Dairy Food Consumption in Educated, Older Women in Virginia: Use of Focus Groups to Examine Attitudes and Perceptions

Katherine T. Eddy

Thesis submitted to the Faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Master of Science in Human Nutrition, Foods and Exercise

Denise Brochetti, Chair
Susan Duncan
Marilyn Prehm

September 4, 1997
Blacksburg, Virginia

Keywords: Dairy, Food Attitudes, Elderly, Calcium, Focus Groups
Consumption of Dairy Foods in Educated, Older Women: Use of Focus Groups to Examine Attitudes and Perceptions

Katherine Eddy

(ABSTRACT)

National studies indicate that older women have a suboptimal intake of calcium, and are not consuming the recommended daily servings of dairy foods. Three focus groups of 5-10 women were conducted to examine older women’s perceptions of dairy foods. Independent living, Caucasian women aged 65 and older were recruited from retirement communities in urban and rural areas of Virginia. Discussion questions addressed preferences for dairy foods, advantages and disadvantages of dairy foods, factors that influence dairy intake, and possibilities for product improvements. Focus group discussions were audio taped, transcribed by the facilitator, then checked for accuracy by a Virginia Tech graduate student using methods described by Krueger (1988). Both persons identified major and minor themes and organized quotations thematically. Analysis was independently conducted to verify correct interpretation of quotations. Results were reported in the following three broad themes: Positive and Negative Health Perceptions, Sensory Attributes, and External Influences.

The predominant negative health perception was that many dairy foods are high in fat. Many women also associated dairy foods with cholesterol, sodium, and calories. One woman in each focus group reported that she experienced lactose intolerance. Participants believed dairy foods were a good source of calcium and other nutrients and were aware of osteoporosis and its relationship with calcium. However, calcium supplement use, particularly Tums®, was prevalent, and participants felt it was important in osteoporosis prevention. Women reported their physicians encouraged them to use calcium supplements and watch intake of dairy foods due to fat content. Women also reported receiving information from media sources such as health newsletters.

Women wanted the food industry to recognize older adults as an important market. Many felt that dairy food packages, particularly cottage cheese and reduced-fat ice creams, were too large for a single person and resulted in spoilage and wasted money. Women found it difficult to locate and read expiration dates, and some expressed confusion over “Use By” and “Sell By” dates. Products, such as plastic milk cartons and zip-pack cheeses, were difficult for women with arthritic hands and diminished vision to open. Women’s comments suggested that they would be receptive to products and packaging designed and marketed to meet their needs. Appropriate recommendations are made to the dairy industry for the promotion and development of such dairy foods. Nutrition education programs for this population should continue to promote the use of low fat dairy foods and should emphasize other nutrients, such as Vitamin D and phosphorus, found in dairy foods.
ACKNOWLEDGMENTS

This study was completed with the help of many groups and individuals who deserve recognition for their interest and cooperation with this study. Gratitude is expressed to the following:

- Dr. Denise Brochetti, major professor, for her guidance, patience, and support;
- Dr. Marilyn Prehm, committee member, for her advice and understanding during the completion of this thesis and throughout my graduate work;
- Dr. Susan Duncan, for her suggestions and serving as a committee member;
- Dairy Management Inc., Rosemont, IL, and Warm Hearth Gerontology Instruction and Research Committee, Blacksburg, VA, for funding this project;
- Social directors at Warm Hearth Village, Westminster Canterbury and Silver Hill for their willing participation and assistance in recruiting their residents;
- The women who participated in the focus groups for sharing their ideas;
- Angela Wood, for her work as assistant analyst;
- Pamela Stewart, who was my assistant moderator and my friend;
- Sherry Terry, Mary Taylor, and Sherry Saville, HNFE secretaries, who know everything and always answered my questions with a smile;
- My fellow graduate students, for their empathy, friendship, and sense of humor; and
- My family for their love, support, and encouragement, with special thanks to my parents, Nancy and Lindsay Bruce, for their faith in my ability to succeed.
# TABLE OF CONTENTS

## CHAPTER

I. INTRODUCTION ..............................................................1  
  Statement of the Problem .............................................1  
  Purpose Statement......................................................2  
  Research Questions....................................................2  

II. LITERATURE REVIEW ......................................................3  
  Demographics of Women Aged 65 Years and Older...............3  
  Osteoporosis................................................................3  
  Effects of Calcium on Hypertension and Colon Cancer Risk...4  
  Calcium Intake................................................................5  
  Food Choices in the Elderly...........................................7  
  Food Attitudes and Dairy Food Consumption......................8  
  Food Choice Models...................................................9  
  Focus Groups...........................................................10  

III. METHODS.......................................................................13  
  Introduction................................................................13  
  Methodology............................................................13  
  Analysis of Focus Group Data........................................16  

IV. RESULTS AND DISCUSSION:  
  SOCIOECONOMIC CHARACTERISTICS OF PARTICIPANTS  
  AND FOCUS GROUP DYNAMICS.........................................19  
    Introduction................................................................19  
    Socioeconomic Characteristics of Participants...............19  
    Group Dynamics ......................................................22  
    Focus Group Activities................................................23  
    Focus Group Themes..................................................25  

V. RESULTS AND DISCUSSION:  
  PERCEPTIONS OF DAIRY FOODS .........................................28  
    Positive Health Perceptions...........................................28  
    Negative Health Perceptions..........................................29  
    Calcium Supplementation .............................................33  
    Preferences and Sensory Attributes.................................35  
    Combined Influences ..................................................36  

VI. RESULTS AND DISCUSSION: EXTERNAL FACTORS THAT  
  INFLUENCE DAIRY FOOD INTAKE......................................38  
    Subjective Norms ......................................................38  
    Media........................................................................39  
    Environmental Factors...............................................40
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Focus Group Questions</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>Socioeconomic Characteristics of Focus Group Participants</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Focus Group Themes</td>
<td>26</td>
</tr>
</tbody>
</table>