

IOWA FOOD *Security, Insecurity, AND Hunger*

Rural Food Access Patterns: **Elderly Open-Country and In-Town Residents**



Grocery store consolidation over the past two decades has resulted in the loss of many rural small town grocery stores. In 1976 Iowa had 1,920 grocery stores; in 2000 there were 911 (Stone and Artz 2001). This is more than a 50 percent loss of stores over a 25-year period. Although there are important economic reasons that grocery stores are closing and concentrating in rural hub towns, little research has examined the impact on rural residents.

Loss of rural grocery stores

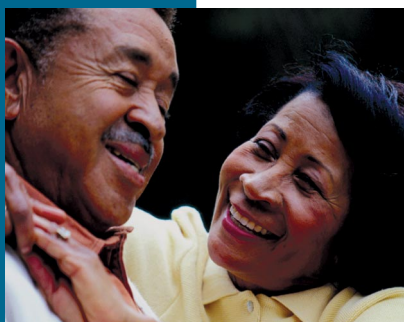
The loss of local grocery stores increases the distances that rural open-country and in-town residents must drive to obtain food. This is of particular concern to rural elderly, as their mobility and social support system may diminish with the out-migration of younger family members.



The Iowa State University Food in Your Community project¹ examines how rural households in two high poverty Iowa counties access food for daily living. Sixteen percent of rural open-country compared to 11 percent of in-town residents regularly shop for food out-of-county at super centers, and discount and wholesale food stores. In these two counties, 97 percent of rural residents have their own source of transportation for regular trips to the grocery store. However, 11 percent of people 70 years and older depend on others for transportation to a grocery store.

Travel to grocery stores

Travel to work and transportation patterns² are strongly associated with consumer shopping patterns. In rural areas, where public transportation is limited or non-existent, one would expect that most residents would have their own vehicles. This suggests that grocery store consolidation is not a big issue for the general rural population since rural residents already drive to work locations. However, a closer look at food access and



transportation patterns reveals distinct differences among rural populations.

Rural open-country versus in-town

Table 1 compares food access patterns of rural residents in two Iowa counties. A greater proportion of in-town residents (26.6 percent) have an annual income of \$15,000 or less compared with their open-country neighbors (16.6 percent). Further, more people 70 years and older live in town (31.9 percent) than live in the open country (22.7 percent). In addition, more in-town residents (24.1 percent) than open-country residents (14.3 percent) receive food assistance.³

Rural food shopping patterns differ by age and location. As the rural population continues to age in place, the proportion of elderly who need others to get to a food store will increase. This community problem will require coordination among government, voluntary organizations, private businesses, and individuals.

Open-country residents shop at more stores for groceries, report less easy access to the grocery store, shop out-of-county more often at superstores or wholesale/discount stores, travel farther to reach the grocery store, and are more likely to use their own vehicle than in-town residents.

Rural elderly, age 70 and older

The majority of all residents (97 percent) have independent access to their regular grocery store. However, 11 percent of those 70 years and older depend on others to get to the grocery store (table 2). Rural elderly food access patterns differ significantly in other areas as well. Residents who are 70 and older are more likely to shop within the county for their groceries (94 percent) and shop fewer grocery stores (1.8) than

Iowa State University Extension, the Iowa Nutrition Network, and the Iowa Department of Public Health present this policy brief

- to increase understanding about the status of food insecurity and hunger among Iowa families, and
- to suggest specific action steps to help Iowa families and communities become more food secure.

residents who are younger than 70 (2.1 stores). Rural elderly on average have lower incomes but are less likely to have ever received food assistance than people younger than 70. In Iowa 8.8 percent of eligible older Iowans (130 percent Federal Poverty Level or below) in 2003 participated in food assistance. There are no significant differences between a person's age and the time traveled for groceries, frequency of shopping, or purchasing food from a convenience store.

Implications

Rural food shopping patterns differ by age and location (open-country and in-town). These variations have implications for food sufficiency and suggest economic development opportunities. Wooden et al. (2003), using the USDA Continuing Survey of Food Intakes by Individuals (CSFII) 1994-96 data, find that shopping for food once a month or less, use of food assistance, and income at or below 130 percent of the poverty threshold, predicted food insufficiency for both older men and women.

Many rural people 70 years and older depend on others for transportation to a grocery store. As the rural population continues to age in place, the proportion of elderly who need others to get to a food store will increase. This community problem will require coordination among government, voluntary organizations, private businesses, and individuals.

- Community leaders need to identify current transportation needs and strategies for increasing access to the normal food system (e.g., grocery stores) for rural residents.
- Community organizations, local government, and private businesses can work together to provide a cooperative system of needed transportation services.
- Employer policies might include flexible work schedules for family and friends to provide transportation to older relatives and friends.
- In the wake of retail consolidation, rural communities are urged to form connections with other willing agencies to ensure that the needs of all residents are being met.

Open-country residents are purchasing their household groceries out-of-county more often than those who live in town. Open-country residents have significantly higher incomes than in-town residents. Economic development strategies might include targeting higher income open-country residents with grocery store and farmers' market products that are high

Table 1. Rural Open-Country and In-Town Food Access Patterns

	Open-Country	In-Town
Number of stores regularly shopped	2.2 stores*	1.9 stores
Frequency of shopping at grocery store	Weekly	Weekly
Minutes traveled to regular grocery store	22.8 minutes*	14.9 minutes
Regularly shop out-of-county at discount/wholesale food stores	16%*	11%
Frequency of shopping for food at convenience store	Several times a year	Several times a year
Personal vehicle used to go to grocery store	97%*	95%
Age	55 years	57 years
Income	\$25,000-50,000*	15,000-35,000
Ever received food stamps	14%*	24%
Education	High school plus technical	High school plus technical

* Statistically significant differences between groups

Table 2. Rural Elderly Food Access Patterns

	Age 70 years+	Less than 70 years
Number of stores regularly shopped	1.8 stores*	2.1 stores
Minutes traveled to regular grocery store	16.6 minutes	18.3 minutes
Frequency of shopping at grocery store	Weekly	Weekly
Regularly shop out-of-county at discount/wholesale food stores	6%*	15%
Frequency of shopping for food at convenience store	Several times a year	Several times a year
Depend on others to get to grocery store	11%*	2%
Income	\$10,000-24,999*	\$25,000-50,000
Ever received food stamps	10%*	25%
Education	High school/GED*	High school plus technical

* Statistically significant differences between groups

quality and unique—making it worth driving to town to purchase such products.

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Notes

¹Two rural Iowa counties not adjacent to a metropolitan county with poverty rates above the overall state average and two grocery stores were selected for this study (see Morton et al. 2004 for methodology details). This project was funded by the Iowa Department of Health, ISU Extension Family Nutrition Program, and the USDA Food Stamp Program to assess the food environment of rural places with limited grocery stores. A total of 1,468 surveys were mailed

in Winter 2003 to a stratified random sample, 720 surveys were returned, three were returned void, and 272 were undeliverable or refused. The return rate was 60.1 percent.

²Office of Social and Economic Trend Analysis is available online, <http://www.seta.iastate.edu>.

³Food assistance formerly has been referred to as food stamps or the Food Stamp Program.

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Written by Lois Wright Morton, Ella Annette Bitto, Mary Jane Oakland, and Mary Sand, Departments of Sociology, and Food Science and Human Nutrition, Iowa State University, Ames, Iowa.

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