The importance of mealtime companionship and social interaction to improvements of food consumption, nutritional status, and morale in the elderly have been stressed, but the research supporting this concept is minimal. To determine the relationship between mealtime companionship and morale, a representative group of rural adults (N=418) aged 65 years or older completed questionnaires. Possible significant differences in the morale of older adults who usually ate alone versus those who ate with others were analyzed using multiple regression techniques. When marital status, educational level, sex, and self-rated health were controlled, the data showed that mealtime companionship was of no relative importance to the morale of older adults. The data supported the greater importance of physical health to psychological health over social factors such as marital status, educational background, sex, and social contact. This observation suggests that efforts to alleviate problems associated with social isolation among the rural elderly should include viable health components that address the multiplicity of their health needs. (Author/WAS)
MEALTIME COMPANIONSHIP AND MORALE
IN THE RURAL ELDERLY

James D. Kinard
Vira R. Kivett

Mealtime Companionship and Morale in the Rural Elderly

James D. Kinard, M.S.  
Vira R. Kivett, Ph.D.

The importance of mealtime companionship and social interaction to improvements of food consumption, nutritional status, and morale in the elderly have been stressed but the research supporting this concept is minimal. The present study determined the relationship between mealtime companionship and morale among a representative group of 418 rural adults aged 65 years or older. Multiple regression analysis was used to determine if there were significant differences in the morale of older adults who usually ate alone versus those who ate with others. Controls were held on marital status, educational level, sex, and self-rated health. The data showed that mealtime companionship was of no relative importance to the morale of older adults when other variables were considered, especially health. The data supported the literature with regard to the greater importance of health to psychological well-being than social factors such as marital status, educational background, sex, and social contact, per se. This observation suggests that any efforts to alleviate problems associated with social isolation among the rural elderly should include, more importantly, viable health components that address the multiplicity of their health needs.

1Paper presented at the 35th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA., November, 1982. Research supported by the Science and Education Administration/Cooperative Research, United States Department of Agriculture, Washington, D.C., 20250; and The School of Home Economics, The University of North Carolina at Greensboro, 27412.

2Doctoral Student, Department of Foods, Nutrition, and Food Service Management, School of Home Economics, University of North Carolina at Greensboro, 27412.

3Associate Professor, Department of Child Development and Family Relations, University of North Carolina at Greensboro, 27412.
Physical, psychological, and social factors may combine to put the elderly at risk for a number of diet or nutritionally related health problems. Often overlooked in the evaluation of the nutritional status of the elderly are the social and psychological parameters that affect food intake. Eating serves as an important psychosocial activity in addition to its importance in fulfilling physiological requirements. Social interaction during mealtimes may affect such psychosocial variables as morale or other important dimensions of well-being which in turn have implications for nutrition. The importance of eating with others and social interaction to improvements in food consumption, nutritional status, and morale in the elderly has been stressed but the research supporting this concept is minimal. The present study was designed to investigate the relationship between mealtime companionship and morale among a representative group of 418 rural adults aged 65 years or older. This information is particularly relevant for persons planning programs or strategies designed to improve the food consumption patterns, nutritional status, and overall health of the elderly.

Variables Associated with Morale

Much research has evolved around the factors contributing to subjective well-being in later life. A number of variables have been found to be associated with morale, life satisfaction, and similar constructs (Larson, 1978). Some problems result, however, when comparing the results of previous studies due to differences in sample characteristics and differences in instruments used to assess various measures of affect.

Health. Of all variables associated with subjective well-being, health appears to be the most consistently and highly correlated. Self-rated health
measures generally have been found to correlate with subjective well-being in the range of .20 to .50 (Larson, 1978). Studies using physicians' ratings of health, while providing the most objective but not always the most accurate assessment of a person's condition, correlate significantly with subjective well-being but at a lower level than self-rated health (Larson, 1978).

**Marital status.** In general, married older adults show higher scores on measures of subjective well-being than unmarried populations (Larson, 1978). Typically, however, correlations have been low (Larson, 1978). Research on the comparisons of the subjective well-being in married vs. never married single groups shows few differences between the two populations whereas widowed, divorced, or separated groups tend to have lower self-reported scores than married or single groups (Larson, 1978).

**Socioeconomic status.** Education, occupational status, and income, all components of socioeconomic status, have been found to be related to a number of measures of psychological well-being. Persons of lower socioeconomic status generally have been found to have lower measures of subjective well-being than persons of higher status (Larson, 1978). George and Bearon (1980), pointed out the limitations in using conventional conceptualizations of socioeconomic status in research using older adults. They cautioned that occupational prestige and formal educational attainment tell us much less about older people than about younger adults.

**Sex.** Studies have varied somewhat with regard to the influence of sex on subjective well-being. In the main, where these associations have occurred, they have been slight and infrequent. As a result, it is generally concluded that there are no consistent sex differences in well-being for older adults (Larson, 1978).
Social Interaction. In general, measures of social activity are found to have a positive relationship with measures of subjective well-being (Larson, 1978). This relationship, however, may vary according to type of measures employed. Global measures of social activity usually show a positive relationship to subjective well-being whereas more specific measures of social activity show less conclusive relationships to well-being (Larson, 1978).

Differences in the relationship between formal activity and well-being have been observed for rural and urban groups. For nonurban populations, church related activity is associated with well-being whereas in urban populations the relationship does not appear (Larson, 1978). Associations between measures of social activity and well-being tend to be weaker for persons of higher socioeconomic status and for persons in good health (Kivett, 1982).

Differences exist in the relationship between social interaction and well-being depending on whether the type of social activity is formal or informal. There appears to be more support for the relationship between subjective well-being and informal activity than for formal activity (Kivett, 1982).

Perceived adequacy of interaction (relative to the level of interaction in earlier life or available time for interaction in later years) may be an important mediator between the level of social activity and well-being (Kivett, 1982). Liang, Dvorkin, Kahanà, and Mazian (1980) suggest that objective social integration, such as the amount of interaction, is related to morale, more importantly, through one's subjective sense of integration. Liang et al. (1980), controlled on such factors as financial satisfaction, socioeconomic status, and health status and found that subjective interaction has a direct effect on morale whereas objective interaction has an indirect effect, mediated through subjective interaction. From this it can be concluded...
that it is the adequacy with which interaction is perceived rather than the actual level of activity that is important to psychological well-being.

Numerous other variables have been examined to determine their relationship to subjective well-being. These accounts are well documented in Larson (1978). Additional information on the measurement of quality of life factors may be obtained in a comprehensive overview by George and Bearon (1980).

In summary, subjective well-being and its correlates have been a frequently researched area. Studies show health-related factors to be more important to well-being than other variables. Considerable inconsistency in findings may be observed for other factors. One open question is the extent to which social interaction or participation in social activities influences the psychological well-being of older adults.

The Social Aspects of Mealtime

Mealtime may serve as an important social event especially in the elderly population. There is little available information to show if the lack of social interaction during mealtime leads to lower subjective well-being among older adults. This observation may have important implications for eating patterns and, subsequently, nutrition in the later years. A paucity of studies have attempted to look at the relationship between social interaction and nutrition.

Learner and Kivett (1981), after looking at the factors associated with the adequacy with which older rural adults perceived their diets, concluded that psychological well-being is important to "improving the quality of older adults' nutrition" (p. 336). Davis and Randall (1981) mentioned the importance
of social interaction and integration because these variables link food habits with such psychosocial factors as morale, well-being, loneliness, and anxiety. They suggested that interest in food is stimulated when people eat together, and thus, an increased likelihood of adequate nutrient intake exists with mealtime companionship. Hanson (1978) concluded that the socialization processes of eating are important to the well-being of the elderly because older adults are often socially isolated and value interaction with others. Similarly, Weg (1978) reported that eating serves a social function as well as a physiological function and that social isolation especially in the poor contributes to dietary inadequacy and lack of interest in food.

Other studies have shown the importance of mealtime companionship to diet and well-being. A study conducted in New York City of 174 elderly individuals found that 46% of those who had mealtime companionship were rated as having good diets whereas only 36% of those who ate alone were rated as having good diets (Schwartz, Henley, & Zeitz, 1964). Todhunter (1976), from a sample of 529 urban and rural older adults, found companionship to be the most important factor during mealtime for 41% of the white females. The finding varied, however, according to sex and race. Companionship was the most important factor at mealtime for 34% of the white males, 27% of the black males, and 25% of the black females in the study.

Physiological differences have been observed to occur according to mealtime companionship. Templeton (1978) found that widowed persons and those who lived alone (who often consumed meals alone) were more likely to be underweight. The diet of 72% of those underweight was found to be inadequate in one or more of the nutrients studied. Howell and Loeb (1969) suggested that many social scientists and nutritionists believe there is a relationship...
between digestive processes and companionship and that nutritional status may be affected by loneliness. Swanson (1964) reported a case study of an elderly female whose nitrogen balance improved once she began eating meals in the company of others even though her protein and energy intake remained constant. In this individual it was evident that "Companionship and sharing of meals played a vital role in maintaining the nutrition of this subject" (p. 653).

The importance of social interaction at mealtime in the elderly is the premise upon which federally supported nutrition programs are based. The social emphasis in nutrition programs is thought to help individuals to accept the program and at the same time add to their improved well-being through social interaction (Sherwood, 1973). A number of researchers have addressed the psychosocial effects of these nutrition programs. Troll (1971) in her review "Eating and Aging" stressed that one of the major goals of any nutrition program should be to keep older people psychologically and socially active. Sherwood (1973) similarly stated that the social function of mealtime should be stressed in programs developed to improve the nutritional status of older Americans. Learner and Kivett (1981) suggested the importance of adequate levels of social interaction with family and friends to improve morale for those developing successful intervention programs designed at improving the nutrition and health status of older adults. Pelcovits (1972) in her review of the Research and Demonstration Nutrition Program funded under Title IV of the Older Americans Act found that participants in the program rated the social aspects of the program equally as important as the nutrition and food aspects of the program. Further, she found the group meals funded by the nutrition program to be a catalyst for involving the elderly in community and social activities. Similarly, Holmes (1972) studied the nutrition
demonstration projects funded by the Administration on Aging in New York and found that participants in the program showed a heightened morale and more positive feelings to social interaction and involvement.

In conclusion, limited information suggests the important intermediary role that social interaction may play in the relationship between psychological well-being and nutrition. Numerous nutrition programs are based upon this assumption, yet there is little evidence to show that older adults who have companionship during mealtime exhibit more positive feelings of well-being than those who do not. This study was an attempt to provide more information on the relationship between companionship at mealtime and feelings of well-being.

Methods

Sample. Secondary data analysis was performed on information obtained from a sample of 418 adults 65 to 99 years of age, who lived in a rural bypassed area in the Piedmont North Carolina Region (Kivett & Scott, 1979). Area cluster sampling techniques were used. Everyone 65 years or older residing within a selected area was administered a comprehensive questionnaire by a trained interviewer. Information on the questionnaire was relative to the physical, psychological, and social characteristics of the older adults. Interviews consisted of a 99-item questionnaire administered by a trained interviewer. Interviews generally required one hour to complete. The response rate was 92%. Of the original 418 adults, 34 were dropped from the present study because of incomplete information (adjusted N = 384).

Procedure

Multiple regression analysis was used to determine if there were significant differences in the morale of older adults who usually ate alone versus
those who ate with others. Controls were held on marital status, educational level, health, and sex. The major independent variable of interest, companionship versus no companionship was entered into the model following the control variables. Morale scores obtained by an adapted version of the Philadelphia Geriatric Center Morale Scale (Lawton, 1975), served as the dependent variable. The instrument is a three dimensional scale with an observed reliability of .81 in the present study. High scores on the scale represent high morale. The independent variables included in the model were marital status, educational level, sex, self-rated health and mealtime companionship. Mealtime companionship was assessed by the question, "Who usually eats with you at mealtime?" The original four categories: family, friends, other, and no one, were made into a two category dummy variable with eating alone being the referent variable, coded 0, and eating with others, coded 1. Marital status was assessed by the question, "Are you single, married, widowed, divorced or separated?" The original 5 categories were recategorized into three values, single, divorced, separated; married; and widowed. This variable was treated as a dummy variable with the widowed group being the referent.

Educational level was assessed by the question, "How many years of school did you complete?" Self-rated health was assessed by the use of the "Cantril Ladder" technique (Cantril, 1965). In this measure, respondents were shown a picture of a ladder and asked to suppose that the bottom rung (0) represented the most serious illness and the top of the ladder (9) represented perfect health. They were then asked to indicate where on the ladder that they felt their health was at the present time.

Zero-order correlations were conducted between all independent measures and the dependent variables. Chi-square contingency tests (2 x 2) were performed.
between eating companionship and problems with diet and between eating companionship and changes in food habits since age 50. Problems with diet were assessed through responses to the question "I'm going to mention some things that sometime give problems. How much do they trouble you -- never, sometimes, or often?" Fifteen areas were read to the respondent one of which was diet.

Changes in food habits were determined through the question "Do you eat the same foods as you did when you were 50 years old?" -- yes or no.

Results

The mean age for the sample was 73.4 years. They had a mean education of 7.0 years. Approximately 20% had completed 11 or more years of education. The respondents were predominately white (63%); all others were black (37%). Females constituted 47% of the group and males, 43%. Approximately 51% of the adults were married, 39% widowed, 7% never married, and 3% divorced or separated. About 20% of the respondents lived alone and 25% ate most meals alone. Most of the sample, 93%, were either retired or unemployed.

Most older adults reported one or more health problems. Despite the fact that the majority (68%) indicated that their health was either fair or poor, respondents (79%) generally said that their health concerns did not stand in their way. The most prevalent physical problem was arthritis (mentioned by 7 out of every 10 adults), followed by problems associated with the cardiovascular system such as high blood pressure, 50%, and circulation problems, 45%. Participants were asked if they ate the same foods that they did when they were 50 years old. Approximately two-thirds of the respondents replied that they had not changed their food habits. For those whose eating habits had changed, 43% were on a special diet. Other ways in which diets had changed were: less fatty foods, 14%; eat less, 10%; elimination of gas
forming foods, and high bulk foods, each less than 7%. Approximately 33% of the respondents indicated that changes in their diet had occurred for two or more reasons.

Results from the study showed that relatively few older adults had experienced changes in their diet since middle age and when this had occurred it had usually been precipitated by health problems. The observation of a relatively large percentage of married couples probably contributed to few changes in diet. It is thought that changes in meal patterns and diet commonly occur as a consequence of widowhood or living alone. The presence of a spouse frequently insures that earlier lifestyle patterns and routines will continue.

The results of the multiple regression analysis showed that mealtime companionship was of no relative importance to the morale of older adults when health, education, marital status, and sex were controlled (Table 1). Although a significant amount of variance was explained in morale scores by the model ($R^2 = .30, p < .001$), this was attributed to two control variables; education, and in the main, self-rated health. Morale was higher among older adults who rated their health more positively and among persons with higher educational levels. Marital status and sex were of no relative importance in their control function.

Table 2 shows the frequency with which diet presented a problem for older adults eating alone and eating with others. Respondents were asked, "How much does getting the "right kind" of diet give you problems—never, sometimes, or often?" As observed from the table, the majority of both
persons eating alone and eating with others, approximately 86%, indicated that they never had a problem with their diet. None eating alone reported problems with diet and 2% of those eating with others said that they had problems. For statistical purposes columns in Table 2 were collapsed into a 2 x 2 contingency table and a chi-square analysis was performed. The results showed no association between mealtime companionship and the extent to which older rural adults perceived problems with their diet.

[Table 2 about here]

From Table 3 it can be seen that similar proportions of older adults having a mealtime companion and those with no companion at mealtime reported no changes in food habits since age 50. The results of the chi square contingency test showed no relationship between the two variables. The majority of both groups had maintained earlier food habits.

[Table 3 about here]

Summary and Discussion

The present study investigated the relationship between mealtime companionship and morale among a representative group of 418 rural adults (adjusted N = 384), aged 65 to 99 years of age. Multiple regression analysis was used to determine if there were significant differences in the morale of older adults who usually ate alone versus those who ate with others. Controls were held on marital status, educational level, sex, and self-rated health. The data demonstrated that mealtime companionship was of no relative importance to the morale of older adults when other variables were considered, especially health. The results of chi square analyses showed that neither was mealtime companionship
associated with perceived problems with diet or with reported changes in diet since age 50.

The data from the present study indicated the relative infrequency with which older rural adults eat alone. The data suggested that in this rural area, the higher than usual percentage of married couples, contributed to the relatively low frequency with which older adults ate alone. Reports on ability to get around suggest that, despite numerous adults with physical problems and fair to poor health, the potential for social interaction, given transportation and related resources, was good. As a result, the lack of mealtime companionship may have been more than compensated for by interaction with family, friends, and neighbors. Consequently, morale was maintained.

Data from an earlier study utilizing the data base showed, for example, that 75% of the older adults with children saw at least one child daily, 44% visited with friends and neighbors at least once a week, 67% reported participating in organized activities two or more times monthly, and 44% reported talking on the phone with someone at least once a day (Kivett & Scott, 1979).

It would appear that mealtime companionship as a predictor of morale should not be taken out of context of the total social interaction experiences of older rural adults. Whether social stimulation during mealtime contributes to nutrition is another question unanswered by the present research.

Results from this study supported the literature with regard to the greater importance of health to psychological well-being than social factors such as marital status, sex, and social contact, per se. Lee, Johnson, and Lawler (1981) in a study of the elderly concluded that nutritional problems among the elderly are complicated by the presence of health conditions such as heart ailments or atherosclerosis. The overriding importance of health
to psychological well-being and nutritional status suggests that any efforts to alleviate problems associated with social isolation and nutrition among the elderly should include, more importantly, viable health components that address the multiplicity of their health needs. The provision of health services including both preventive and corrective strategies along with nutrition education, can serve to improve the overall health and morale of the elderly. The provision for improved health services can also provide opportunities for social interaction, reducing loneliness and isolation, and thereby reducing apprehension and anxiety. Comprehensive mobile health units for diagnosis and treatment of disease are useful in rural areas due to lack of local facilities and poor health that may limit mobility. Furthermore, expanded food programs in rural locations can help alleviate loneliness by systematically bringing the older individual into a social setting and improving general physical and mental health through improved nutrition.

There was strong evidence in the present study of the consistency of food habits over the middle and late years. It would appear that when changes occur, they are for reasons of health. Companionship during mealtime appears not to be a factor in changes in food habits. Furthermore, findings show that neither can perceived problems with diet be linked to eating companionship.

In conclusion, results from this study show the relative unimportance of mealtime companionship to morale among the rural elderly. Data also indicate that changes in food habits over the middle and late years and perceived problems with diet are not associated with eating alone or with others. Eating alone or with others is mainly a function of marital status with few apparent implications for morale, per se. To the extent that morale is affected by informal social interaction, the many forces in evidence in the lives of older rural adults would appear to offset any social interaction
missed through mealtime companionship. Despite these findings, the importance of social contact to nutrition should not be underestimated. Included here is the physical and mental stimulation experienced by older adults going to fellowship meal programs, the educational advantage of programs constructed around meal programs, as well as the probable relationship between social stimulation and food intake. Further studies on more socially isolated groups than the current sample such as the geographically isolated, adults with small kin networks, and inner city adults isolated through fears of victimization are needed. More research is also needed on the relationship between companionship and appetite, digestive processes, and overall nutrition. Knowledge of these relationships would make important contributions to the understanding of motivation and influence among older adults as they pertain to dietary patterns.
REFERENCES


Table 1. Multiple Regression of the Effect of Companionship During Mealtime on the Morale Scores of Older Rural Adults

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta (Standardized)</th>
<th>$R^2$ Change</th>
<th>F **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single vs. widowhood</td>
<td>-.07</td>
<td>.007</td>
<td>2.74</td>
</tr>
<tr>
<td>Married vs. widowed</td>
<td>-.00</td>
<td>.001</td>
<td>.38</td>
</tr>
<tr>
<td>Education</td>
<td>.09</td>
<td>.062</td>
<td>24.91***</td>
</tr>
<tr>
<td>Self-rated health</td>
<td>.51</td>
<td>.232</td>
<td>114.42***</td>
</tr>
<tr>
<td>Sex</td>
<td>.08</td>
<td>.006</td>
<td>2.28</td>
</tr>
<tr>
<td>Mealtime companionship</td>
<td>.06</td>
<td>.002</td>
<td>.91</td>
</tr>
</tbody>
</table>

($R^2 = .30, p < .001$)

N = 384

**Significance of $R^2$ change

***p < .001
Table 2. Frequency with Which Diet Presents Problems According to Eating Alone or with Others

<table>
<thead>
<tr>
<th>Mealtime Companionship</th>
<th>Never a Problem</th>
<th>Sometimes a Problem</th>
<th>Often a Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat alone (N = 96)</td>
<td>86.5</td>
<td>13.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Eat with others (N = 285)</td>
<td>85.1</td>
<td>12.8</td>
<td>2.1</td>
</tr>
</tbody>
</table>

\[ \chi^2 = .02, p = .88 \]

\(^2\)This category was combined with the middle category for chi square analysis.
Table 3. Frequency with Which Food Habits Had Changed Since Age Fifty According to Mealtime Companionship

<table>
<thead>
<tr>
<th>Mealtime companionship</th>
<th>Food habits changed</th>
<th>%</th>
<th>No change in food habits</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat alone (N = 98)</td>
<td></td>
<td>30.6</td>
<td></td>
<td>69.4</td>
</tr>
<tr>
<td>Eat with others (N = 303)</td>
<td></td>
<td>35.0</td>
<td></td>
<td>65.0</td>
</tr>
</tbody>
</table>

$X^2 = .45, p = .50$