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Consumer Definitions of “Locally Grown” for Fresh Fruits and Vegetables

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Interest in locally produced foods has been rising steadily, in step with an increase in popular books and newspaper and magazine articles at both the local and national level. However, “local” remains undefined. As economists, we are inclined to want to measure what “local” is, or to define the space which is local. Retailers select their own definition of local, and many farmers markets establish distances from which sellers can bring their product. Market researchers also have weighed in. The Hartman Group (2008) recently reported that 50 percent of survey respondents selected “made or produced within 100 miles” as the statement best defining local product.¹ Our work points out the difficulties with defining a distance, both because consumer opinion is quite varied and because there are differences between regions across the U.S.

For consumers, however, regardless how one defines the distance of “local,” it is evident that “buying local” may achieve a variety of goals. The top reason among survey takers for buying locally produced goods is “freshness and quality.” One empirical question is to determine if the distance necessary to achieve this and other goals differs across consumers, or if different goals lead to definitions of local that imply different distances. Furthermore, the consumer experience may influence the definition of a local area for food production.

The research described in this report was driven by strong interest in “local” expressed during pre-survey focus groups, in a project primarily concerned with ecolabeling of agricultural production. At the same time, definitions of local which differed

from those traditionally used by marketers and other interested parties appeared. Thus the ecolabeling survey was augmented, specifically, to include questions to study consumers’ beliefs and preferences for locally produced agricultural produce. This report presents our statistical findings about how consumers across the country define their local area, points out some of the contrasts between areas, and discusses why these regional contrasts may have occurred.

The surveys were administered during the summer of 2006 in the Minneapolis/St. Paul and Portland, Oregon greater metropolitan areas and throughout the state of Rhode Island. A total of 1,500 consumers were surveyed in conventional and natural food supermarkets and farmers markets, with the distribution approximately equal in each of the three states. Prior to defining their “local” area, respondents were asked if they preferred locally produced fresh fruits and vegetables, and if they so, to rank the reasons why. The reasons, which included “freshness and quality,” “supporting the local economy,” and so forth, are discussed in Durham and Rohiem (2009).

One survey question focused on geographical definitions of local, and differed slightly between survey location to include six possible geographically appropriate choices each in Oregon and Minnesota and nine in Rhode Island. The material which follows provides the analysis of that question, including graphs of the percentage of consumers in each state who chose the available areas and a comparison between the states.

The focus groups showed that there were distinct differences in consumers’ perceptions of “local” among the three survey locations. Writing questions which could define these areas was challenging. Respondents were influenced by different factors in determining what meant “local” to them: for some, verbal definitions of the area were best defined using geographical boundaries (e.g. cities, states), while for others, distances were best defined using physical reference points.

¹ They indicated that 37 percent chose “made or produced in my own state,” but other choices were not presented.

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Distances, while fairly commonly used in the West, are rarely used in the Northeast, where travel time is more commonly used. Furthermore, of the three locations, only Minnesota allows for a circular distance to be readily applied, as the area considered does not quickly run up against the mountains or ocean as in Oregon and Rhode Island. All three survey regions border on at least one other state. An additional distinguishing distance feature for the Northeast is simply that all of New England is roughly two-thirds the size of Oregon. Thus while Rhode Island is extremely close to Connecticut in terms of distance, the perception in a consumer's mind may well be that out-of-state produce is not "local," even though Rhode Island and Connecticut combined could easily fit within either Oregon or Minnesota. However, state boundaries were offered as choices in each survey. For example "a 50-mile radius around Minneapolis/St. Paul" is much smaller than the entire state of Minnesota but it includes parts of Wisconsin, and "Northwest Oregon plus Southwest Washington" is substantially smaller than either state. The point of this was to examine whether consumers felt a state loyalty in defining locally grown.

Differences in terrain influenced the choices as well. Rhode Island, for example, is next to the ocean, so that almost all areas include water in any determination of a 50-mile radius. The Portland area is bounded by mountain ranges to the east and the ocean to the west, which affects the consideration of local because these features affect the areas actually considered as producing food.

Each survey, depending upon location, allowed respondents to choose differing "areas" which would define areas of production for locally-produced fresh fruits and vegetables and, in a second question, processed foods. Table 1 categorizes these possible responses across each survey location into three possible radius groups: up to 60 miles, between 60 and 175 miles, and over 175 miles.

The definition of "local" that comprised the smallest area—in other words, the closest to point of purchase—for essentially includes the entire state of Rhode Island (Figure 1). Respondents in the Rhode Island survey did in fact indicate that local could mean a sub-portion of Rhode Island, even though the state itself is of course much smaller than either of the two other states (Roheim et al. 2007). It is difficult to explain exactly why this should occur.

Those surveyed in northern Rhode Island thought produce from northern Rhode Island was local, while those surveyed in southern Rhode Island believed southern Rhode Island produce was local.

Figure 2 shows that almost half of those in the Minneapolis/St. Paul metropolitan area define "local" as the surrounding area closest to this metropolitan area, or the 50-mile radius around the metropolitan area. However, an approximately equal number of respondents defined "local" as the largest radius area—outside 175 miles. This is in contrast to the respondents in the Portland, Oregon and Vancouver, Washington metropolitan area, who were more inclined to use the smaller-radius definition. Southern Minnesota was selected less often than the smaller-radius but overlapping "East-Central Minnesota/West-Central Wisconsin" choice, and "Minnesota plus Wisconsin" was more often chosen than was Minnesota alone.

From Figure 3 it is quite clear that in the Portland, Oregon metropolitan area the state boundary is not a factor for many decision-makers in considering the area which is local. "NW Oregon" is selected far less often than the full circle including a portion of Washington state across the Columbia River. "Oregon plus Washington" is more often selected than is Oregon alone.

Figure 4 compares responses in the regions of the country after aggregating the possible selections into the three radius groups shown in Table 1. This demonstrates more clearly the differences among the respondents in the three areas. While the declining number selecting areas as they become larger in Rhode Island and the fairly uniform spread in the Northwest seem fairly natural, the nearly equal number of respondents choosing the smallest and the largest areas in Minnesota seems to need further explanation. Perhaps this distribution is due to the fact that the size of the 50-mile circle and the next larger group are not very different. No single demographic factor seems to explain these differences, and somewhat to our surprise these distributions are not very different between farmers markets and conventional stores within a state. Nor are they very different by age. It appears that state differences are stronger than many demographic aspects of the consumer.

Though these results have only shown the responses for fresh produce, we found that 12–20 percent of consumers by region did not care about

Table 1. Radius Groups of Consumers' Self-Declared Definitions of "Local" Across Regions.

Radius groups	Minneapolis/St. Paul, MN	Portland, Oregon/ Vancouver WA ^a	Rhode Island
Up to 60 miles	Twin Cities Metro & the surrounding area	Portland Metro & Willamette Valley (<i>note: technically the length to the southernmost point of the valley is longer but next choice defines just about a 60-mile distance east to west</i>)	South County
	A 50-mile circle around the Metro area (roughly bound by Lake City, Faribault, Glencoe, Cambridge, and Menomonie) (<i>note: includes Wisconsin</i>)		Newport County Southern Rhode Island Northern Rhode Island All of Rhode Island
60-175-mile radius	In-state	Northwest Oregon (roughly bounded by Eugene, the Oregon Coast, and the Hood River)	
	Multi-state	East-Central Minnesota and West-Central Wisconsin (roughly bound by Winona, Mankato, St. Cloud, Hinkley, and Eau Claire)	All of Rhode Island and Southeastern Massachusetts All of Rhode Island, Connecticut and Massachusetts
Over 175 miles	State-bounded	Western Oregon (roughly bounded by the Oregon Coast and the Cascade range)	
		All of Minnesota	All of Oregon
	Multi-state	Southern Minnesota (roughly bound by Alexandria and Iowa)	
	All of Minnesota and Wisconsin	All of Oregon and Washington	New England Rhode Island, Connecticut, Massachusetts, New York, Pennsylvania, New Jersey

^aFor the survey given in Vancouver, WA the choices were altered to parallel Oregon choices, so where Oregonians were given "Oregon" as a choice, Washingtonians were given "Washington."

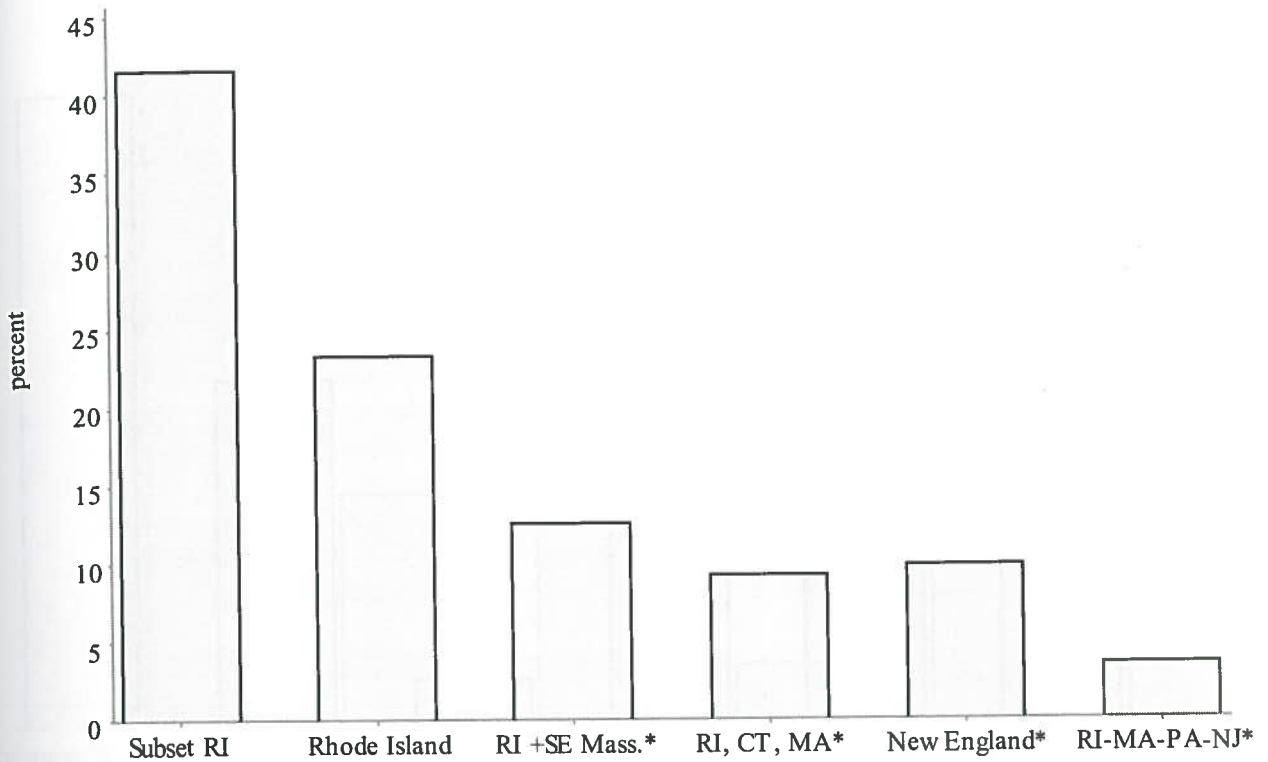


Figure 1. Rhode Island. When selecting fresh fruits and vegetables which of the regions below most closely signifies locally grown to you?

* indicates category extends beyond state boundaries.

the local concept for processed foods, and many of those who did selected larger areas than they had for fresh produce in all three regions. This other aspect of local should be the subject of future study.

Conclusion

Our findings indicate that many consumers do not agree with the marketing declarations that 100 miles constitutes "local." In Rhode Island more than 60 percent of respondents selected a local area under 60 miles, in Minnesota that number was over 40 percent, and in Oregon more than 30 percent.

Indeed, 100 miles makes Connecticut produce local for Rhode Island, and the majority of Rhode Islanders did not consider Connecticut to be local. Furthermore, it is equally clear that distance is not the single determining factor of "local"—otherwise, one might expect more similarity among responses across states. However, respondents seem to be influenced by geographical factors as well as physical and possibly psychological or cultural factors in defining "local." More research seems warranted in order to make maximum use of this term in marketing.

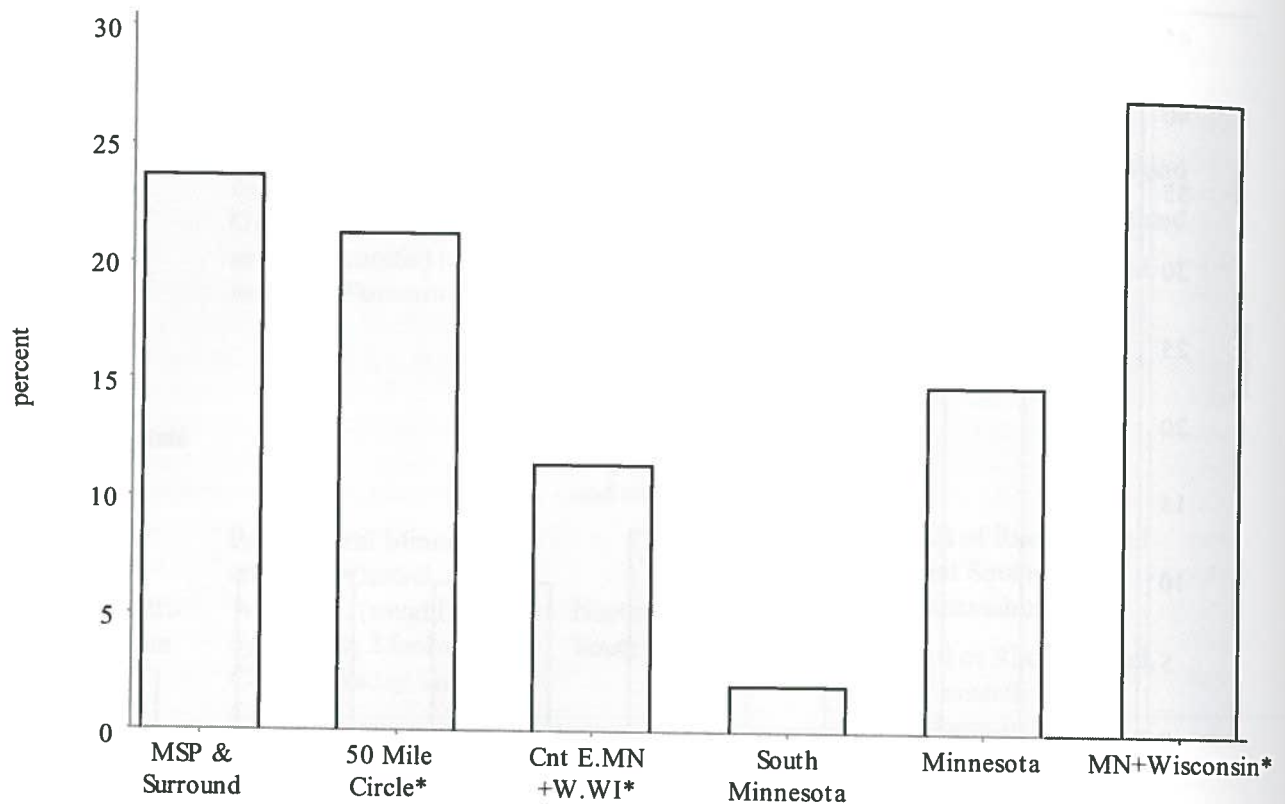


Figure 2. Minnesota. When Selecting Fresh Fruits and Vegetables, Which of the Regions Most Closely Signifies Locally Grown to You?

* indicates category extends beyond state boundaries.

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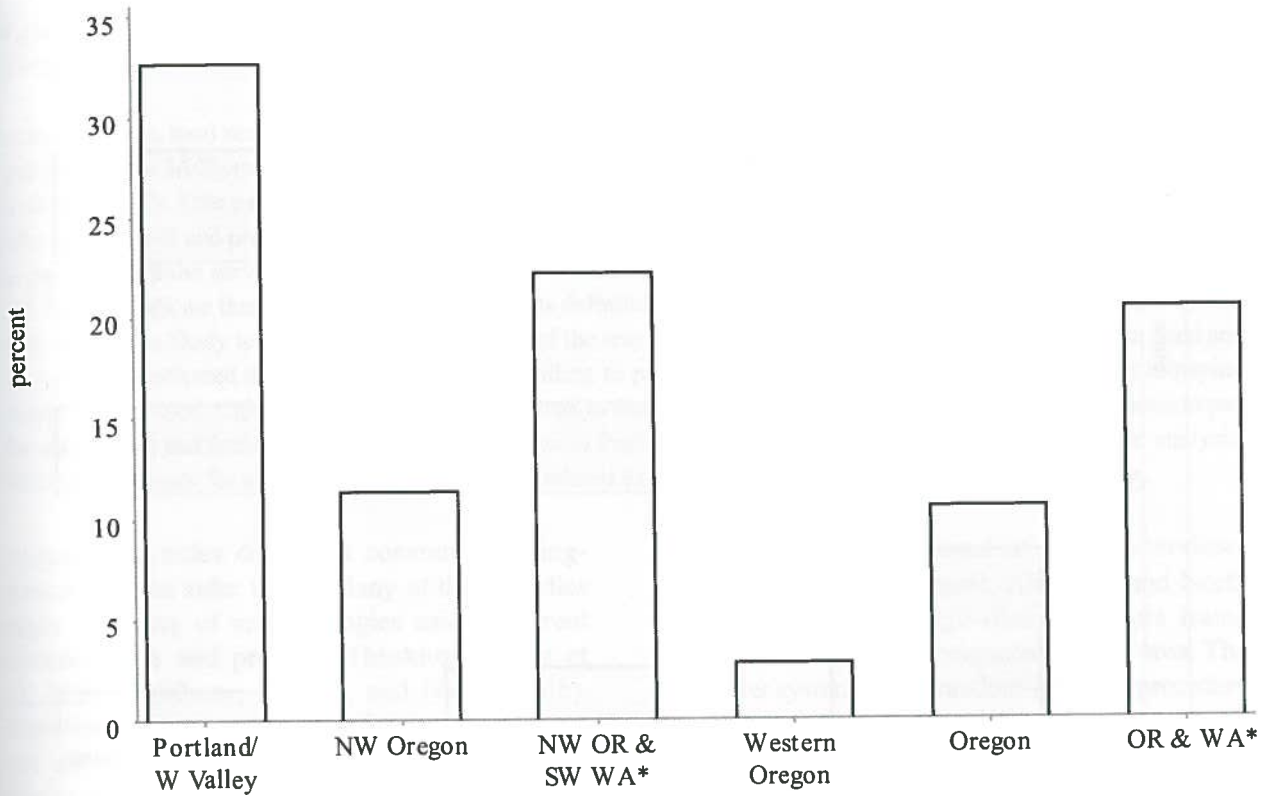


Figure 3. Oregon/Washington. When Selecting Fresh Fruits and Vegetables, Which of the Regions Most Closely Signifies Locally Grown to You?

* indicates category extends beyond state boundaries.

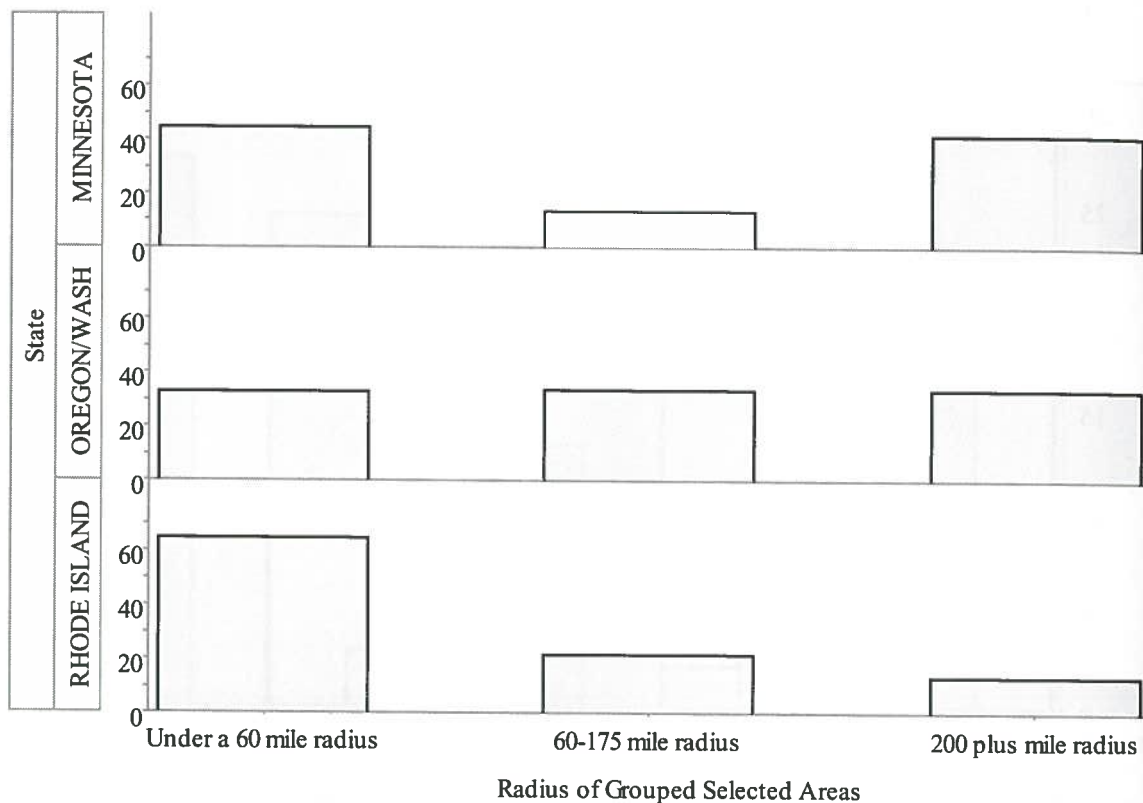


Figure 4. Regional Comparison. When Selecting Fresh Fruits and Vegetables, Which of the Regions Most Closely Signifies Locally Grown to You?