Waiting for Dinner

Elderly on the Waiting List for Home-Delivered Meals

Mary Anne Salmon, University of North Carolina School of Social Work
Jessalyn Gooden Bridges, Northwest Piedmont Area Agency on Aging

The home-delivered meals program, often called Meals-on-Wheels, is one of two nutrition services provided under the Title III-C Elderly Nutrition Program of the Older Americans Act. It is designed for people over 60 who are home-bound due to health and/or mobility problems. In most cases, the program provides one hot, nutritionally balanced meal per day, five days a week. Meals are designed to meet one-third of an adult’s recommended daily intake (RDI).

During this time of declining real-dollar federal funding, North Carolina has been hit by a hurricane/flooding disaster and by drastic budget shortfalls. As a result, there have been growing waiting lists for home-delivered meal programs as well as other health and human services in the state. North Carolina is not unique in this respect. The National Council on Aging reports that, nationally, over 40 percent of home-delivered meal providers have waiting lists [1]. However, there is little published research on the people who qualify for home-delivered meals but are relegated to a waiting list.

This policy brief uses data from a telephone survey of older adults on the waiting list for meals in one North Carolina Area Agency on Aging. The questions asked during the survey included the following:

1. Who are the people on the waiting list (demographics and functional status)?

2. How are they getting food now?

3. What are they eating, and what is their level of nutritional risk?

4. What happened to these people approximately six months after they were interviewed?

5. How are they different from those who began receiving meals directly after assessment?

The first four questions are addressed in separate sections of this report while the fifth is addressed, where relevant, in each of these sections. The final section touches on policy implications and local solutions to waiting list issues.

Determining Eligibility

Although Weimer [22] asserts that “severe or life-threatening” nutritional deficits are relatively rare among older adults in the United States, he also acknowledges that many elders are “at high risk of deficient intakes of some essential nutrients.” Inadequate intake of food is estimated to affect 37 to 40 percent of people 65 and older living in the community, and roughly 80 percent have diets that need improvement [23]. When this nutritional risk is untreated, it can lead to increased disability and morbidity [4, 5, 11, 13] and increased need for services, including costly institutionalization [13]. Since nutritional risk is high in the general older adult population [7, 19], it can be
expected to be even higher among those enrolling for meals [3, 17]. Because they are screened for eligibility before being placed on the waiting list, people in this population are, by loose definition, homebound and assessed as unable to prepare adequate meals for themselves. Although the program is not means-tested, it is targeted to those with the “greatest social and economic need,” in particular those who have low incomes or are members of ethnic minority groups [2]. All of these characteristics — being homebound, having functional limitations, being poor and being members of ethnic minority groups — have been associated in the literature with high nutritional risk and/or barriers to good nutritional practices [6, 7, 8, 10, 12, 15, 16, 18, 22].

Methods

North Carolina Area Agency on Aging Region I, where this study was conducted, is made up of urban Forsyth County (Winston-Salem) and the surrounding rural counties of Davie, Stokes, Surry and Yadkin. At the time of the study, all counties except Davie had a waiting list for home-delivered meals. Two trained interviewers administered a structured telephone survey. In all, 110 people were interviewed, representing 64 percent of those who were still on the waiting list when contacted. Further information on the methods used can be found in the final report for this project [14].

Who Are the People on the Waiting List?

Demographic Overview. The typical person on the waiting list for meals is a 77-year-old widowed white woman. Table 1 provides a demographic profile of waiting list members in comparison to two relevant groups — a sample of new clients who had begun receiving services in the year before the study was undertaken and a national sample of home-delivered meals participants [9]. As that table shows, waiting list members are not markedly different from program participants.

Ethnicity and Rurality. All three groups (waiting list, new Region I clients and national clients) show a proportion of African-Americans higher than that of the underlying elderly population, contradicting at least one study that shows African-Americans less likely to participate in home-delivered meal programs than white Americans [21]. In Area Agency on Aging Region I, the ethnic distribution is not typical of the state as a whole. All but one of the African-Americans interviewed in the study lived in Forsyth County where 18 percent of the older population is African-

![The typical person on the waiting list is a 77-year old widowed white woman.](image)

Table 1. Demographic comparison among Waiting List Respondents, New Home-Delivered Meals Clients in Region I in 2001 and National Home-Delivered Meals Clients.

<table>
<thead>
<tr>
<th></th>
<th>Waiting List Respondents</th>
<th>Region I</th>
<th>Nationala</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>77.0</td>
<td>79.0</td>
<td>78.0</td>
</tr>
<tr>
<td>Percent Women</td>
<td>75.4</td>
<td>71.4</td>
<td>70.0</td>
</tr>
<tr>
<td>Percent African-American</td>
<td>34.9</td>
<td>25.5</td>
<td>19.0</td>
</tr>
<tr>
<td>Living Alone</td>
<td>70.9</td>
<td>60.6</td>
<td>60.0</td>
</tr>
<tr>
<td>Married</td>
<td>16.0</td>
<td>26.6</td>
<td>26.0</td>
</tr>
<tr>
<td>Rural</td>
<td>24.8</td>
<td>44.1</td>
<td>16.0</td>
</tr>
<tr>
<td>At or Below Poverty</td>
<td>49.5</td>
<td>NAb</td>
<td>48.0</td>
</tr>
</tbody>
</table>

a Estimates taken from [9], Table 1, p. 236. b Data were not collected.
American. Fewer than 5 percent of older adults in each of the surrounding rural counties are of African-American heritage. Forsyth has, by far, the largest waiting list. As a result, urban people and African-Americans are over-represented on the waiting list just by virtue of living in that county. Rural people are underrepresented not only because the rural counties have shorter waiting lists but also because some people who need the service live in remote areas that are not close enough to meal distribution points. Thus, they are never put on the list.

**Living arrangements.** Those on the waiting list are less likely to be married and more likely to be living alone, which reflects the greater number of urban dwellers on the waiting list. Living arrangements are not statistically related to their ethnicity or their ability to complete ordinary daily activities for themselves (functional status).

**Functional Status.** Interviewers asked about nine potential impairments — the standard five Activities of Daily Living (ADLs): bathing, dressing, feeding oneself, transferring from bed to chair and using the toilet; three Instrumental Activities of Daily Living (IADLs): taking medications, paying bills and doing housework; and one mobility item: the ability to walk around inside the house.

If we consider a person to have an impairment only if he or she needs help from another person (not equipment alone) to perform this activity, members of the waiting list have an average of 1.75 impairments, with the most common being housework, paying bills and bathing. This appears to be reasonable for candidates in that they are sufficiently impaired and in need of the service, yet they are functioning well enough to continue living at home with some help. However, 21.1 percent reported that they had no impairments that require the help of another person. By the end of the project, three-fourths of the people who reported no impairment were, in fact, found to be ineligible for the service. Some perspective clients had acute conditions that necessitated help at the time they were put on the waiting list (e.g., fractures, surgery) from which they had recovered by the time of the interview. A few were the result of errors in screening, which led to inclusion on the waiting list when they might have been better served by congregate meals or transportation to shopping. In the remaining cases, it is strongly suggested by the providers that potential clients exaggerated their abilities about functional loss either from pride or denial.

Differences in the wording of questions asked of newly-served clients and those asked of new Region I home-delivered meals clients make comparisons of their functional status imperfect. However, it would appear that the new clients were more likely to have mobility and ADL impairments, particularly in getting dressed, transferring from bed to chair and walking around inside the house. These functional differences suggest that some informal triage may be taking place in assigning people to the waiting list.

Despite a relatively high level of independent functioning, people on the waiting list suffered from a variety of serious chronic illnesses: 37.1 percent of the respondents had diabetes, 22.6 percent had high blood pressure, and the same number of people either had a heart condition or reported that they were recovering from a heart attack. Smaller numbers reported a range of other conditions including stroke, cancer, AIDS and kidney disease requiring dialysis.
How Are They Getting Food Now?

Self-Help. About 45 percent of those on the waiting list were able to have some of their nutritional needs met within their household, either by preparing food themselves or having it done by a person who lived in the household with them. Nearly 24 percent (26 people) said that they could cook or shop for themselves, which would make them ineligible for home-delivered meals. There is evidence that nine of these people were really ineligible. However, as in the case of functional status, local providers warn that clients and potential clients often overstate what they can do for themselves out of pride, and that the meals they can “cook” for themselves often consist of such foods as cereal, sandwiches and cheese on crackers.

Information on respondents’ food consumption on the previous day bears this out at least in part. Of the 11 people who said they could prepare meals on their own, three ate no cooked meals, four ate meals that they happened to tell us were prepared by someone else, and four ate meals that they possibly prepared for themselves.

About 22 percent of respondents said someone who lived with them did some cooking, shopping or both. Of these, more than one-third (37 percent) said that person did all of their shopping, and 30 percent said that person did all of their cooking. (Note that this refers to all the shopping and cooking that occurs, not necessarily all that respondents might need.)

Another theoretical form of self-help, at least in urban areas, would be to order food from a restaurant or have groceries delivered from a store. In general, these strategies are not used. Only four people reported restaurant deliveries, and only two people ordered groceries.

Informal Supports. In addition to help in the home, we asked about a variety of external sources of food, whether prepared meals or groceries. As Table 2 shows, the most widely used resources are family and friends bringing in prepared meals (70 percent) and groceries (65.4 percent).

On average, respondents who received prepared meals from loved ones received 3.2 meals per week, while those who got groceries averaged enough for 15.8 meals per week, although the median is considerably lower in each case. Half of the respondents say they are sometimes taken to a restaurant or a family member’s home for dinner, but as we would expect, given that these respondents are homebound by their provider’s assessment, they do not go out often. The mean frequency of these trips is once every two weeks, but the median is slightly less than once a month.

There were 10 people (8.9 percent) who did not receive whole meals, groceries or the help of someone coming to cook for them. Seven of these, four of whom lived alone, did not receive help from any external sources. This is a small but very vulnerable group of people who may face the choice between residential care and real hunger.

<table>
<thead>
<tr>
<th>Source</th>
<th>n</th>
<th>%</th>
<th>Mean Meals per Week</th>
<th>Median Meals per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Someone brings meals (home-made or from restaurants)</td>
<td>77</td>
<td>70.0</td>
<td>3.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Someone takes Respondent to dinner at their home or in a restaurant</td>
<td>72</td>
<td>65.4</td>
<td>15.8</td>
<td>9.0</td>
</tr>
<tr>
<td>Someone brings treats (sweets and/or snack items)</td>
<td>55</td>
<td>50.0</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Someone brings garden produce</td>
<td>50</td>
<td>45.4</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Someone comes to the house to cook meals</td>
<td>30</td>
<td>27.3</td>
<td>6.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Restaurants deliver meals (or delivery arranged)</td>
<td>23</td>
<td>20.9</td>
<td>5.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Store delivers groceries</td>
<td>4</td>
<td>3.6</td>
<td>0.9</td>
<td>7.9</td>
</tr>
<tr>
<td>At or below poverty</td>
<td>2</td>
<td>1.8</td>
<td>Cannot be calculated from data</td>
<td></td>
</tr>
</tbody>
</table>
Who Provides Informal Assistance?

As Table 3 shows, the respondents’ children are the most frequent providers of prepared meals, groceries, treats, cooking at the respondent’s home and taking the respondent out for a meal. Garden produce, by contrast, is most often provided by friends and neighbors, followed by siblings. This may reflect a cohort change in that people of the respondents’ own generation may be more likely to keep a garden than the younger generations. Members of the respondents’ churches provide about 10 percent of treats, but less than 10 percent of other assistance and no groceries.

Respondent Contributions. Among respondents who received groceries, most (73.9 percent) said that they paid for them, while 15.9 percent said the groceries were a gift or favor, and 10.1 percent said that they paid sometimes but also received gifts of groceries. Whether or not the respondents paid varied according to who brought the groceries. They always paid when a distant relative or paid caregiver brought groceries, usually paid when the provider was a friend or neighbor (87.5 percent) or a child (76.9 percent), and were about equally likely to pay or receive groceries as a gift from a sibling (42.9 percent) or niece or nephew (50 percent).

Because some respondents had more than one family member who sometimes came to cook for them, 29 people came to an older person’s home to cook for 24 of the respondents. Of these cooks, 37.9 percent bring the food they cook with them, while 62.1 percent cook food the respondent has on hand.

Amount of Food Received from Informal Providers. Given that people on the waiting list are not taken out to dinner frequently, that garden produce is seasonal, and that neither produce nor treats usually make up a meal, the three major sources of meals for people on the waiting list are prepared meals, groceries brought by someone not living in the respondent’s home, or meals prepared in the respondent’s home by someone who does not live there. Table 4 shows the mean and median number of meals provided from these sources combined for people receiving food from some or all three of these sources. As this table shows, those people who cannot provide for their needs at home are receiving enough food for about two meals per day, those who have someone at home to

<table>
<thead>
<tr>
<th>Type of Assistance</th>
<th>Child</th>
<th>Sibling</th>
<th>Other Relative</th>
<th>Friend or Neighbor</th>
<th>Church</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brings prepared meals</td>
<td>44.2</td>
<td>16.9</td>
<td>20.8</td>
<td>6.5</td>
<td>7.8</td>
<td>3.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Groceries</td>
<td>57.1</td>
<td>10.0</td>
<td>17.1</td>
<td>11.4</td>
<td>0.0</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Takes Respondent Out</td>
<td>47.3</td>
<td>16.4</td>
<td>14.5</td>
<td>18.2</td>
<td>1.8</td>
<td>1.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Treats</td>
<td>26.0</td>
<td>14.0</td>
<td>14.0</td>
<td>34.0</td>
<td>10.0</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Garden Produce</td>
<td>6.7</td>
<td>23.3</td>
<td>13.3</td>
<td>40.0</td>
<td>7.0</td>
<td>10.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Cooks in Respondent’s Home</td>
<td>26.1</td>
<td>21.7</td>
<td>21.7</td>
<td>4.3</td>
<td>8.7</td>
<td>17.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 3. Relationship of Primary Informal Provider to Respondent for Each Type of Food Assistance.

Table 4. Meals per Week Provided from Meals Brought In, Groceries Brought In, and Someone Coming In to Cook for Respondent.

<table>
<thead>
<tr>
<th>Meals per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
</tr>
<tr>
<td>People who cannot cook or shop for themselves and have no one living with them who can help</td>
</tr>
<tr>
<td>People who can cook and/or shop with help</td>
</tr>
<tr>
<td>People who can cook and/or shop without help</td>
</tr>
<tr>
<td>People who have someone living with them who helps with cooking, shopping or both</td>
</tr>
<tr>
<td>Total (all people receiving food from any of these three sources)</td>
</tr>
</tbody>
</table>

*Does not sum to 100 percent due to rounding.*
help receive about four meals a week, and those who can cook and shop for themselves (at whatever level) receive about two meals a week from these sources.

**Rural Urban Differences in Ways of Receiving Food.** There are no significant differences among rural and urban respondents in any of the eight ways that people report receiving food, including receiving garden produce. Although more rural dwellers in the sample received garden produce from friends and family (34.6 percent compared to 25.3 percent of urban dwellers), the difference is not significant at this sample size.

Rural residence is also unrelated to the total amount of food received from outside the home. A linear regression equation to predict the amount of food received was estimated. The number of impairments the respondent had and the number of different ways he or she received food were modest but significant predictors of receiving more meals, while marriage predicted significantly fewer meals from outside the home. Neither ethnicity, age nor rural residence was significant. The overall model is significant, although its explanatory power is modest, which means that these variables together explain less than 16 percent of the variance in the amount of food received.

**Food Security.** The most often used type of food security in research is the financial ability to buy food. More than half of the respondents say that they do not always have enough money (or food stamps) to buy food. There is no significant difference in the prevalence of this measure of insecurity among those whose incomes are below the poverty line and those whose are above.

A second form of food security lies in having multiple sources of food in case

---

**Figure 1. In Their Own Words**

**Question:** Suppose a friend or neighbor of yours needed help with meals and they got put on the waiting list today. If this person called you and asked you how to get by while they were waiting, what advice would you give them?

- “Family is supposed to take care of one another if they live around each other.”
- “A lot of families help each other, but some of them don’t.”
- “I tell them to get by by making sacrifices, you know, buying food that they could ahhh . . . that could last longer than others, and eat food for another meal. Some people don’t like leftovers, but if they don’t have anything left you can make a good meal. That’s what I do.”
- “Get food to heat in the microwave so they wouldn’t have to work nearly as hard to prepare a meal.”
- “Well, you just gotta do the best you can . . . Do what you gotta do to get by. It’s not always easy to get by, though.”

---

**Figure 2. Sample Menus**

**Example 1** (eaten throughout the day)
- four or five pimento-and-cheese sandwiches
- Diet 7-Up™

**Example 2**
- **Breakfast:** cooked grits (three big spoonfuls raw), tsp. of butter
- **Lunch:** none
- **Dinner:** Shared one big can (15 ounces) of pork & beans with wife (some still left), two boiled chicken wings, one slice white bread

**Example 3**
- **Breakfast:** none
- **Lunch:** one bologna sandwich (one slice bologna, one tablespoon mayonnaise on white bread), an eight-ounce glass of buttermilk, two snack-size Milky Way bars, four sugar cookies
- **Dinner:** a can of Vienna sausages, six saltine crackers, one eight-ounce glass of regular Coke™, one tall cup of coffee (black), a mayonnaise sandwich (two tablespoons of mayonnaise on two slices of white bread)

*Note: These menus, recalled by three different participants, have been deliberately chosen from among those at the poor end of the nutritional scale, but they are not necessarily the worst and certainly not the only such examples.*
something happens to one source. Of the eight sources of help from family and friends, the median number of sources each person uses is three. Only a little more than one-third of respondents had two or more providers for any of the three primary sources of meals or groceries delivered or cooked in the respondent’s home (37.7 percent, n = 106).

Public Programs. A third form of security is the “safety net” provided by public services to people in need of food. As a group, older adults underuse these programs [20], and those who are on the waiting list for home-delivered meals are no exception. Only 18 respondents (16.4 percent of all respondents and 26.1 percent of respondents living in poverty) said that they received food stamps. Given that almost a quarter of respondents pay for all of the groceries they receive, food stamps could be very useful, even though the problem of preparing food would remain.

Although very few people on the waiting list received food stamps, rural residents were more likely to receive them (26.9 percent, compared to 12.7). This has borderline significance with this number of participants, but it is suggestive.

Among those who reported poverty status, only 6.5 percent used commodities programs, and only 4.3 percent ever used a food pantry. Because these numbers are so small, rural-urban differences do not approach significance, but the direction is the same as for food stamps — rural residents are more likely to use these services.

What Are They Eating, And What Is Their Level of Nutritional Risk?

Risk Factors. As our key measure of nutritional risk, we used the NSI’s DETERMINE checklist, a nationally developed self-screening tool used in the intake process for nutrition clients in North Carolina and much of the country. Possible scores for nutritional risk on the NSI scale range from 0 to 21, with a score of 0 to 2 representing low risk, 3 to 5 representing moderate risk, and 6 or more representing high risk. By this measure, 96.3 percent of waiting-list clients were at high nutritional risk. Their mean NSI score was 9.9, with a median of 10. This is slightly higher than the level of nutritional risk exhibited among new Region I clients (82.3 percent at high risk; mean NSI scores 8.5; median 8).

Perhaps because risk factors are uniformly high, we were unable to find any significant model to predict differences in nutritional risk. Gender; age; ethnicity; marital status; number of impairments requiring assistance from another person; rural and small town residence; having no one in the home capable of cooking or shopping; the amount of food provided per week by people outside the home; and the number of types of assistance used were all tested as theoretical predictors. None were significant individually or in combination.

Types of Food Consumed. Based on a 24-hour recall of food and drink consumed, 34.3 percent of respondents had

<table>
<thead>
<tr>
<th>Status</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still on the waiting</td>
<td>45.0</td>
<td>40.9</td>
</tr>
<tr>
<td>Now receiving meals</td>
<td>25.0</td>
<td>22.7</td>
</tr>
<tr>
<td>Neither receiving meals nor on the waiting list; reason unknown</td>
<td>14.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Removed from list/removed self, no longer needed meals</td>
<td>11.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Began receiving meals, but has since discontinued them</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Not eligible</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Receives congregate meals</td>
<td>3.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Receives in-home services</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Died while on waiting list</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Moved out of the county</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Moved to retirement home that has meals</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Refused meals when offered</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>110.0</td>
<td>98.8*</td>
</tr>
</tbody>
</table>

*Does not sum to 100 percent due to rounding.
consumed no fruit or fruit juice the day before the interview, and 41.2 percent had consumed no nonstarchy vegetables. In fact, 14.1 percent had consumed no fruits or vegetables at all. Over 40 percent (42.6) had consumed no milk or calcium-rich products. Thirty percent drank fewer than eight eight-ounce glasses of water per day, with about 44 percent of those (13.2 percent of respondents) saying that they had not consumed any.

Coffee and/or sodas were the drinks of choice for most people.

What Has Happened to These People Since We Interviewed Them?

As shown in Table 5, over 40 percent of the people to whom we spoke were still on the waiting list in September 2002, although the bulk of the interviews were completed between January and April of that year. More than 20 percent were receiving meals. Most of the rest had found an alternative service or no longer needed the meals. Fourteen (12.7 percent) are neither on the waiting list nor receiving meals, and the providers do not know what happened to them. It is possible that their need changed in either a positive direction (e.g., they were able to prepare meals for themselves or had additional help) or a negative one (death or placement in a facility).

In at least four rural cases and two urban ones, people were waiting because providers are trying unsuccessfully to establish a delivery route in the area of that person’s home. This usually occurs when the person lives in an isolated area. Either there is no volunteer willing to drive such a route, or the people live so far from the meal site that the ordinary means of keeping meals within the temperatures dictated by the health guidelines of the program are not adequate for safety.

Policy Implications

These findings represent the best knowledge currently available about the people who are on the waiting list for home-delivered meals. Although generalization should be made cautiously because they represent only a single region in North Carolina, they raise several policy issues for consideration.

While waiting-list members are following their own advice to “just do the best you can to get by,” it is clear that they are at high nutritional risk as measured by the NSI checklist. Their families and friends are real resources (though limited), bringing them meals and groceries and, less often, cooking for them in their homes. A substantial majority have only one family member or friend providing whatever type of food assistance they are receiving. It is not known how many have another person who could step in and help if the family member now helping were to become unable to continue. There are few, if any, differences between rural and urban elders or between African-American and white elders in either their level of nutritional risk or the amount and kind of help they receive from family and friends. Waiting list members generally are not being served by other public food programs, even if their income is below the poverty level, and more than half say they do not always have enough money to buy food.

Our study showed a few errors in the initial screening, which might be improved by better training for intake workers about alternative services. They could be enabled to give referrals directly or encouraged to refer people in need to local information and assistance providers. It was clear, for example, in the course of several interviews that the respondents would have benefited from congregate nutrition programs if transportation were available. However, in most cases respondents were in need of meals and unable to participate in programs outside of their homes.

Although increased funding for the home-delivered meals program is needed, it is unlikely in the current climate of

All three groups show a proportion of African-Americans higher than that of the underlying elderly population, contradicting at least one study that shows African-Americans less likely to participate in home-delivered meal programs than white Americans.

41.2 percent of the respondents had consumed no nonstarchy vegetables. In fact, 14.1 percent had consumed no fruits or vegetables at all.
budget deficit and political resistance to spending for health and human services. Given this constraint, particular attention must be focused on identifying and finding alternative solutions for those who have a weak or nonexistent social support network and thus do not have anyone bringing them meals or groceries at regular intervals. Otherwise, these people are extremely likely to suffer worsening health or functional ability and be placed in residential settings at much greater public cost.

Alternative arrangements would also seem appropriate for those who have short-term needs because of an acute episode such as a fracture. When local providers are in a waiting list situation, it may not be appropriate for one program to serve both those with chronic and acute needs. An alternative program would increase the likelihood that people with acute needs would receive meals while they were still relevant and reduce the length of the wait for people who have chronic needs for home-delivered meals.

Currently, individual local providers in North Carolina are trying to address the needs of people who do not live on a meal route, as well as those on the waiting list. They are using a variety of strategies, including providing infrequent bulk deliveries of frozen or shelf-stable meals or liquid nutritional supplements. Some have raised money to have packages of nutritionally balanced no-cook foods shipped by commercial providers. In at least one county, faith communities have organized Saturday morning work sessions to prepare a variety of homemade dishes that are then frozen in trays provided by the home-delivered meals programs. Assortments of these meals are delivered by the faith community to people with acute health problems. A few meal programs in North Carolina have used private funds and grants to purchase trucks with heated and refrigerated tray spaces. These trucks keep meals at a safe temperature while they are delivered to remote areas for distribution. A combination of these creative local solutions and informed state and federal responses to the waiting list problem can help assure that people are able to receive healthy meals when they are no longer able to shop and cook for themselves, and to continue living at home as they wish.

References
Although increased funding for the home-delivered meals program is needed, it is unlikely in the current climate of budget deficit and political resistance to spending for health and human services.


About the Author
Mary Anne P. Salmon, Ph.D. is a research specialist in the CARES program of the Jordan Institute for Families and clinical associate professor at the School of Social Work, University of North Carolina at Chapel Hill.

Jessalyn G. Bridges, MS (gerontology) is an aging program specialist at the Northwest Piedmont Area Agency on Aging.

Acknowledgements
This research was funded through Grant Number 018000 320935 02 of the USDA’s Food Assistance and Nutrition Research Program through the Southern Rural Development Center at Mississippi State University. Special thanks to Dean Burgess, Director of Northwest Piedmont AAA, who inspired this research; Rhoda Silver, MSW, for her patience and experience in interviewing older adults; Robin Gilliam, MSW, for her tireless library research; and Margaret Morse, PhD, for the generous gift of her time to review and make comments on this brief.
A PUBLICATION OF THE
SOUTHERN RURAL DEVELOPMENT CENTER
Box 9656
Mississippi State, MS 39762
Phone: (662) 325-3207
Fax: (662) 325-8915
http://srdc.msstate.edu

FOR MORE INFORMATION, CONTACT:
Lionel J. “Bo” Beaulieu, Director
ljb@srdc.msstate.edu

Emily Elliott Shaw, Program Manager
emilye@srdc.msstate.edu

The Southern Rural Development Center does not discriminate on the basis of race, color, religion, national origin, sex, age, disability or veteran status.