CHAPTER III

METHODS

Introduction

Focus groups were the preferred method for this study as they allowed for insight into women’s opinions and beliefs that would not have been possible if more structured methods, such as individual interviews, questionnaires, and surveys, were used. Qualitative data generated from the focus groups, will later be used to design quantitative research tools such as a questionnaire.

Methodology

This study was approved by the Institutional Review Board for Research Involving Human Subjects at Virginia Tech. All subjects signed an informed consent form prior to participation in a focus group discussion (Appendix A).

A sequence of twelve, open ended questions (Table 1) were developed that followed the criteria cited by Krueger (1988). Questions were developed to address factors such as advantages and disadvantages of dairy foods, factors that influence intake, and possibilities for product improvement. Consideration was given to factors previously identified in food preference models (Randall & Sanjur, 1981; Shepherd, 1989; Khan, 1981; Ajzen and Fishbein, 1980). On July 13, 1996, the focus group questions were tested with a group of six female students and staff from Virginia Tech to familiarize the moderator with the focus group method and identify problems in the questioning line. A pilot focus group was conducted on June 28, 1996 with a group of older women participating in Golden Aerobics at the Blacksburg Recreation Center. Minor modifications were made following these two sessions.

Criteria for Recruitment

Participants recruited for the focus groups were Caucasian females, 65 years of age or older, living in Virginia. The women were independently living and responsible for preparing their own meals and purchasing foods. All women were literate (with an education of at least 8th grade) and of middle income and above. Women were recruited from retirement communities and income was based on place of residence.

Women were recruited from Warm Hearth Village, a retirement community in Blacksburg, Silver Hill, a retirement high rise in Virginia Beach, and Westminster Canterbury, a retirement community in Charlottesville. Site directors were contacted at each site to determine appropriate methods of recruitment. To promote the study at Warm Hearth, eligible women were invited through mailbox flyers to an ice cream social where they were given the opportunity to meet the researchers. Heavy rains resulted in a low turnout, so an additional flyer was sent to further recruit. At Silver Hill, the women were recruited through a letter posted on the facility bulletin board and read by the activity director at a weekly organizational meeting. Women were recruited from Westminster Canterbury by the director through personal contacts. One focus group was conducted at each of the three sites. Refreshments were provided during each focus group and additional incentives consisted of Baskin Robins coupons, recipe booklets, and a door prize drawing for a house plant. At Warm Hearth, all interested participants received letters one week prior to the scheduled focus group reminding
them and thanking them for their interest (Appendix B). Each candidate from Warm Hearth was also telephoned the evening prior to the focus group to confirm attendance. Directors of both Silver Hill and Westminster Canterbury did not wish to give out the addresses or phone numbers of their residents, so a letter of confirmation was sent only to the directors who reminded participants of the study.

Focus Group Procedure

Focus groups were conducted according to methods described by Krueger (1988). A chronological plan as suggested by Krueger was followed (Appendix C). The number of focus group participants ranged from 5-10 participants. Five women were present at the Warm Hearth focus group on July 22, 1996, nine were present at Westminster Canterbury on July 31, 1996 and ten women were present at Silver Hill on August 9, 1996.

An assistant moderator was present at all focus group discussions to take notes, observe group interactions, and help ensure that each session ran smoothly. Focus group dialogue was recorded using two audio-tape recorders and back up tapes were made following each group. Focus groups were conducted in activity rooms available at each site. Name tags were used to familiarize participants with one another. As participants arrived, they were greeted and encouraged to have refreshments. Sessions began with a welcome and a brief overview of the topic and ground rules (Appendix D). Welcome and ground rules were modeled after those described by Krueger (1988). Following this introduction, participants signed the consent forms (Appendix A). At this time, the two audiocassette recorders were turned on and focus group participants were asked to introduce themselves and say one thing they enjoyed doing at their respective location (Blacksburg, Charlottesville, or Virginia Beach). A seating chart of the participants was drawn by the assistant moderator to assist in identifying comments in later analysis, though no names were used. Twelve questions were asked (Table 1). Possible probes were developed to accompany each question as part of a moderator’s guide (Appendix E). Two written activities accompanying questions one and seven were included in the questioning line to help encourage participation (Appendix F). Activities were given to women and directions were read aloud for clarity. Following each written activity, responses were shared and discussed. The initial activity during the focus group (Appendix F) addressed factors that influence general food choices. Women rated four factors (good for me, taste good, easy to use, and low cost) in order of importance. Women then shared their choices with the group and provided reasons to support their choices. This activity was intended as an ice breaker to allow women to begin thinking about their food choices and familiarize them with focus group discussion. After the initial activity, participants were asked to generate a list of dairy foods. The assistant moderator recorded the items on a large sheet of poster paper to serve as a reference for the participants when answering questions later in the discussion. This activity was designed to focus women on dairy foods, to help clarify which foods constituted dairy foods, and to familiarize woman with speaking in a focus group setting. A need for this type of list was identified in the pilot tests. Participants in each focus group suggested assorted dairy products which were further clarified and written down by the assistant moderator. Non-dairy items suggested by participants (eggs for example) were not used. Prior to the study, a basic list was compiled by the researcher (Appendix G). If similar items were not included by the participants in the different groups, they were suggested by the moderator and placed on the list after participant approval. The third activity accompanied the seventh focus group question (Appendix F) and required women to reflect on different stages in their lives and consider times when more or less dairy products were consumed. It was designed to stimulate thought about factors that changed food choices. A moderator’s guide
(Appendix E), consisting of the activities and twelve questions with possible probes was used by the moderator.

During the focus group meeting, an informal style was used to encourage open participation. First names were used, and all participants were free to speak at any time.
### Table 1- Focus Group Questions

1. **ACTIVITY- FACTORS THAT INFLUENCE GENERAL FOOD CHOICES:** Let’s go around the room so everyone can share what they ranked as most important and explain what influenced you to give it the highest ranking.

2. Think back over the last few months. What are some dairy foods that you ate regularly?

3. Let’s talk now about some of the dairy foods you seldom or never eat. As you did before, give some examples and reasons that influenced your decision not to eat these foods.

4. We’ve talked about dairy foods that you do and do not eat. Compared with other foods, how important are dairy foods to you?

5. What are some advantages of eating dairy foods?

6. What are some disadvantages of eating dairy foods?

7. **LIFECYCLE ACTIVITY:** Who would like to share some of the times you have made changes in the amounts of dairy foods you eat?

8. Describe some situations in which you can see yourself changing the dairy foods you regularly eat.

9. Who influences your decision to eat dairy foods?

10. How do you think the food industry could improve dairy foods to make them more desirable to you and your friends?

11. What does the term osteoporosis mean to you?

12. Is there anything else you'd like to add that we haven't covered here today?
Efforts were made to address more hesitant members in order to encourage their participation and input. Focus groups lasted approximately 45 minutes to 1 hour and 15 minutes. After the focus group was completed, participants were asked to fill out a demographic questionnaire (Appendix H). Ice cream coupons and recipe books were distributed and a drawing was conducted for the house plant. All participants were thanked for their participation at the time of the focus group, and written thank you notes were sent to both the director and participants at Warm Hearth and the directors at Silver Hill and Westminster Canterbury because these two sites could not release addresses or phone numbers of their residents.

Following each session, there was a debriefing session with the moderator and the assistant moderator. Tapes were spot-checked to be certain that participants’ responses were captured. Initial impressions, overall themes, nonverbal behavior and suggestions for improvements were addressed, and notes were made. Level of familiarity and other group dynamics were also noted. Brief summary reports were written by the moderator, based on debriefing sessions and the assistant moderator’s notes.

**Analysis of Focus Group Data**

The focus group moderator was responsible for transcription and analysis. Since the moderator was present in all discussions and had intensive exposure to the data, it was ideal for this same person to conduct the analysis (Krueger, 1988). Prior to the start of transcription, the moderator listened to each tape to become reacquainted with the flow of dialogue. In order to develop a written record of the focus group discussions, quotes were directly transcribed using a word processing program while listening to the cassette tapes. A word processing program allowed researchers to later sort, categorize and rearrange statements easily (Krueger, 1988). The moderator listened to and rewound each tape multiple times to accurately capture quotations. Pages in the three transcripts, one per focus group, were numbered consecutively in the order that the focus groups were conducted. All page numbers included site initials, WH, WC, and SH. When transcription was complete, an assistant listened to original focus group tapes and verified that all verbal dialogue was accurately transcribed.

Focus group summaries and notes taken by the assistant moderator were reviewed by the moderator and frequently mentioned opinions were noted as possible themes. Transcripts were then read by the moderator to further identify preliminary themes and patterns. These initial themes and opinions became coding categories. Coding categories were used to identify key ideas as the combined focus groups as described by Stewart et al. (1994). While keeping the initial objectives in mind, statements were sorted, categorized and rearranged into themes. Quotes were cut and pasted into coding categories using a word processing program. Each quote was accompanied by the initials and page number of the original transcripts, allowing researchers to easily refer back to the quote in the context in which it occurred. When necessary, themes were modified or further broken down into subthemes. This systematic analysis was independently conducted by the moderator and an assistant to verify accuracy of interpretation. Results were not discussed by the moderator and the assistant during the analysis process. In order for the analysis to be verified, it was necessary for both persons to identify similar themes using the raw data (Krueger, 1988).

Focus group themes were reported in Chapters V and VI, using the descriptive summary method described by Krueger (1988). This method included a descriptive summary of each theme followed by illustrative quotations for emphasis and clarity. Reports were modeled after those used by Brug et al. (1995) in their study of fruit and vegetable consumption. Numbers and percentages of responses were not used as they are not
appropriate for focus group research (Krueger, 1988); instead, adjective phrases such as those suggested by Krueger were used as seen in the following examples, “Several participants strongly agree that...” or “... was a prevalent feeling”. Reports of focus group discussion were derived from the analysis of all focus groups collectively, though sub-themes that were not prevalent in all focus groups were identified. Each focus group results was not reported separately because researchers were interested in overall attitudes and perceptions of older women.

Chapter IV provides perspective about focus group participants and acts as an introduction to focus group themes. Group dynamics were reported in Chapter IV along with socioeconomic data and results of focus group activities. The demographic data from the questionnaires were compiled for each focus group independently and the group as a whole (Chapter IV, Table 2). Results of the initial activity, Factors that Influence Food Choices, were reported separately from focus group themes as this activity was intended to be an ice breaker and the data were about general food choices, not specifically about dairy foods. Written responses for this activity were not separately analyzed as they coincided with oral responses. Results of The Lifecycle activity and the Listing Dairy Foods activity are also reported in Chapter IV as they provide an introduction to the major focus group themes which are reported and discussed in detail in Chapter V, Perceptions of Dairy Foods, and Chapter VI, External Factors that Influence Dairy Food Intake.