 1 = 10$).

Variable definition

A number of independent variables were included on the survey to allow us to explore through multivariate analysis which personal characteristics were associated with preferences for each potential eco-label (Table 1). Surveys indicate that demographics tend to be weakly associated with eco-label preferences or ecologically conscious behaviours (Roberts, 1996; Wessels *et al.*, 1999; Gatersleben *et al.*, 2002). Therefore, we included attitudinal and behavioural variables in the multivariate analysis. Research on ‘perceived consumer effectiveness’ has found that some people are more likely to

¹⁴This involved four contacts, which included a prenotice letter, the survey (including a cover letter, \$1 bill incentive and a stamped reply envelope), a reminder postcard, and replacement survey for non-responders. Sixteen surveys were returned as undeliverable.

Table 1 Descriptive statistics for variables in the analyses ($n = 475$)

	Per cent	Per cent missing
Dichotomous variables		
Gender		3
Men	44.7	
Women	52.3	
Ethnicity		2.5
European	58	
Asian	19.4	
Latino	10.5	
Other	9.7	
Income		9.1
Low income	24.9	
Middle income	36.9	
High income	29.1	
Education		1.9
High school or less	12.9	
Some college	30.6	
College	31.4	
Graduate school	23.2	
Children		2.1
Household with children	33.5	
Purchasing behaviours		
Frequent local	14.6	1.5
Frequent organic	30.2	3.2
Continuous variables		
	Mean (SD)	Per cent missing
Consider environment when purchasing ^a	4.4 (1.8)	8.9
Age (years)	51.1 (15.2)	5.5
Attitudes		
Consumers can affect environment ^a	5.2 (1.8)	9.3
People care about how food is produced ^a	3.4 (1.9)	9.7

^aMeasured on seven-point Likert scale.

believe they can contribute to sustainability efforts through their purchasing behaviours, and that this belief is associated with more sustainable behaviours (Ellen *et al.*, 1991; Roberts, 1996). A variable derived from this literature was agreement with the statement ‘consumers can have an effect on environmental problems’. We also included a variable for agreement with the statement ‘people care about how their food is produced’. We observed from the focus groups that many of the participants who cared strongly about the food system had the perception that most other people did not, and we

were interested in determining if this attitude was associated with eco-label preferences. Behavioural variables included in the analysis were considering the environment when making purchases, purchasing organic food and sourcing local food. We defined local sources as household gardens, farmer's markets, Community-Supported Agriculture subscriptions (CSAs or box schemes) and roadside stands.

Analytic strategy

Most respondents completing the forced-choice, paired comparisons survey questions will, in effect, create an ordinal ranking of the choices. Their most preferred choice will be selected in every paired comparison, their least preferred choice will not be selected at all, and the others will be selected once, twice or three times respectively. The result is typically a unique score for each potential standard for each respondent on a scale of 0–4 (some participants chose the 'neither one' option or left particular comparisons blank however). The same pattern can be observed for the sample as a whole, with one standard preferred by more respondents in every comparison, the next most popular standard chosen in three of the four comparisons, and so on, for a result of a population ranking. Logistic regression was then used to examine the association of demographics, attitudes and behavioural characteristics with preferences between potential eco-labels.

We used multiple imputation as the missing data strategy, rather than using simpler approaches, such as listwise or pairwise deletion, which have many disadvantages. For example, deleting cases due to missing values results in the loss of valuable information and, unless the data are missing completely at random, could result in selection bias as well. This is because certain types of people may be more likely to leave questions, such as income level, unanswered. Excluding their responses will bias the sample, and therefore the estimates and standard errors. Multiple imputation involves using a computer algorithm to 'fill in' the missing values, using the complete values to predict them, but for multiple data sets. Each data set's values for the missing data are different to reflect uncertainty. In our case we generated five data sets ($m = 5$) using the software Amelia: A Program for Missing Data (Honaker *et al.*,

1999), ran the logistic regression results for each, then combined them using the method described by King *et al.* (2001, p. 53). The point estimates are simple averages, while the standard errors and *P*-values involve a slightly more complicated calculation that reflects the variance both within the imputed data sets and between the imputed data sets.

Results

Descriptive statistics on respondents

Table 1 reports the distribution of the variables used in the analysis, as well as the percentage of missing data. Demographic characteristics were similar to those reported in the 2000 US Census for this region (see Howard, 2006). The majority ethnic group was European-American at 58%, while 19.4% of respondents were Asian-American and 10.5% were Latino. Low income was defined as less than \$50 000 per household, per year, and approximately 25% of the respondents fell into this category. Middle income was defined as \$50 000 to \$100 000, which applied to approximately 37% of respondents, and high income was defined as more than \$100 000 a year, which was reported by approximately 29% of respondents.¹⁵ The percentage of missing data was largest for income, with 9.1% of respondents refusing to answer this question. A third of all households had children under 18. Food was sourced locally at least once a week by 14.6% of respondents, and 30.2% reported purchasing organic food on a weekly basis. The average age of survey respondents was approximately 51 years.

Paired comparisons results

Table 2 indicates the 'winners' and 'losers' of each paired comparison. Humane was preferred by more respondents in each of the four comparisons with other labels. That is, humane trumped small-scale, US-grown, local and living wage for the majority of respondents.

¹⁵This region has very high housing costs, with median home prices in the year 2000 ranging from \$265 800 to \$469 200 depending upon the county (United States Census Bureau, 2005).

Table 2 Results of the 10 forced-choice paired comparisons (*n* = 436)

Winner (%)	Loser (%)	Neither (%)
Humane (61)	Small-scale (32)	(7)
Humane (57)	US-grown (38)	(5)
Humane (55)	Local (38)	(7)
Humane (50)	Living wage (41)	(9)
Local (74)	US-grown (17)	(9)
Local (58)	Small-scale (34)	(8)
Local (53)	Living wage (42)	(5)
Living wage (57)	US-grown (36)	(7)
Living wage (54)	Small-scale (36)	(10)
Small-scale (52)	US-grown (42)	(7)

Local ranked second, winning three comparisons – with US-grown, small-scale and living wage. In third place was living wage, preferred over US-grown and small-scale. Small-scale ‘won’ only once, over US-grown. Finally, US-grown ‘lost’ in every comparison. We should note that although local had the highest overall percentage of respondents choosing this label in one comparison (74%), this was only when it was paired with US-grown, also a geographic variable. In the direct comparison between local and the more popular choice of humane, for example, humane was chosen by 55% of respondents and local was chosen by 38%.

Most important criteria results

The percentage of respondents selecting a particular standard as their top-ranked choice is indicated in Fig. 1. The ordinal ranking is much the same, although US-grown edged slightly ahead of small-scale for fourth place. More than 30% of respondents chose humane every time they had the opportunity, compared with 22% for local, 16.5% for living wage and less than 6% for US-grown and small-scale. These figures do not add up to 100% because some respondents had ‘ties’ or did not indicate a clear preference for one standard.

Logistic regression results

Table 3 reports the odds ratios for the results of logistic regression, which indicate the strength of the associa-

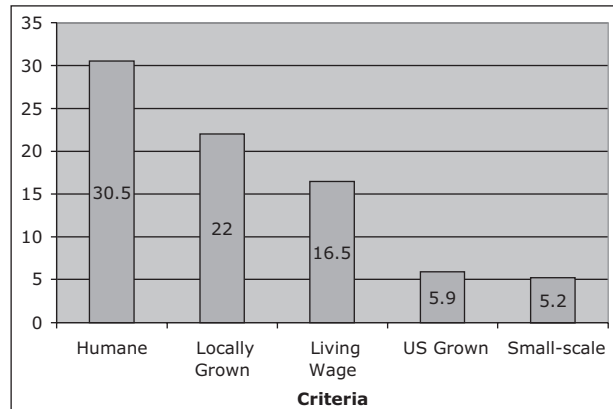


Figure 1 Percentage of respondents ranking a criterion as most important (*n* = 436).

tions between individual characteristics and choosing one standard over another. Comparisons between the top three standards could be made with just three regression models ($T_3, 2 + 1 = 3$) vs. 10 regression models for all five standards. As US-grown and small-scale combined were the top choice of just 11.1% of respondents they were excluded from this analysis. An odds ratio of greater than 1 demonstrates a preference for the standard of interest (listed first) while an odds ratio of less than 1 demonstrates a preference for the reference standard (listed second).

Humane vs. local

The first comparison was between humane and local, and the data indicate that women are almost twice as likely as men to prefer humane ($P < 0.01$). Conversely, men were almost twice as likely as women to prefer local. Those that consider the environment when making purchases were more likely to choose humane; every one-unit increase on this variable, as measured on a seven-point scale, was associated with a greater than 20% increase in the odds of choosing humane ($P < 0.01$). Two additional variables were associated with preferring local over humane; Asian-Americans were almost twice as likely as European-Americans to choose the local option ($P < 0.05$), and each additional year of age was associated with increasing odds of choosing local ($P < 0.05$). Stated another way, European

Table 3 Odds ratios from logistic regression of choice of alternative eco-labels on demographic, behavioural and attitude variables ($n = 423$)

	Humane over local	Local over living wage	Living wage over humane
Gender			
Men (default)			
Women	1.89**	0.68***	1.34
Age (years)			
	0.98*	1.02**	1.02*
Ethnicity			
European (default)			
Asian	0.51*	0.78	1.62
Latino	0.55	0.51***	4.32**
Other	0.59	1.15	2.20***
Income			
Low income (default)			
Middle income	0.97	0.58***	1.46
High income	0.73	0.50***	1.91***
Education			
High school or less (default)			
Some college	1.29	1.17	1.01
College	1.21	1.76	1.12
Graduate school	2.09***	1.07	1.43
Children			
Household with children	0.78	2.05**	1.01
Purchasing behaviours			
Frequent local	0.88	1.49	0.57***
Frequent organic	1.39	1.38	0.59*
Consider environment	1.22**	0.82**	1.01
Attitudes			
Consumers can affect environment	0.95	0.85*	1.10
People care about how food is produced	1.01	1.16*	0.89***
-2(log likelihood)	497.5	515.3	483.3
Pseudo- R square	0.14	0.16	0.12

** $P < 0.01$; * $P < 0.05$; *** $P < 0.10$.

ethnicity and younger age were associated with a preference for humane over local.

Local vs. living wage

For the comparison between local and living wage, having children was associated with a greater than 200% increase in the odds of preferring local ($P < 0.01$). In other words, our data indicate that those with children are more likely to prefer a label based on place to one based on economic justice. Increasing age was also associated with choosing local over living wage ($P < 0.01$). Respondents who consider the environment when mak-

ing purchases, or who feel like consumers can do something about environmental problems were more likely to choose living wage. For example, for every one-unit increase on the scale measuring consideration of environment when making purchases were approximately 20% more likely to choose living wage ($P < 0.01$). People who do not believe that others care about how their food is produced were more likely to prefer living wage over local, while the reverse is true for those who do believe that others care ($P < 0.05$). Women were more likely than men to choose living wage over local ($P < 0.10$), and Latino respondents were more than 60%

more likely than European-Americans to choose living wage over local ($P < 0.10$). Middle-income and upper-income respondents also tended to express a preference for living wage over local; both of these groups were more than 50% more likely than low-income respondents to make this choice ($P < 0.10$).

Living wage vs. humane

In the comparison between living wage and humane, older people were more likely to choose living wage. For example, controlling for other variables in the regression, someone who is 25 years older than an otherwise similar respondent is 60% more likely to choose living wage rather than humane ($P < 0.05$). Minority ethnic groups were more likely to prefer living wage in comparison to European-Americans. Latino respondents were more than 4.3 times more likely than those of European-Americans to choose living wage over humane ($P < 0.01$). Although the difference between Asian and European ethnic groups was much weaker, Asian-American respondents were still 1.6 times more likely to choose living wage. Those in the high-income groups were 1.9 times more likely to choose living wage over humane than those in the low-income group ($P < 0.10$). As in the comparison with local, those who thought most people do not care about how their food is produced were more likely to choose living wage, with the odds of choosing this criteria over humane 10% higher for each one point change on the seven-point scale ($P < 0.10$). Frequent organic ($P < 0.05$) and frequent local ($P < 0.10$) consumers were more both 50% more likely to choose humane over living wage.

Discussion and implications

Our results show that, for this population, humane, locally grown and living wage are the label criteria in which consumers are most likely to be interested. In addition, certain criteria are more likely to appeal to those with different demographic characteristics. Humane was more likely to be preferred by women, European-Americans, younger people and frequent organic purchasers. Local was more likely to be chosen by older people and households with children. Living wage was more likely to be chosen by those of Latino ethnicity, high-income households and consumers who

do not think that other people care about how their food is produced. Those who consider the environment when making purchases were interested in both humane and living wage, and did not demonstrate a preference when the two were directly compared. Overall, US-grown and small-scale received much less support from our respondents. This does not mean, however, that these criteria are unimportant to our respondents, just that they are less important compared with other criteria.¹⁶

Pilot labelling efforts addressing humane, local and living wage criteria are currently in development, and these results can help those working on the labels to advance and target their efforts. Although they are not yet widely available to consumers, they illustrate three potential directions that these labels may take with respect to a national organic standard (while remaining institutionally separate from the USDA programme): (1) a label that may apply to either organic or conventional food products; (2) a label that will complement and integrate closely with organic; and (3) a label that is intended to supplant organic using the USDA guidelines as a baseline, but also including more stringent and additional criteria.

The first instance is illustrated by fledgling humane labelling efforts that focus only on humane and are not limited to organic products. Pilot efforts to create a third party-certified humane label in the US include 'Certified Humane' and 'Free Farmed'. Free Farmed is administered by American Humane, and they currently certify nine operations. Certified Humane is funded by a coalition of animal protection groups, including the Humane Society of the United States, and currently certifies 34 operations.

The second option is the one used by the USA Domestic Fair Trade Working Group, which is working towards a third party-certified standard that would represent social justice criteria, including a living wage, but remain tightly integrated with organic practices. Their goal is to create a label 'that is consistent with the basic values of the international fair trade movement, and builds on the values of the organic and sustainable

¹⁶Multiple surveys have indicated greater than 75% support from consumers for country-of-origin labelling of meat products in the US (Schupp and Gillespie, 2001; Supermarket Guru, 2003; Umberger *et al.*, 2003).

agricultural movements' (Domestic Fair Trade Working Group, 2005, p. 1). Members of this coalition are currently testing pilot projects in Minnesota and Florida.

A pilot project that exemplifies the third direction, supplanting the USDA standards, can be found in Northern California. The Mendocino Organic Network is an organization of growers working to develop a peer-certified label. It would apply to locally grown produce from Mendocino County and adjacent Lake County. They plan to use this label to denote products grown with all the input prohibitions of the USDA standards, but including additional criteria such as animal welfare, social justice and minimal packaging, among others. The label states 'Mendocino Renegade, Buy Local – Beyond Organic' (Mendocino Organic Network, 2004).

The success of these various strategies is likely to depend not just on consumers' interest in additional ethical criteria, but on growers' and consumers' level of satisfaction with the USDA standards as well. Both groups have expressed concern over recent attempts to weaken these standards, such as recent legislation passed by Congress that allows more synthetic substances in processed organic foods (Deardorff, 2005). If organic consumers lose confidence in government oversight of the national programme, they may be more willing to seek out non-governmental alternatives, such as the Mendocino Renegade label. If consumers continue to trust the USDA's regulation of organic, then a complementary certification strategy, such as that of the Domestic Fair Trade Working Group, may meet with more success.

Although US-grown and small-scale may not currently have the market potential of the top three standards, evidence from our focus groups suggests that many consumers view them positively. Therefore, they should be considered for inclusion in labels that incorporate multiple ethical criteria. The feasibility of implementing such a label in the state of California is currently being studied by the non-governmental organization Ecotrust (Hamerschlag, 2005).

One limitation of this research was that the design of the study was cross-sectional, and consumer interests may shift over time. In addition, it was limited to a small geographic region, making it unreasonable to draw conclusions about how the results might be applied nationally or internationally. And, although the question

format was similar to the choices consumers make in retail outlets, actual purchasing behaviour may differ from stated preferences. For example, while the level of consumer support for fair trade expressed in surveys in Europe is extremely high, the market share of fair trade products remains quite small in many countries (Krier, 2001; De Pelsmacker *et al.*, 2005). On the other hand, consumer preferences cannot be accurately ascertained through their purchasing behaviour, either, given the confounding factors such as taste or brand (de Boer, 2003).

Thus, future research is needed to evaluate the market potential of such labels through longitudinal observations of trends, comparisons with other regions (particularly other nations), and evaluations of consumers' willingness to pay more for these criteria. In addition, qualitative research such as individual or group interviews would be useful to get at the reasons why people prefer one type of criterion to another. For example, why are women so much more likely than men to prefer humane over local? Why are younger people more likely than older people to choose humane over local? Indeed, why was humane so strongly supported in general, compared with the other criteria? Another area to pursue in future research is the tension between idealism and realism. Our pre-tests revealed that people sometimes chose one criterion over another simply because they did not see the second one as 'realistic'. This is consistent with other research findings that California non-governmental organizations focused on certain topics (not necessarily those they thought were most important) because they perceived it was *possible* to work on these topics in the current political economy, while others were out of reach (Allen *et al.*, 2003).

Conclusion

The success of eco-labels like organic and fair trade demonstrate the power of consumers to influence food production practices through their purchases. Consumers can contribute to the institutionalization of additional ethical criteria in the food system by supporting pilot efforts to create 'beyond organic' eco-labels through their purchases. The development of these labels would have to be separate from the USDA Organic label, but could coexist, much as organic and fair trade

do currently. Alternatively, increasing consumer and/or grower dissatisfaction with a government standard could lead to success for labels that integrate organic practices with one or more additional ethical criteria.

Research conducted in the Central Coast region of California identified three standards that have the most potential interest from consumers, and may be more likely to be successful labels. Humane attracted the most interest, particularly from women, European-Americans, younger people and frequent organic purchasers. Locally grown was the second most popular choice, and was preferred by older people and households with children. A living wage for workers involved in food production was the third most popular choice, and was selected more often by Latinos.

Labels that address ethical criteria not included in the US organic standards, may benefit consumers and 'ecological' growers, as well as foster progressive social change – the goals of alternative agrifood movements in the US. Historically, these movements have tended to focus primarily on farm-based, environmental and local food systems issues, with much less attention given to concerns such as social justice and animal rights (Allen, 2004). Our research shows that while the emphasis on local is certainly not misplaced, considerations should be given to foregrounding issues of humane animal standards and social justice, given their high degree of support by consumers.

Acknowledgements

The authors are grateful for the participation of the focus-group members and survey respondents. We would like to express appreciation for assistance from Jan Perez, Hilary Melcarek, Rob Serrine and Elliot Kuhn, as well as two anonymous reviewers for their comments. Funding was provided by the USDA as part of 'A consortium-based program for sustainable agriculture along the Central Coast of California', directed by Carol Shennan, University of California, Santa Cruz.

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