they need.” This dietary practice contributes to nutritional risk to a great extent, as indicated by a high point value of four (Table 4.3). The elderly were not asked to disclose their incomes in this study because it may have been offensive to them. However, they were recruited for the focus groups based on low income status by the CongregateMeal Program Site Directors who were aware of their approximate incomes. The Congregate Meal Program in Virginia is not permitted to obtain directly income information because the ENP accepts adults 60+ years regardless of income. The national evaluation of the ENP indicates that the majority of program participants are poor or near poor with 34% having incomes below 100% of the poverty guidelines and 79% having incomes below 200% of the guidelines (AoA, 1996). Few of the elderly in this study (3) reported eating “less than two meals per day” despite the limited financial resources of the group. In a previous study by Houston et al. (1994) involving the general population of elderly, income level was not significantly related to the number of meals eaten; however, lower income level tended to be associated with fewer meals consumed per day (Houston et al., 1994). Results of this study are consistent with those of the national evaluation of the ENP (AoA, 1996) which indicated that most Congregate Meal Program participants consume about three meals a day, including breakfast (AoA, 1996).

Many of the elderly adults in this study (12) also had increased nutritional risk due to the unintentional loss or gain of ten pounds in the last six months. A few elderly (7) in the study admitted having physical difficulty with shopping, cooking, or feeding themselves. Two adults at the Richmond site reported that they were stroke victims. As a result, one participant had apparent nerve damage to the face and another was partially paralyzed and confined to a wheelchair. One Richmond elderly adult reported that she had throat cancer. One female Christiansburg participant reported that she had suffered a ruptured aneurysm. No participants reported having three or more drinks of beer, liquor, or wine almost everyday. In fact, according to notes taken during the focus groups, most participants stated that they did not drink at all. Results of the NSI Determine Your Nutritional Health Checklist are consistent with findings from
the national evaluation of the ENP (AoA, 1996). According to that study, dietary practices that contributed to nutritional risk of Congregate Meal Program participants included consuming few fruits, vegetables, or milk products and taking 3 or more different prescription or over-the-counter medications a day.

Elderly adults at the Richmond and Halifax sites reported similar dietary practices that contributed to a high risk for poor nutritional status (Table 4.3). All adults at these sites were African-American (Table 4.1). The majority of elderly at Richmond (5 of 6) and Halifax (8 of 8) reported that they “don’t always have enough money to buy the food they need.” This practice contributes to nutritional risk to the greatest extent, as indicated by a point value that is higher than those for all other statements in the NSI checklist (Table 4.3). Another practice that contributed to the high nutritional risk of adults at the Richmond site was having an “illness or condition that made them change the kind and/or amount of food they ate.” In fact, all of the adults at the Richmond site admitted having an illness or condition that affected their dietary habits. Also, many at this site reported that they “take 3 or more different medications a day” (5 of 6) and “eat alone most of the time” (4 of 6), practices that contributed further to nutritional risk.

The elderly at the Christiansburg and Fredricksburg sites reported similar practices that contributed to moderate and high nutritional risks (Table 4.3). The majority of adults at these sites were non-Hispanic whites (Table 4.1). Most reported “eating alone most of the time”, “taking 3 or more different medications a day”, “eating few fruits, vegetables, or milk products,” and having an “illness or condition that made them change the kind and/or amount of food they ate.” Few adults at these sites reported that they frequently lacked financial resources to buy food. Nutritional risk of adults at the Christiansburg and Fredricksburg sites might have been underestimated. At least one participant at the Christiansburg site did not respond to the statement pertaining to the unintentional loss or gain of weight in the past six months. Two
adults at the Fredricksburg site did not answer statements related to either the number of meals consumed a day or the lack of fruit, vegetables, and milk products in the diet.

Focus Group Dynamics

Focus group dynamics such as size of the group, relationships among participants, and interactions within the group, affect participants’ responses to focus group questions. Interpretation of responses depends on the context in which they occur (Krueger, 1994); therefore, dynamics are reported here.

Richmond Focus Group

The Richmond focus group was held at the congregate meal site operated at the Richmond Community Senior Center. The focus group was conducted in a small room which had two open doorways. One connected the room to a large activity room, and the other connected it to the rest of the center. The environment was distracting at times with noise among non-participants in the two adjoining rooms and people walking through the focus group meeting room. The group of elderly, the moderator, and the assistant moderator sat at two adjoining circular tables during the discussion. Despite the seating arrangement and the noise, the elderly adults remained involved in the discussion.

The majority of the program participants from the Richmond area had sixth to eight grade educational levels, as reported by the director of the Richmond Area Agency on Aging. Although the assistant director of the Richmond Congregate Meal Program stated before the discussion that three of the six participants had health issues that may hinder participation, all members contributed to the discussion. One participant had throat cancer, but this did not appear to affect her vocal ability as she was very talkative. Two adults seemed to have been stroke victims because one had nerve damage to the face, and the other was confined to a wheel chair. These
individuals were more reserved than others and required prompting for responses. The elderly appeared to be a group of friends as they often talked among themselves in small groups and frequently shared recipes during the discussion. During the initial focus group activity, which was designed to encourage participants to discuss factors that influence their food choices, the first few participants began to describe foods they ate regularly rather than reasons for doing so. Consequently, the remainder of the group did the same. Participants discussed their food purchasing and preparation practices more than they did their ideas for nutrition education.

Congregate meals are served at the Richmond site every weekday, which allows participants to socialize on a regular basis. This might have contributed to the strong focus group interactions among members of this group. The program seemed to be well organized with many available activities, such as crafts and games. The director and assistant director, who recruited the participants, were pleased with the opportunity for their program participants to discuss food and nutrition. In fact, the elderly adults stated that they frequently have guests discuss food and nutrition with them.

Halifax Focus Group

The Halifax Congregate Meal program had a total of 60 participants and was conducted in a large meeting room of the Halifax Social Services building. Focus groups were conducted at this site on two visits because the site director felt that this was a desirable activity for the program participants. Two focus groups were conducted at the same time during each visit. Therefore, all participants of the program were involved in a focus group. A total of 15 low-income participants were present on the first visit to the Halifax program and were randomly divided into two groups, one group of eight and one group of seven. The primary researcher conducted the focus group with the group of eight adults in one corner of the room. Participants in this groups were seated at a long rectangular table. Responses from this group were used in analysis. In another corner across of the room, the other focus group was conducted by a Virginia
Cooperative Extension Agent. Consequently, the environment was distracting with noise from the simultaneous focus group. Elderly adults in the group conducted by the primary researcher seemed to have more difficulty hearing focus group questions than adults in any other focus group due to hearing impairments, background noise, and seating arrangements. It was necessary to address these older adults individually more often than at any other site. One participant appeared confused the majority of the time and participated only when directly asked questions. Her responses indicated that she did not understand the questions. Overall, however, participants freely responded when addressed and appeared to be friends in that they shared recipes and cooking tips with each other. There was one participant who dominated the discussion related to preferences for nutrition education. This participant verbalized great frustration with confusing messages about healthy food choices. Participants of the Halifax Congregate Meal Site were unique in that this was the only group to discuss problems in obtaining food due to lack of financial resources. The majority of participants at other sites simply stated they had no problems getting the food they needed. During the focus group discussion, many elderly at this site reported that they had grown up in this area. They stated that sixth grade was their highest level of education because that was the highest grade offered in the school at that time.

The Halifax Congregate Meal Program operates in conjunction with the school lunch program at Halifax High School. The food for the program is prepared by the Halifax High School Foodservice and is served to high school students as well as Congregate Meal Program participants. The program serves meals twice a week on Thursday and Friday. However, meals are served to different groups of adults each day. The elderly at this site expressed frustrations with the meals offering comments such as, “Our lunches come here with exactly what we are not suppose to eat. People that prepare our foods need to go to nutrition education. It is just wasted and food is expensive.” They felt that concerns they had expressed about the food were not considered and “didn’t seem to do their lunches no good.” However, it appeared as though the
director of the meal site was concerned about the frustrations of program participants and attempted to satisfy their needs.

**Christiansburg Focus Group**

The Christiansburg focus group was held at the Christiansburg Senior Center in a private medium-sized room. It was the same room the meal site clients gathered to eat as well as to socialize. This was the largest focus group with eleven elderly adults who were seated at a long rectangular table. The size of the group and the seating arrangement tended to inhibit discussion. Additionally, the telephone would ring, van drivers would enter the room, and the site director observed the focus group. Adults in this group were different from those at the Halifax site because they were more reserved and required more prompting for discussion. Although one adult at the Christiansburg site was younger than 60 years old, he contributed little to the discussion due to an apparent mental disability. Another adult reported that he was at least 60 years old, but also admitted that he was married to a thirty-year old women and had a 12 year old daughter. Another did not appear to be low-income as she stated she received uninsured, private counseling with a Registered Dietitian for her recently diagnosed diabetes. This adult also conveyed a sense of depression and loneliness and emphasized her condition in all responses. Another woman was abrupt and stated repeatedly, “I don’t do no cooking!”

The Christiansburg Congregate Meal Program operates three days a week. The elderly as well as the director at this site appeared to be involved with social activities. For example, adults shared talents with each other, such as artwork, and the director stated that she would like to have cooking classes once a week for the group. A discussion with the adults after the focus group revealed that the adults knew each other well and expressed their likes and dislikes.
Fredricksburg Focus Group

The Fredricksburg focus group took place in the basement of Shilo Baptist Church in a large meeting room. According to the meal site director, there were 18 low-income adults at this site. The director randomly selected ten of the 18 to participate in the focus group. Adults sat at a large rectangular table. There was noise during the focus group due to conversations between non-focus group participants. The director sat at the table and observed the focus group discussion. All of these factors might have inhibited discussion during the group. Adults in this group responded to focus group questions, for the most part, only when individually addressed. Adults tended to stray from the discussion and form small group discussions. The site director informed the primary researcher after the discussion that one adult mentioned that she felt that the others in the group were “simply saying what they thought the moderator wanted to hear.”

One participant seemed depressed and contributed little to the discussion. Another stated that she was a Registered Nurse and seemed knowledgeable about the discussion topic. She appeared to set the tone of the focus group in that many others would follow her lead in their responses about food choices and preparation. Towards the end of the focus group discussion when the group was asked about topic preferences for nutrition education, she stated,

“...But the people like our age, we’re mostly set in our ways...They (elderly) do not need younger people coming in with new ideas. So ya’ll are just going to have to just hang in there and let us old people move on. So that’s the way it is.”

At this point others agreed with her and little discussion followed.

The Fredricksburg Congregate Meal Program operates three days a week. The program director was very receptive to having the focus group at the site and appeared interested in having activities in which her clients could participate. However, in conversation with the director following the focus group, she expressed dissatisfaction in working with the Congregate Meal Program. If she conveyed this impression to her clients, she may have negatively influenced the attitudes of those who participated in the focus group.
CHAPTER V

RESULTS AND DISCUSSION:

FACTORS THAT INFLUENCED DIETARY PRACTICES OF FOCUS GROUP PARTICIPANTS

Introduction

Focus group themes related to factors that influence food purchasing and preparation practices are discussed in this chapter. Because low-income elderly frequently consume unbalanced diets and have poor dietary and lifestyle practices (Wolfe et al., 1996), one objective of this study was to examine current food purchasing and preparation practices of the focus group participants. During the discussions, most reported that they were responsible for food purchasing for the household, regardless of living arrangements. The majority also reported that they either were “always” or “almost always” responsible for meal preparation (Table 4.1). An understanding of the motivations for these dietary behaviors is essential to the development and provision of nutrition education materials to promote positive dietary changes. Another objective was to understand the perceptions of the elderly adults regarding the importance of food to health. In order for nutrition education to be effective in bringing about positive dietary change, the adults must first perceive that food and nutrition is important to their overall health.

Health Conditions

Personal Health Conditions

Little research has been done to examine the perceptions of older adults regarding the effects of food on health. Crockett et al. (1990) used focus groups to assess the beliefs of elderly
adults (60+ years of age) regarding nutrition education. Most rural elderly in that study believed food affected health and that “better eating habits would make them feel better or healthier.” They thought the word “nutrition” was associated with food, health, balanced meals, and “things that were good for them.”

All of the adults in this study reported that they believed food was important to their health when asked, “How important do you think food is to your health?” For example, some adults responded as follows: “Very important”; “On a scale from one to ten, it’s a ten”; “It means a whole lot”; “Food is important or we wouldn’t be here”; and “It’s all of it.” Many adults agreed with this by nodding and saying “Yes” and “That goes for me, too.” Several elderly implied that food was important to health as they discussed adverse effects of poor dietary practices on health, as evident in quotes such as: “Your health depends on how you eat...don’t eat something that you know you’re not suppose to have” ; “If you eat the wrong foods, you’ll get sick. So, you have to try to stay within your means as to what you can eat” ; and “One of the best things that we can do for ourselves ...is to watch our diet because otherwise, you’re going to be sick and you’re going to know it someday, somehow.” When these elderly were asked what the word “nutrition” meant to them, their responses indicated that nutrition was related to health, as illustrated in quotes such as: “Eating the right food”; “It’s (nutrition) your health food or what’s good for you...”; “It means my health”; “I know that it’s (food) all important. The body is what you eat. And if you don’t eat, you can’t be good”; “Foods to eat according to my health”; and “Proper foods.”

The majority of the elderly in this study reported that they had an illness or condition that affected their dietary habits (Table 4.3). Prevalent health conditions discussed in the focus groups were high blood pressure, which participants referred to as “pressure,” diabetes, referred to as “sugar,” and hiatal hernia. Other conditions that were discussed included cancer, high blood cholesterol, heart disease, muscular dystrophy, and physical disabilities. These conditions are typical of Congregate Meal Program participants as indicated by results of the national
evaluation of the ENP (AoA, 1996). According to that study, the most common health problems reported by more than half of the participants were arthritis, hypertension, heart disease, lung or breathing problems, elevated blood cholesterol levels, and diabetes.

The predominant theme for all of the focus groups was the influence of a health condition on food purchasing, food preparation, and dietary practices. During the initial activity (Appendix F) in which the elderly discussed the most important reason for choosing foods, “good for you” was the response most often mentioned. The elderly explained that they needed to choose foods based on dietary restrictions from personal health conditions. This was demonstrated in explanations such as: “Well, I have high blood pressure, so I can’t eat no salt. There are a lot of things I can’t eat with high blood pressure” and “Well, I try to buy what I need and I try to buy what I can have. See, I have ulcers, so certain foods I stick with…certain foods I avoid.”

The elderly believed that certain dietary practices may be beneficial to their health. They explained that food was important because it had positive effects on their health, as evident in the following quotes, “I read the labels, if it’s got too much sugar in it, I don’t buy it. I’m not an insulin dependent and I don’t want to be that way so I try to stay on my diet” ; “I’m a victim of cancer and I eat a lot of broccoli.” ; “If you do the right thing, it’ll help keep you strong. But if you don’t eat, it’ll make you weak” ; “…As long as you eat what things that you suppose to eat to help keep your health good, you won’t be suffering in a bad condition”; and

“When I go to my doctor, I usually have a blood test. He takes my blood and tells you whether you’ve got enough potassium…cholesterol level…and the way I eat, I have been able to keep that in check.”

Since these elderly believed food was important to their health, their food choices were influenced by health conditions, which was apparent from responses such as, “Good for you. I try to get the healthy meals, it’s good for your heart and everything. I had open heart surgery in 1994.” ; “See, I have heart failure… It’s (health) fine as long as I stay away from salt and fried food “ ; “…I have problems with high blood pressure and that I have a hiatal hernia and that’s
why I have to choose foods that are good for me”; and “I have high blood pressure and sugar, too. Don’t put no salt on your food...Don’t put too much butter...” One older adult from Fredricksburg admitted that her daughter prepared her meals and explained, “She does all mine...She knows what I can eat and what I can’t eat. She knows I can’t have the sugar.” Many elderly discussed the adverse, physical effects of certain food choices on their health when those choices did not comply with dietary restrictions from their health conditions. This was evident in responses such as: “You have to be on a diet...sugar gets out of whack...if I eat stuff with sugar in it” and “I have high blood pressure. If I eat the wrong thing, it’s going to make my blood pressure go up.” During the portion of the focus group discussions related to food purchasing and preparation, many side conversations occurred among participants and these conversations involved discussions about avoiding certain foods due to health conditions and sharing recipes.

Many elderly felt that health conditions were a normal part of aging and these conditions restricted their food choices more than they did those of younger persons. This perception is illustrated in the following quotes:

“Good for you because at the age we are, we cannot eat any and everything. We got to eat special foods for pressure and not greasy foods and...that it’s low in cholesterol and all that.”

“When you get ageable, you have to watch what you eat. Can’t eat things like you used to when you were young, you know because you could eat anything you wanted.”

Health conditions also were important to dietary changes. Although a few of the elderly stated that they never had made any changes, and a couple stated that they had made changes due simply to personal preferences or preferences of household members, a large portion of the elderly stated that they had made changes in their dietary habits. The main reason for a change was a dietary restriction imposed by the presence of a health condition. The importance of personal health conditions is seen in the following quotes from the groups: “I didn’t (make a change), but the doctor changed it...She stopped me from eating pork chops because of high blood
pressure” “I used to could eat anything I wanted to. Well, on account of high blood pressure”
“Oh yes. I ate anything and everything. Now, I have to watch the fat. They say fats are much
harder for the diabetic.”; and “They took me off salt and eggs, too. The doctor. Heart trouble.”
From comments such as these, it was apparent that many of the elderly had been instructed by a
health professional, either a physician or dietitian, to make a change in their dietary practices.
These elderly discussed how they attempted to make and maintain the changes. Several seemed
to be successful as illustrated in the following quotes: “I eat something else rather than having
pork chops” and “I eat turkey instead.” Others stated that they made changes because they
feared the consequences if they did not, as illustrated in such responses as, “Well, I wanted to do
it because I don’t like to feel bad or sick. Plus, you got to be careful with your blood pressure
going up”; “If I eat it and it don’t work...I just do away with it”; and “I eat too much grease...I
burp up bitter food.” However, a few elderly admitted having difficulty at times with maintaining
changes, as illustrated in the following responses: “Every now and then I can’t resist and I go off
of it, but I pretty much stick to it” and “I steal a little bit.”

A few of the older adults did not mention having a specific health condition, and a few
others reported that they did not have health problems. However, these adults seemed concerned
with choosing foods to maintain optimal health, as demonstrated in quotes such as, “I try to
choose what I think is good because I can eat anything”; “Vegetables...they told us to help
yourself to two helpings of vegetables or all you can eat”; and “…Good for you. Keep the
cholesterol down, watch the high percentage of fat.”

Health Conditions of Significant Others

Although the presence of a personal health condition was the prominent theme, a few
elderly mentioned they made food choices according to health conditions of significant others in
the household. As previously discussed, the majority of the elderly at the Richmond site
reported that they lived with others (Table 4.1). One adult from this group explained that she
prepared foods that were best suited for her nephew’s health condition by stating, “...that’s very important for him. I’ll eat anything. The reason I make it is because the doctor said he was anemic.” One elderly female participant at the Fredricksburg site discussed the influence of a family member’s health condition. She remarked, “I try to cook what I think will be good for me...of course, I live with my daughter and she doesn’t have very good health...she has to eat a lot more fresh fruits and vegetables than I do...”

Health conditions of significant others also seemed to influence changes in dietary practices of a few of the elderly in the focus groups. One individual at the Christiansburg site stated that she made changes in her diet years ago as she described,

“My husband had a heart attack back in the sixties. I had to keep away from cholesterol, fatty foods...But that happened a long time ago and I think I’ve stuck to it since.”

One adult from the Fredricksburg site discussed the changes she made due to a health condition her husband had as she stated, “When my husband was so sick, I learned to steam his vegetables so he’d get all the nutrients he needed that were in the vegetables.” This adult felt the changes she made in her diet due to her husband’s health condition improved her health as well. This belief was apparent from her response as follows: “I learned quite a bit from when he was living and it guided myself, which has paid off.”

Food Preferences

According to various food choice models, food choices are influenced by three factors that are interrelated: 1) the food; 2) the person choosing the food; and 3) the external environment, including economic and social factors of the person choosing the food (Shepherd and Sparks, 1994). The physiological effects of the food, the person’s sensory perception of food attributes, and the person’s attitudes about the food all affect food preferences, which ultimately affect food
choices (Briley, 1989). In one study involving interviews with older adults, sensory perception was the value most frequently mentioned as being important to food choices; taste, specifically, was the sensory perception most often mentioned (Falk et al., 1996).

Personal Food Preferences

Elderly adults in all of the focus groups discussed food choices in relation to personal preferences. Those preferences often were expressed in relation to the sensory perceptions of food attributes. “Tastes good” was often mentioned during the initial focus group activity as a reason for choosing foods. The elderly explained that they purchased foods based on what they liked or what appealed to them. This was evident in responses such as: “I buy the groceries that I cook. Just whatever I like”; “…If I see it and want it… I’ll get it”; “Before I shop, I make out a menu of the meals I would like and then I sort of stick to that menu…”; and “It depends on personal taste… most of the time it depends on what looks good.”

Personal preference also seemed to influence food preparation. Many participants reported that they prepared foods they liked, as demonstrated in responses such as: “Tastes good. Yeah”; “The taste. I cook for taste...”; “What I want because I want it”; and “Well, I guess more or less things I like because I don’t always know if they’re good for me.”

Some adults varied the foods they prepared based on preferences. This was apparent in responses such as: “I just cook whatever come in my mind...You feel like you want something different”; “…different taste or something”; “I try not to eat the same thing today as I did yesterday”; and “I decide someday I want something different. I go visit my girlfriend and she’ll be making a dish and I’ll like it... I’ll make it that week.” During the discussion of dietary changes, a couple of adults implied that they made changes in order to obtain variety. One Halifax participant stated, “Well I change foods to food that tastes good,” while one Fredricksburg adult reported, “Yes, sometimes I change. I do it on my own.”
Food Preferences of Significant Others

Some elderly mentioned they made food choices according to preferences of significant others in the household. These adults were primarily in the Richmond and Halifax groups because many adults in these groups lived with others (Table 4.1). Most of the adults in the Richmond group who were responsible for food purchasing and preparation discussed influences of household members on food preferences. This was illustrated in quotes such as: “I ask them what they want. Whatever they say they want, that’s what I’ll get”; “They say what they want. If I feel like making it, I’ll make it”; and “The one (food) that they eat the most of, that won’t have to be thrown away. Because of the people that I have to cook for...” Another adult in the Richmond group reported that she tried to avoid making changes in the foods she prepared for the household as she stated, “Because of the household that I live in, I try to go with what they like. So I don’t change, I just try to stay.”

A few of the elderly in the Halifax group admitted that other members of the household were usually responsible for food purchasing and preparation. Therefore, food choices of these elderly seemed to be influenced by preferences of others, as one adult reported, “She (wife) do the shopping. She always do the deciding of what to buy and I just always go along with what she gets.” Another stated, “No, I don’t do much shopping. I always go with my wife.”

A few of the adults in all of the focus groups admitted that they shared food purchasing and preparation responsibilities with others in the household. It seemed that food choices of these individuals were influenced by personal preferences and preferences of others as evident in responses such as: “I live with my daughter and we both do the cooking”; “My boy does the shopping most of the time”; and “Me and my wife both do the cooking...She has to help me and I have to help her.”
A few elderly in this study discussed food purchasing and preparation practices in relation to availability of various resources. These elderly implied that they needed the following resources to purchase and prepare foods: willingness, assistance from others, money, availability of food items, and transportation. Research has indicated that many elderly experience food insecurity as a result of limited resources. Food insecurity is defined by the American Institute of Nutrition as “...a condition in which availability of nutritionally adequate and safe foods or the ability to acquire foods in socially acceptable ways is limited or uncertain” (Wolfe et al., 1996). One study indicates that some factors which contribute to food insecurity in the elderly are poor health and physical disabilities; reliance on others who do not use money management strategies when shopping for food or attempt to conserve food when preparing it; dependence on neighbors and the community for help, companionship, transportation; and limited incomes (Wolfe et al., 1996).

Food insecurity was also examined in the national evaluation of the ENP (AoA, 1996). According to that study, at least 10% of the Congregate Meal Program participants mentioned experiencing one or more of the following in the past 30 days: 1) on one or more days the participant had no food in the house and no money or food stamps to buy food; 2) the participant had to choose between buying food and buying medications; 3) the participant had to choose between buying food and paying rent or utility bills; or 4) the participant skipped one or more meals because he or she had no food in the house and had no money or food stamps to buy food. Furthermore, Congregate Meal Program participants were more likely than other elderly groups of persons in the United States to experience food insecurity when faced with a choice of how to spend scarce household resources (AoA, 1996). Results of this national
evaluation (AoA, 1996) also indicate that 1 in 10 Congregate Meal Program participants experienced food insecurity during the preceding month; whereas 1 in 20 elderly persons in the general U.S. population experienced food insecurity in the preceding six months.

**Human Resources**

Dietary practices of some elderly in several of the focus groups were influenced by the fact that they did not want to spend time and effort to purchase and prepare food. During the initial activity in the focus group discussions, a few elderly mentioned “easy to make” as a reason for choosing foods. These elderly preferred convenience foods, which was evident in responses such as: “Easy to make. I know for me, I’m busy. I keep busy”; “Easiest to make. Don’t want to fool with it”; “Whatever is in the refrigerator”; and “Well, I’m buying things that are easy to fix because I don’t like to cook a whole lot.” One adult from the Christiansburg site reported throughout the focus group discussion that she did not cook at all and always chose prepared foods as she stated, “I go to Wades. It’s already cooked.” A few adults implied that they did not have time or were not willing to spend time purchasing and preparing food when they discussed foods they regularly chose. Responses that exemplify this include: “The most important thing that come to my mind is chicken and turkey pot pie...it’s very easy to make”; “Chicken because you can fix it any kind of way”; “I live alone and get very little cooking done. I cook if I have to, if there’s something special I want. Otherwise we just eat a sandwich or piece of watermelon...”; and “I don’t do much cooking. What I can make a sandwich out of. I eat here and when I go home, I’ll make a sandwich”.

A few other elderly discussed their lack of food preparation skills. Two adult males from the Christiansburg site reported that they were recently widowed and that they did not know how to prepare some foods. One of these elderly responded, “I live alone. I do what cooking I can. I’ve had about a year’s experience of it. I live by myself.” The other adult reported that he received assistance as he stated, “I live by myself. Me and the can opener get
along good. She (another adult at the site) helps me sometime also. She lives next door.” In fact, other adults from this site as well as one from the Richmond site mentioned that they were at least partially dependent on others outside the household. Dietary practices of these individuals seemed to be influenced by caregivers, as illustrated in quotes such as: “No, (does not express food choices) she (sister-in-law) just sends me food” ; “I don’t cook. I have a sister-in-law that cooks all the time and she’s always sending me dishes.” ; and

“She (daughter-in-law) buys them (groceries). I’ll let her go and get what she wants. Then she will bring me food from her house”

**Financial Resources**

Limited income is a factor that contributes to food insecurity in older adults (Wolfe et al., 1996). In 1990, total income for 44% of all elderly ranged from $5,000 to $14,999, and total income for 10% of people 65+ years of age was less than $5,000. Results of the national evaluation of the ENP (1996) indicated that the majority of Congregate Meal Program participants are poor or near poor, with 34% of participants receiving incomes below 100% of the DHHS poverty guidelines, and 79% receiving incomes 200% below the guidelines. Approximately 5% reported having no food in the house or skipping meals because they had no food or resources to buy food during the past month.

When the elderly in this study were asked to discuss problems related to obtaining needed food, some reported that they frequently lacked financial resources. A few elderly also reported that “low in cost” was the primary reason for choosing foods during the activity conducted at the beginning of the discussions. Although two elderly from the Fredricksburg site chose “low in cost” as the reason for choosing foods, they did not elaborate on this. Financial resources were not discussed by adults at the Christiansburg site. According to results of the NSI *Determine Your Nutritional Health Checklist* (Table 4.3), the majority of participants who lacked financial resources were from the Richmond and Halifax sites. When these adults were asked to discuss problems they experienced in obtaining needed food, they explained that lack of financial
resources influenced their food purchasing and preparation practices, as evident in responses such as: “Yes, sometimes. I didn’t have enough money to get it”; “...(Money) always. Well, not always”; “Money. That runs out. That’s the main thing. You never get what you want without the money”; and “...when I have the money.” These elderly also explained how they managed without needed food when they lacked money to buy it as they stated, “When it happened, I just had to do without until next time” and “...We just have to make out.” One adult from the Halifax group described how she attempted to avoid food shortages as she reported, “Well, what I try to do when I go (to the grocery store) I try to look out for that (lack of money), but in the event I don’t (have enough money) I just have to wait.”

Other Resources

Other resources mentioned less frequently were availability of food items and the lack of transportation. Several adults reported that they routinely used certain foods and they purchased these foods based on availability of them at home. This was evident in explanations such as: “I make some lists and most of the time I go buy it, but then again I go in the store and just pick up what I need”; “...(buy) what you need”; and “Normally, I buy the regular foods that I need.” One Christiansburg adult reported that her daughter, who did the shopping, bought foods according to what she needed as she stated, “I write her (my daughter) a list. I just look under my counter and see what I got.”

Two elderly adults mentioned that availability of food items in the grocery store influenced their food choices. One adult from the Christiansburg site explained that he had difficulty obtaining certain food items as he stated, “I have a problem getting real, homemade Italian sausage.” The other adult from the Richmond site reported problems with availability of food items as she stated, “...They’ll say the store don’t have it.”

Lack of transportation to the grocery store was a factor discussed by three elderly. One adult from the Christiansburg site reported that she was dependent on a friend for transportation
to the grocery store. She explained that when transportation was not available, she sometimes managed without certain food items. Two elderly from the Halifax site mentioned that inclement weather made it difficult for them to get to the store to buy food. This was evident in responses such as: “Well, I have a good neighbor, when the ice is on the ground he always checks on us to see if I need this, that, and the other” and “One big time we probably have getting food is rough weather...when we can’t get out.”
CHAPTER VI

RESULTS AND DISCUSSION:

PREFERENCES OF FOCUS GROUP PARTICIPANTS FOR FOOD AND NUTRITION EDUCATION

Introduction

In order for nutrition education to be effective in the promotion of positive dietary changes, information must be appealing to those for whom it is intended. One theory that has been utilized in the development of health education programs is social marketing. According to the social marketing theory, education should be developed based on the perceived needs and wants of the target audience. The OAA requires the Elderly Nutrition Program to provide nutrition education to participants. These programs should provide information that is useful and interesting to low-income elderly based on their perceived needs and preferences.

At the present time, there are no government nutrition education programs specifically targeting the elderly. SCNEP is an educational program administered by the Virginia Cooperative Extension for the purpose of educating members of food stamp households. The SCNEP program assistants teach older adults in the Congregate Meal Program in Virginia. One objective of this study was to identify topics and methods that elderly in the program prefer for receiving food and nutrition information. During the focus groups, the elderly discussed food and nutrition topic and method preferences. They were asked to discuss what they would like to know more about, sources of their current food and nutrition information, and ways they would like to
receive information. Themes related to topic preferences and preferred methods for receiving food and nutrition information are discussed in this chapter.

Although the adults seemed hesitant about discussing these issues, they seemed interested in receiving nutrition education as they discussed related topics after prompting. Interest was apparent as they asked how to get information such as, “How would you do that?”; “How can we get more information?”; and “What source would you go to where they point you in the right direction?” One adult at the Fredricksburg site who appeared knowledgeable about nutrition implied that elderly adults do not want to know more about food and cooking, as discussed in focus group dynamics in Chapter IV. Her response seemed to set the tone of that focus group because adults at this site discussed nutrition education topic and method preferences less than adults in all the other focus groups.

Current Sources of Food and Nutrition Information

Elderly in this study were asked about their current sources of food and nutrition information. Suggestions of possible sources of nutrition information, such as physician, family, dietitian, television, newspapers, etc. were provided to the elderly to aid discussion. The three sources discussed most often were family members, health professionals, and printed media or television. Research by others has examined the use of these sources among non-institutionalized elderly. Briley et al. (1990) reported that written materials were the most common sources for the general population of elderly, both rural and urban. Magazines were the most common form of written materials (36%), followed by newspapers (22%). Cookbooks were the primary source of information for the rural elderly; while pharmacists and grocery store flyers were mentioned least frequently by both groups. Although 96% reported that they watched television and 51% listened to radio on a regular basis, these media were not identified as common sources of nutrition information.
Family Members

When adults in this study were asked how they learned what they know about food and cooking, they tended to report how they learned to cook without referring to any other issues related to nutrition, such as food choices. The majority reported that they learned about food preparation from family members. However, adults from the Richmond and Christiansburg sites mentioned that they learned to cook from family members more than adults from the other two focus group sites. This was evident in the following responses from these sites: “From my mother, she taught me how to cook”; “My grandmother”; “Well, I just watch my nephew do it because he is older than I am. He makes stuff and I want to try”; “My husband taught me to cook”; “My mother and my wife”; and “My grandmother. She taught me and I watch her...” Two elderly from the Halifax site mentioned family members along with personal experience as a source of information as they stated, “My mother...I just did it on my own...” and “Well, in cookbooks, but my mother and I did cooking in a lot of private homes.”

Media

Many of the elderly among the groups reported that they learned how to prepare food from cookbooks, newspapers, or television. Written materials were the most common form of media discussed by elderly at the Christiansburg and Halifax sites. These elderly admitted that they learned from written materials such as recipes in cookbooks and newspapers or from written materials they received from a health professional. This was evident in responses such as: “I try to keep an open mind and learn what I can, what I read (materials)...from the nurse at the hospital”; “Breaking down and learn...what foods are all about...any kind of food and read, read, read”; “I learned a lot from a cookbook”; “Mainly...in reading, you see some things that they say is good for you”; and “I look in the Mechlenburg Rural (local newspaper)...they put recipes in there...” Although another adult at the Christiansburg site did not mention a specific
type of media, her remarks during the discussion indicated that she received food and nutrition information from the media as she discussed a current topic in the media today, food safety. She remarked, “You know, we were brought up on a farm. We raised everything. Back then, we ate what we had. And I wonder...about these things they put in foods.”

The elderly at the Richmond and Fredricksburg sites who mentioned media as a source of nutrition information most often discussed learning from television. When these elderly were asked to discuss what they had learned from television, some responded: “Yes...Different shows on TV...how to cook”; “Yes. Just recently...it was a recipe on TV. It seemed like it might be real good...I’ve learned something important”; “I like to see them stir-fry on TV. I learn how to make stuff like that...”; and “They look good (cooking show). They show things like canning.” It was also noted that several other adults at these sites agreed with these responses.

**Health Professionals**

During the focus group discussions, only a few elderly mentioned health professionals in relation to nutrition and healthy food choices. More adults at the Christiansburg and Fredricksburg sites indicated this than adults from the other sites. Adults at the Christiansburg site implied that what they learned from health professionals was related to dietary restrictions imposed by either a personal health condition or one of a significant other. This was evident from comments such as: “I had to”; “I had to, too”; “When my husband had his first heart attack...that’s when they gave me a list of things he should have”; and “When my husband had a heart attack...the doctors and the nurses...” One adult from the Fredricksburg site who reported that she was a Registered Nurse admitted that she learned from her physician as she stated, “Yes, about special diets.” Another at this site stated she received the most information from her physician’s nurse who advises her how to get more nutrients and fiber in her diet. However, a few other professionals were mentioned by adults at this site. One elderly reported that she learned much from Virginia Cooperative Extension as she responded, “I learned a lot from...that
lady who used to work for Virginia Tech...she was an extension agent home economist...”

Another reported that she obtained information from the Congregate Meal Program site director as she stated, “I get a lot of advice on foods that don’t agree with me or what I couldn’t have...from no other than (Fredricksburg Congregate Meal Program Director).” Only one elderly from the Halifax site and only one from the Richmond site reported that they learned from their physician as they stated, “Well they (doctor) still saying don’t eat pork meat if you got pressure problems” and “I learned you don’t eat no salt on your turkey.” In fact, one adult from the Richmond site reported that she never had received food and nutrition information from a health professional.

**Topic Preferences for Food and Nutrition Education Programs**

Since the OAA requires the ENP to provide nutrition education to Congregate and Home Delivered Meal Program participants, research has examined nutrition education content and formats utilized at these programs. Results of the national evaluation of the ENP (AoA, 1996) revealed that 81% of Congregate Meal Programs currently offer nutrition education on nutrition, diet, food purchasing, food preparation, and other related topics. Previous research has examined preferences of the general population of elderly. A recent Practice Trak® survey from The American Dietetic Association asked members to identify major topic preferences of adult clients aged 50 years an older. Results were as follows: 30% wanted more information on fat; 24% wanted more information about weight loss; 16% wanted more general recipes and information related to meal planning; 14% requested information related to the issue of good and bad foods; and 12% wanted to know more about food choices for disease-specific diets (Stahl, 1998). Krinke (1990) found that some elderly want to know about food buying, food preparation techniques to retain nutrient value, and diet changes for disease or weight control. Crockett et al. (1990) reported that topic choices identified from focus groups with rural elderly included
healthy food choices, basic nutrition, incorporating fiber into diets, and new ideas for preparing tasty foods.

Elderly in this study were asked about their preferences for information related to food and cooking. The two topics discussed most often were food choices and food preparation methods. These topics were discussed in relation to their personal health conditions. As mentioned previously in Chapter V, personal health conditions imposed restrictions on their dietary practices.

**Preferences Related to Health Conditions**

Interest that the elderly in this study expressed for information on food choices in relation to personal health conditions was apparent in responses such as: “You know...like to know more about what foods are good for me”; “Healthy foods”; and “Just what’s good for me. What’s good for the nutrition.” The elderly were also asked if they would like to know more about how food could reduce the adverse effects of their personal health condition. Except for the one adult at the Fredricksburg site who expressed negative thoughts towards nutrition education, all of the elderly from this study expressed interest in this topic. This was evident in responses such as: “I’d like to know more about it...I’d try to make myself more better than I do now because when you got high blood pressure and sugar, you got something”; “I would, too...like this ulcer”; “Yes, indeed”; and

“Yes, I have ulcers and about three months ago, they put me on radiation treatments (for throat cancer) and since then I’ve been going downhill as far as my appetite is concerned. They put me on Ensure®...Knowing about which other foods I can have.”

Many others agreed with this by nodding and saying “yes.” One adult at the Halifax site reported that she wanted to know about convenient and healthy foods as she stated, “I’d like food that’s easy to make...to know more about food easy to make that I can have.” Another adult
at this site expressed frustrations with mixed messages about healthy food choices as evident in her response as follows:

“What I couldn’t understand you know people used to tell you, with high blood pressure, don’t eat pork meat. Now the doctor says eat pork meat. Now what? Said don’t eat it and now they say eat it...Now what kind of margarine should we...I went to the grocery store and read the label...I looked at Parkay® and that was wrong.”

Several elderly also reported that they would like to receive information about healthy cooking according to their health condition. This was evident in responses such as: “Now I’d like to know what kind...of cooking oil that I can cook in and won’t be greasy...”; “What kind of grease are you suppose to cook with that’s not fattening...oil, what kind of oil?”; and “I just like to know more about cooking...different things...good to cook.” One adult at the Richmond site reported that she wanted to know how to prepare soft foods that she could swallow easily since she had throat cancer. She stated, “I would like to know...I have been told to get a meat grinder, whatever that is. I want to know is there any other way I can do It (make foods soft) besides chewing it up and spitting it out.” No adults at the Fredricksburg site indicated a desire for information related to healthy food preparation methods. Perhaps this was due to the tone of the focus group established by the adult who expressed negative thoughts towards nutrition education prior to this focus group question

Preferences Related to Other Topics

One adult at the Richmond site reported that she wanted more recipes to prepare foods with variety as she stated, “I have a lot of cookbooks at home...but I feel like I want something different.” Two elderly males at the Christiansburg site reported that they wanted to know more about how to cook as they responded, “I want to learn more about the Southern cooking. Yes (like to know different cooking methods)” and “I’d like to know more about cooking...I know one thing. Every man ought to know a little something about cooking.”.
Preferred Methods for Food and Nutrition Education

An objective of this study was to identify ways in which the elderly adults preferred to receive information on food purchasing, food preparation, and nutrition. Previous research has examined the needs of elderly adults for nutrition education. Krinke (1990) found that some elderly were interested in television programs, meetings, and social gatherings on food and nutrition topics. Crockett et al. (1990) found that rural elderly preferred written materials to nutrition classes; however, nutrition classes might be appealing if incentives were offered.

The national evaluation of the ENP (AoA, 1996) examined nutrition education strategies utilized at these programs. Eighty-nine percent of the Congregate Meal Programs offered nutrition education to participants. Educational methods included the use of printed materials (81%), lectures (69%), visual displays (56%), group discussions (50%), and personal discussions (38%). However, results indicated that only 31% of the Congregate Meal Program participants found the nutrition education to be very useful in improving eating habits. This suggests that nutrition education must include relevant topics of interest to the elderly as well as be presented in ways that are preferred by these adults. In fact, a couple of adults in this study emphasized this when they stated, “Have something interesting to talk about” and “If it would help me.”

After adults in this study discussed topic preferences for food and nutrition information, they discussed methods for receiving new food and nutrition information. The methods most often mentioned included: group discussions, various forms of media such as printed materials and television, and health professionals. Interestingly, the elderly discussed methods by which they had already learned about food and cooking.

Group Discussions

The majority of elderly in this study reported that they would prefer to receive nutrition information in group discussions. A few adults mentioned that they participated in discussions
when professionals came to the Congregate Meal site, and they enjoyed it as they stated, “Here...She was here last week...I was here. I liked it...how she tell you what to do and certain things you shouldn’t do” and “Yes, they were here. It was good.” However, many adults reported that they had never participated in group discussions about nutrition, but that would be the best way for them to learn about nutrition. This was evident in responses such as: “Yea, Group discussion”; “I would like it (group discussion)”; “It’s fun in a group”; “It would be best in a group. I think it’s a whole lot better as a group than as one person...”; and “I think I’d rather have it in a group discussion like this (focus group discussion).” Many of these adults explained that they preferred group discussions because these discussions gave them the opportunity to share ideas and opinions. As one adult stated,

“When you’re in a group, it makes it so much more interesting. You get someone else’s opinion, too. You don’t only get your own, but you get someone else’s. Sharing makes a big difference.”

Many adults agreed with responses that indicated a preference for group discussions as they nodded and made comments such as “Yes” and “Me, too.” Many adults also shared recipes and information about disease specific foods in side conversations during focus group discussions, which also suggests group discussions may be an effective method for these adults.

The adults were asked if they would like to have someone visit them at home to talk about nutrition. Although none of the adults expressed an interest in this, several reported that they would like to have someone talk with them at the Congregate Meal sites as they stated, “Could we have someone come here, like this room? That would be more helpful to me...Like we’re doing now “ and “I’d rather have them come to the site.”

During the focus group discussions, some elderly reported more than one preference. Perhaps these adults implied that they would like to receive food and nutrition information in other ways as well.
Media

Many adults in the focus groups reported an interest in media as a source for food and nutrition information. One elderly at the Christiansburg site and one at the Fredricksburg site expressed an interest in television programs or audiovisual materials as they stated, “I could do videos or TV” and “Yea, you can learn a lot of things from TV. They show you how to cook everything under the sun.” However, most were interested in written materials as evident in the following responses: “…it would do me a lot of good if I had the information down on a piece of paper so I can read it…”; “…The only way I could get information would be newspapers or anything that I could read…”; and “That’s something else the Extension Specialist used to do for us. She gave us pamphlets of healthy recipes…something in writing.”

Health Professionals

Only a few elderly in the focus groups preferred receiving food and nutrition information from a health professional. They reported that they learned from their physicians and nurses in whom they trust for advice. Responses from some adults at this site that illustrated this were: “I would ask my doctor because he knows your health and what you need to live”; “I guess my doctor’s nurse…”; and

“…The best way if you are on a special diet or anything is to get information from your doctor. You could tell him that this seems to be upsetting you or like that. Then he could make the changes because the changes for you are different from the changes from me…He could check you and you could get an update from him.”

Only two adults, one at the Richmond and one at the Halifax site, expressed interest in learning from a dietitian as they stated, “Dietitian. Not no doctor” and “Yes, that would be a good way to learn.” Two adults at the Christiansburg site implied they would like to learn from professionals at organizations such as wellness centers. Their responses included, “I go over to the Wellness Center over at the mall. They have good programs” and “Yes, that’s (Wellness Center) a very good place to go to get information.”
CHAPTER VII

CONCLUSIONS

Major Findings

The focus group participants represented the group targeted which was low-income elderly adults participating in the Congregate Meal Program in Virginia. Socio-demographic characteristics of these elderly were typical of Congregate Meal Program participants in that most were female, between the ages of 60 and 89 years, and either non-Hispanic whites or African-Americans. They were non-institutionalized and capable of making their own choices for food purchasing and preparation. Most reported that they usually “eat alone” and they always prepared their own meals.

The majority of elderly were at nutritional risk, as indicated by results of the NSI Determine Your Nutritional Health Checklist, with a larger number at high risk than at moderate risk. Dietary practices that contributed to nutritional risk were “eating few fruits, vegetables, or milk products”; having an illness or condition that caused a change in dietary habits; and a lack of financial resources.

The most prominent theme throughout all of the focus groups was the influence of a health condition on dietary practices. Adults reported that personal health conditions imposed dietary restrictions and that it was important to comply with these restrictions. All of the adults in this study believed that food was important to health and that certain foods had either positive or adverse effects on health status. Prevalent health conditions among these elderly were hypertension, diabetes, and hiatal hernia. Personal food preferences and those of others in the
household also influenced dietary practices. The researchers concluded that the sensory perceptions of food attributes seemed to be important to these adults. Many adults did not want to spend time and effort to purchase and prepare food. The researchers believed that many of these adults had experienced food insecurity, because they lacked financial resources to purchase foods.

Focus groups revealed that the elderly were interested in nutrition education as they discussed their perceptions of the importance of food to health, preferred topics, and ways they preferred to receive information. They discussed the need for information about disease-specific dietary practices, especially on food choices and preparation methods. Although the majority reported that they learned about cooking from family, many reported that they also learned from cookbooks, newspapers, or television. Surprisingly, only a few reported that they had learned about nutrition and healthy food choices from health professionals, such as physicians and nurses.

The majority preferred to receive information during group discussions because they reported that sharing ideas and opinions was an effective way to learn. Many mentioned more than one preference. Only a few expressed an interest in television, while many were interested in written materials, such as pamphlets. Only a few indicated that they would like to learn from their physician or nurse because they trusted their advice, and only a couple mentioned they would like to learn from a Registered Dietitian. Perhaps adults in these focus groups were either unaware of the services offered by Registered Dietitians because they do not have access to their services or these professionals are not visible to this group of low-income elderly.

**Recommendations for Nutrition Education**

Nutrition education programs that effectively promote healthy dietary practices could help low-income elderly adults reduce their nutritional risk, but only if these programs convey
information that is relevant and interesting to them. This study was conducted in support of SCNEP in Virginia; therefore, information on the needs and preferences of low-income elderly adults for nutrition education was obtained. This information then was to be used to aid that program in developing nutrition education programs for low-income elderly adults, specifically those receiving or eligible for food stamps.

Elderly adults in this study were at nutritional risk and were interested in nutrition education to improve their health status. They wanted to know how to choose and prepare foods that complied with dietary restrictions imposed by their health conditions, primarily chronic diseases. Therefore, health status needs to be assessed when developing nutrition education programs for this group of elderly adults. During the focus group discussions, the elderly conveyed confusion concerning food choices related to their health condition. They mentioned that their physicians prescribed a diet, such as low sodium or low fat, but only informed them in general of foods to avoid. However, these adults wanted specific “how-to” information about food choices and preparation methods to obtain diets that comply with those restrictions. Perhaps one way to do this would be for the educator to develop “resource kits” for various health conditions. These resource kits would consist of lists of specific foods and food preparation methods based on dietary restrictions. Adults could then make appropriate food choices from those lists. Adults also should be taught how to read and interpret nutrition labels on food packages in order to choose foods that comply with dietary restrictions.

Nutrition education programs should address dietary practices that contribute to nutritional risk of these low-income elderly, particularly those identified through the NSI checklist. Because many of the elderly were at nutritional risk from low consumption of fruits, vegetables, and milk products, educators should help them find ways of incorporating these foods into their diets. Educators also should help them find ways to improve energy intake. Although most of these adults did not report eating less than two meals per day, some reported
an unintentional loss or gain of ten pounds in the last six months. This suggests that meals they do eat might not provide sufficient energy or they need help with choosing adequate foods.

Food preferences of elderly adults must be considered. Sensory characteristics, particularly taste of foods were important for making food choices by these adults. Nutrition educators need to assess food preferences of elderly adults in education programs to help them choose foods they enjoy, yet support their dietary restrictions. Since some shared a household with others, food preferences of household members need to be considered. Some of these adults indicated that they often experience a lack of financial resources to buy food. Educators should help these adults choose appealing foods that are within both their dietary restrictions and financial limitations.

Since these elderly attend the Congregate Meal Program, the most effective method for education would be group discussions because they are accustomed to this and seem to enjoy sharing opinions and ideas with each other. During the focus group discussions, the elderly often shared recipes and cooking tips with each other. However, this group of elderly also expressed the need to have written materials to take home. Consequently, nutrition educators could convey information to them in group settings and distribute written materials, such as pamphlets and brochures, that outline basic “how-to” information. Some adults expressed frustration with written materials that were too overwhelming; thus, materials should be clear, concise, and relevant in order to be useable. Another approach to teaching these adults is to provide them with recipes for foods that comply with their dietary restrictions. Again, many adults shared recipes during focus group discussions. However, educators need to keep in mind that these adults have an interest in convenience foods because they did not want to spend the time cooking, and some lack cooking skills. Therefore, educators might conduct cooking classes to teach them cooking skills and demonstrate quick and easy recipes, as well as introduce new recipes that conform with dietary restrictions.
The elderly adults expressed interest in receiving food and nutrition information from professionals, such as physicians, nurses, and nutrition professionals. Many wanted a health professional to come to the Congregate Meal sites to discuss this information with them in group settings. Consequently, educators should consider incorporating these individuals in nutrition education programs. Before doing so, however, nutrition professionals should be educated about the specific nutritional needs of older adults and the physiological effects of chronic diseases on those nutritional needs to ensure that the most beneficial and accurate information is communicated to the elderly.

**Recommendations for Further Research**

Although focus groups are designed to gain insight into the attitudes, perceptions, and opinions of a defined area of interest for a particular group of individuals, one disadvantage is that results of focus groups are not generalizable across subset populations (Krueger, 1994). Results of this study pertain only to the needs and preferences for nutrition education of older adults, primarily low-income, participating in the Congregate Meal Program in Virginia. However, the needs and preferences of other groups of low-income elderly should also be examined as those might differ. Studies should be done with low-income elderly participating in the Meals-on-Wheels Program, another component of the ENP. Since 1980, there has been nearly a 200% increase in home-delivered meals compared to only a 2% increase for congregate meals (AoA, 1994), which suggests the Meals-on-Wheels Program serves a significant number of low-income elderly who also need to be educated. These elderly are home-bound due to physical disabilities and chronic diseases and may be highly dependent on caregivers for food purchasing and preparation. Furthermore, studies indicate that 90% of Meals-on-Wheels clients have incomes that are 200% below the poverty guidelines; they may often not have enough money to buy adequate foods.
Results of this study indicated that the low-income elderly adults chose foods based on personal food preferences in addition to dietary restrictions; however, information on food preferences of this group is lacking in the literature. Additional studies to identify food preferences of low-income elderly adults would be beneficial because this information could be used to develop educational material that includes recipes and cooking tips that this group of adults finds appealing. This might help to promote dietary changes. Information on food preferences also might help the Congregate Meal Program develop menus that appeal to the elderly yet comply with dietary needs and restrictions. Food frequency questionnaires are assessment tools often used to assess nutritional quality of the diet. However, these same tools might be used to help identify food preferences.

Results of this study will be used to develop recommendations for nutrition education that could be used in SCNEP, but additional research could help strengthen those recommendations. Interviews could be conducted with Congregate Meal Program site directors to assess feasibility of the recommendations. It is expected that feasibility would differ by site; however, this type of information would be very useful to a statewide program such as SCNEP. Interviews with site directors and other professionals currently working with low-income elderly could also be used to assess education methods that are currently in use, which would help identify effective, as well as ineffective methods.

Research also should be done to examine the effectiveness of nutrition education programs that are developed based on the perceived needs and preferences of low-income elderly. In those studies, the programs should be evaluated for appeal, comprehensibility, and effectiveness in promoting behavior change.

Finally, one last point regarding research with this group needs to be made. In the process of conducting this study, the researchers found it necessary to modify published procedures on how to conduct focus groups because those procedures were inappropriate for low-income elderly adults (Krueger, 1994; Knodel, 1994). Many adults in this study were either
hearing impaired or physically disabled, and most had a reserved disposition. Consequently, it was often necessary to address the adults individually with focus group questions and to provide many prompts to questions in order to promote discussion within the groups. Although published procedures advocate a more open-ended approach for focus groups, adults in this study seemed to appreciate being addressed individually as they discussed issues openly. These modifications should be beneficial to those who conduct focus groups with low-income elderly adults in the future.
LITERATURE CITED


APPENDIX A

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
INFORMED CONSENT FORM FOR PARTICIPANTS OF
INVESTIGATIVE PROJECTS

Project Title: Smart Food Choices Program

Principle Investigator: Denise Brochetti, Ph.D. and Pamela L. Stewart

I. PURPOSE OF THE PROJECT

Researchers in the Department of Human Nutrition and Foods are studying the types of foods that men and women 60 years of age and older eat. You are invited to participate in the project. Your participation is voluntary.

II. PROCEDURES

You are asked to participate in a focus group discussion of the types of foods that you eat. There will be approximately 6-10 people participating in the discussion. A moderator will lead the discussion, which will last approximately 45 minutes to 1 hour.

III. RISKS

There are no risks involved in this study.

IV. BENEFITS OF THIS PROJECT

Your participation in the project will provide information that might be helpful in understanding food-related practices and needs of men and women, 60 years of age and older. No guarantee to benefits has been made to encourage you to participate. When the research is completed, you may contact the investigator for a copy of the results.
V. EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this project will be kept strictly confidential. Your name will be removed and only a code number will be used during evaluation and any written report of the project. A notetaker will be present and an audiotape will be made of the discussion. The notes and tape will be reviewed by Pamela Stewart, investigator, and Denise Brochetti, faculty advisor. Notes and tapes will be secured in the office of the Department of Human Nutrition and Foods, Virginia Tech.

VI. COMPENSATION

For your participation, you will receive food coupons and refreshments at the time of the group discussion.

VII. FREEDOM TO WITHDRAW

You are free to withdraw from this project at any time without penalty. You also have the right to refuse to answer any questions that are asked during the group discussion. If you choose not to answer any questions, you still will be compensated for your participation in the project.

VIII. APPROVAL OF RESEARCH

This project has been approved, as required, by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University and by the Department of Human Nutrition and Foods.
IX. SUBJECT'S RESPONSIBILITIES

I know of no reason that I cannot participate in this study. I have the responsibility of participating in one group discussion.

X. SUBJECT'S PERMISSION

I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

_________________________________________________
Signature                                                                 Date
Should I have any questions regarding the project or its conduct, I should contact:

Pamela L. Stewart (540) 231-7708
Investigator
Graduate Assistant
Department of Human Nutrition and Foods
Virginia Tech

Denise Brochetti, Ph.D. (540) 231-9048
Faculty Advisor
Department of Human Nutrition and Foods
Virginia Tech

Ernest R. Stout (540) 231-9359
Chair, Internal Review Board, Research Division
Virginia Tech

DETACH THIS PAGE AND KEEP IT
MODERATOR’S GUIDE USED IN PILOT TESTING

Introduction

Good morning and welcome. Thank you for taking the time to join our discussion. My name is Pam Stewart and I am a student at Virginia Tech University. Assisting me today is Katherine Eddy who is also a student. Today we would like to talk with you about the foods that you eat. We are very interested in hearing about the foods you like to eat and would like everyone to share their ideas with us. Please feel free to share them even if they are different from others in the group. Everyone’s ideas are important. There are no right or wrong answers.

Our discussion will last about 45 minutes. We ask that only one person speak at a time. Please speak up so that everyone can hear you. We are tape recording the session because we don’t want to miss anything that you say. Katherine will be taking notes while we are talking. We will be on a first name basis today. We have given you name tags to help us remember names. However, there will be no names associated with any comments that you make. What you say will be kept confidential.

Focus Group Questions

1. Well let’s begin. Let’s start by going around the room. Tell us your name and who does the cooking in your house.

2. Next we will do an activity. I’m going to pass a piece of paper to each of you. On each piece are the following topics: Easy to make, Good for you, Low in cost, and Tastes good. These are some of the reasons people eat foods. Please circle the reason that you feel is most important to you. Next, circle the reason that you feel is least important to you when choosing foods.

3. Would someone share what they circled as most important? Tell me more about that.

4. Would someone share what they circled as least important? Tell me more about that.
5. How do you decide what foods to buy? (i.e. coupons, recipes, other people)

Probes:
   a. Who does the shopping in your house?
   b. For those who do their own shopping, do you always shop in the same place?
   c. How often do you shop for foods?

6. Think about the foods you cook. How do you decide what foods to cook?
   Probe:
   a. Who helps you decide what foods to cook?

7. Sometimes people have problems getting the food that they need. Can anyone tell about a time when this has happened to them? (i.e. barriers such as transportation, disabilities, money, time, etc.)

Probes:
   a. What caused this to happen?
   b. What did you do when this happened?

8. Think about the foods that you eat. Have you ever tried to change what you eat? Can anyone tell about a time in which you tried to make a change?

Probes:
   a. Were you able to make the change? What do you think make it work (or not work?)
   b. What made you try to change?
   c. Was there someone else who wanted you to make that change?
   d. Right now, is there anything that you would like to change about the way that you eat?

9. How important do you think food is to your health?
10. Think about what you already know about food and cooking. Where did you learn this information? (i.e. family members, friends, doctors, television, radio, etc.)?

11. Some people feel they need more information about food and cooking. What do you think about getting more information?

   Probes:
   a. What type of information would you like?
   b. How would you like to get this information? (i.e. videos, radio, television, group discussion, classes, pamphlets, doctors)?

12. What does the word “nutrition” mean to you? How important is nutrition?

13. Have you ever gone to a nutrition class? If so, how did you feel about the class?

   Probes:
   a. What was it that made you go?
   b. Would you like to go to a nutrition class?
   c. What suggestions can you make for getting people to go to nutrition classes?

14. Before we finish, is there anything else that you would like to say that we haven’t already covered?
**APPENDIX C**

**NSI DETERMINE YOUR NUTRITIONAL HEALTH CHECKLIST AND DEMOGRAPHIC QUESTIONNAIRE**

![Handwritten notes on a paper pad]

**DETERMINE YOUR NUTRITIONAL HEALTH ...**

Read the statements below. Place a check in the yes column for those that apply to you. Place a check in no column for those questions that do not apply to you.

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have an illness or condition that made me change the kind and/or amount of food I eat.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I eat less than 2 meals per day.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I eat few fruits, vegetables, or milk products.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I have 3 or more drinks of beer, liquor, or wine almost everyday.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I have tooth or mouth problems that make it hard for me to eat.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I don’t always have enough money to buy the food I need.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I eat alone most of the time.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I take 3 or more different medications a day.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I have lost or gained 10 pounds in the last 6 months without trying to.</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I am not always physically able to shop, cook and/or feed myself.</td>
<td></td>
</tr>
</tbody>
</table>

**IMPORTANT! PLEASE COMPLETE OTHER SIDE**
INFORMATION ABOUT YOURSELF:
SEX: ___Female ___Male

AGE: ___60-69 Years
     ___70-79 Years
     ___80-89 Years
     ___90 Years or older
     ___Don’t care to answer

ETHNIC GROUP: ___White
               ___African American
               ___Asian
               ___Hispanic
               ___Native American

DO YOU LIVE ALONE? ___Yes ___No

HOW OFTEN DO YOU PREPARE YOUR OWN MEALS?
___Never
___Sometimes
___Almost always
___Always

WHICH OF THE FOLLOWING DO YOU USUALLY DO?
___Eat alone
___Eat with others

THANK YOU FOR COMPLETING THIS FORM!
APPENDIX D

MODERATOR’S GUIDE USED IN FOCUS GROUPS

Introduction

Good morning and welcome. Thank you for taking the time to join our discussion. My name is Pam Stewart and I am a student at Virginia Tech University. Assisting me today is Katherine Eddy who is also a student. Today we would like to talk with you about the foods that you eat. We are very interested in hearing about the foods you like to eat and would like everyone to share their ideas with us. Please feel free to share them even if they are different from others in the group. Everyone’s ideas are important. There are no right or wrong answers.

Our discussion will last about 45 minutes. We ask that only one person speak at a time. Please speak up so that everyone can hear you. We are tape recording the session because we don’t want to miss anything that you say. Katherine will be taking notes while we are talking. We will be on a first name basis today. We have given you name tags to help us remember names. However, there will be no names associated with any comments that you make. What you say will be kept confidential.

Focus Group Questions

1. Well let’s begin. Let’s start by going around the room. Tell us your name and who does the cooking in your house. Do you live alone?

2. Next we will do an activity. I’m going to pass a piece of paper to each of you. On each piece are the following topics: Easy to make, Good for you, Low in cost, and Tastes good. These are some of the reasons people eat foods. Please circle the reason that you feel is most important to you.

3. Would someone share what they circled as most important? Tell me more about that. (Ask each person what they put).
4. How do you decide what foods to buy? (i.e. coupons, recipes, other people)

   Probe:
   a. Who does the shopping in your house?

5. For those who do their own shopping, do you always shop in the same place?

   Probe:
   c. How often do you shop for foods?

6. Think about the foods you cook. How do you decide what foods to cook?

   Probe:
   a. Who helps you decide what foods to cook?

7. Sometimes people have problems getting the food that they need. Can anyone tell about a time when this has happened to them? (i.e. barriers such as transportation, disabilities, money, time, etc.)

   Probes:
   a. What caused this to happen?
   b. What did you do when this happened?

8. Think about the foods that you eat. Have you ever tried to change what you eat? Can anyone tell about a time in which you tried to make a change?

   Probes:
   a. Were you able to make the change? What do you think make it work (or not work?)
   b. What made you try to change?
   c. Has your doctor ever told you to change what you eat?
   d. Have you had a health condition that has made you change what you eat?
9. How important do you think food is to your health?

10. Think about what you already know about food and cooking. Where did you learn this information? From your doctor? From television? (i.e. family members, friends, radio, etc.)?

11. Some people feel they want to know more about food and cooking. What would you like to know more about?

   Probe:
   a. Would you like to know more about how to cook foods?
   What foods to buy? What foods are good for you?

12. How would you like to find out more about food and cooking?

   Probe:
   a. Would you like to get this information from videos? Your doctor? Television? A dietitian? (Also, group discussion, pamphlets, radio, etc.)

13. What does the word “nutrition” mean to you? How important is nutrition?

14. Think about any health condition you may now have, such as osteoporosis, cancer, higher blood pressure, diabetes, heart disease, or recovery from surgery or illness. Would you like to know how food you eat can possibly reduce the bad effects or symptoms of that condition?

15. Have you ever gone to group discussions where you talked about nutrition? If so, how did you feel about the session?

   Probes:
   a. Do you think you might like to attend group discussions on nutrition?
   b. What suggestions can you make for getting people to go to group discussions on nutrition?
16. Would you like to have someone come visit you at home to talk with you about food and cooking?

17. Before we finish, is there anything else that you would like to say that we haven’t already covered?
APPENDIX E
ACTION PLAN FOR THE STUDY
TIME ALLOCATION FOR ACTIVITIES TO BE COMPLETED

WEEK 1:  JUNE 3 - JUNE 9
Develop Plan
Begin Literature Review
Contact director for pilot study

WEEK 2:  JUNE 10 - JUNE 16
Identify characteristics for recruitment of study
Contact site directors for recruits
Prepare for pilot study
Continue literature review

WEEK 3:  JUNE 17 - JUNE 23
Pilot study 1
Edit focus group questions based on pilot study responses
Continue Literature review
Contact site director for first focus group

WEEK 4:  JUNE 24 - JUNE 30
Pilot study 2 if necessary
Edit focus group questions based on pilot study 2 responses
Continue literature review
Recruit for first focus group

WEEK 5:  JULY 1 - JULY 7
Continue recruitment for focus group 1 and finalize plans
Continue literature review
**WEEK 6: JULY 8 - JULY 14**
Focus group 1
Summarize results
Continue literature review

**WEEK 7: JULY 15 - JULY 21**
Focus group 2
Summarize results
Continue literature review

**WEEK 8: JULY 22 - JULY 28**
Focus group 3
Summarize results
Continue literature review

**WEEK 9: JULY 29 - AUGUST 4**
Focus group 4
Summarize results
First draft of literature review

**WEEK 10: AUGUST 4 - AUGUST 11**
Compile summaries of focus groups
Final draft of literature review
APPENDIX F

ACTIVITY

Easy to make
Good for you
Low in cost
Tastes good

Easy to make
Good for you
Low in cost
Tastes good
VITA

Pamela Stewart was born in Blacksburg, Virginia on June 24, 1971. After graduating in 1990 from Franklin County High School in Franklin County, Virginia, she began her undergraduate studies at Roanoke College in Salem, Virginia. In 1994, she received a Bachelor of Science degree in Biology and then worked as a Doctor’s Assistant until 1995. She began her graduate program at Virginia Polytechnic Institute and State University in 1995. Her Masters’ of Science degree in Human Nutrition, Foods, and Exercise was awarded in May of 1998 and she also completed course requirements for a dietetic internship. Upon completion of her graduate work, Mrs. Stewart plans to complete an internship and pursue a career in clinical dietetics as a Registered Dietitian.