

NUTRITION EDUCATION NEEDS AND INTERESTS:
PERSPECTIVES OF OLDER AMERICANS PARTICIPATING IN A CONGREGATE
MEAL PROGRAM IN EAST CENTRAL INDIANA

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ABSTRACT

THESIS: Nutrition Education Needs and Interests: Perspectives of Older Americans Participating in a Congregate Meal Program in East Central Indiana.

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The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. Subjects in this study included sixty participants from 11 LifeStream Services Inc. congregate meal sites across East Central Indiana. Focus groups were conducted by the primary researcher at each site to determine nutrition needs and interests of elderly Americans participating in a congregate meal program concerning nutrition education and other health related topics. The elderly at LifeStream sites were most interested in having more information about specific disease states, most specifically diabetes. Currently nutrition information is received by many different venues with handouts being the most popular and accepted with this population. Ideas that were suggested to improve LifeStream nutrition education included more one-on-one interaction to teach new nutrition information. Keeping lessons simple and interactive is also important when teaching elderly Americans about nutrition topics.

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CHAPTER I

INTRODUCTION

As the life expectancy increases in America, proper nutrition intake of older persons continues to play an important role. An estimated 87 percent of older adults have diabetes, hypertension, dyslipidemia, or a combination of these diseases (Kamp, Wellman & Russell, 2010; Institute of Medicine Committee, 2000). Older persons, especially after the age of 50, often experience various obstacles that prevent them from following healthy diets such as limited mobility, decreased appetite, and disease complications (Sims & Longe, 2008). Nutrition education interventions that lead to healthier eating patterns have the potential to delay onset of chronic disease and help maintain the health and independence of older Americans (Teague, 1987). Focus group research has shown that many older people do not eat healthy diets but are concerned about their nutrition (Crockett, Heller, Merkel & Peterson, 1990). Focus groups have become an increasingly popular form of data collection for social and health science as well as in evaluation research (Kidd & Parshall, 2000). A targeted nutrition education program would allow this population to increase their knowledge of topics that interest them and therefore potentially reduce or prevent some disease complications. Nutrition education is required as part of the Older Americans Act and participants in congregate meal programs funded

by this act are often presented with nutrition handouts and other information. Besides meals, services include nutrition screening, education, assessment, and counseling as part of the Title III Nutrition Program (Department of Health and Human Services, 2011).

The congregate meal program serves the elderly ages 60 and over to give them nutritious meals at a low cost (Gitelson, Fitzpatrick, Case & McCabe, 2008). Meals served at a congregate meal site must meet at least one third of older adults' Dietary Reference Intake (DRI) and meet the most recent dietary guidelines for Americans (Kamp, 2010). Many health professions support programs, such as the Title III Nutrition Program. For example, "It is the position of the American Dietetic Association (ADA) that all older adults should have access to food and nutrition programs that ensure the availability of safe, adequate food to promote optimal nutrition status" (Kamp, Wellman & Russell, 2010). The congregate meal program serves to address this position of the ADA. Not only is the Title III program helping the elderly consume healthy meals, it also reduces food insecurity. The cost of one year's supply of Title III home delivered meals is about the same as staying one day in the hospital (Dausch, 2003; Lee et al., 2010). Title III nutrition programs are required by law to give some sort of nutrition education to their participants. LifeStream currently gives our nutrition education handouts to congregate meal diners in East Central Indiana, commonly known as "Area Six."

There are several causes of nutritional health decline in the elderly population, including decreased oral intake, polypharmacy, disease presence, and decreased overall independence (Norman et al., 2008). Weight loss associated with malnutrition can be

caused by dysphagia, poor dentition, and anorexia as well as altered taste and smell. Social factors contribute greatly to declining nutrition status. It has been shown that free-living elderly often have a much better intake than institutionalized elderly, and eating alone is often a large reason for decreased nutritional status in both populations (Kuzcmarksi & Cooney, 2001). Nutrition education that is targeted towards the elderly population could help prevent declining nutrition status. For many older adults, eating a meal is a very secure, meaningful and structural part of everyday life. If this is altered in any way, the elderly are put at a higher risk of developing a nutrition problem (Kuczarski & Weddle, 2005). Improving nutrition education programs at congregate meal sites can improve overall health and decrease health complications.

Problem

The nutrition information that is currently being provided to congregate meal participants may or may not be the information that the elderly congregate meal participants would benefit the most from. Determining what nutrition topics are of most interest to this population is important to know to provide the most useful information that will have the most benefit. Focus group research technique is useful as an initial step in developing nutrition education or other health promotion programs (Teague, 1987). Targeted nutrition information is a key to preventative healthcare and is especially important because the United States population is rapidly aging. By 2030, the number of Americans aged 65 and older will more than double to 71 million, comprising roughly 20 percent of the U.S. population. In some states, a quarter of the population will be aged 65

and older. The cost of providing health care for an older American is three to five times greater than the cost for someone younger than 65 (Sims & Longe, 2008).

Purpose

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes.

Research Questions

The following research questions were examined in this study:

RQ#1. What nutrition topics are important and of interest to the elderly congregate meal participants?

RQ#2. What methods are most favored to present nutrition education materials to the elderly congregate meal participants?

RQ#3. How is nutrition knowledge currently obtained by congregate meal participants?

RQ #4. What could be done to nutrition education materials to make them more helpful to congregate meal participants?

Rationale

It was determined which nutrition topics are of the most interest to congregate meal program participants in this study. The more informed the healthcare professionals are about what types of nutrition topics interest the participants, the easier it will be for

healthcare professionals to develop education materials. If the nutrition education materials that are presented to congregate meal participants are of interest, their knowledge of each topic will most likely increase more than if they were presented information on a topic that was of no interest.

Assumptions

The researcher made the following assumptions in the implementation of the study and in the interpretation of the data:

1. Participants who chose to take part in the focus groups are representative of a typical congregate meal site in general.
2. There were an adequate number of focus group participants who were willing to voice their opinions during the focus group.
3. Congregate meal participants understood the purpose of participating in a focus group.
4. The researcher is sufficiently knowledgeable to conduct focus group interviews.
5. Participants told the truth when filling out the demographic data sheet.

Definitions

For the purpose of this study, the following definitions were used:

1. Aged- elderly people; those who have reached an advanced age (Kristine, 2002)

2. Aging- process of growing older; a process that includes physical changes and sometimes mental changes (Kristine, 2002).
3. American Dietetic Association- The world's largest organization of food and nutrition professionals (American Dietetic Association, 2011).
4. Area 6- The region of Indiana Area Agency on Aging which includes Blackford, Delaware, Grant, Henry, Jay, Madison and Randolph Counties and serves the elderly in these areas (Census Bureau, 2008).
5. Area Agency on Aging- an area agency on aging designated under section 305(a)(2)(A) or a State agency performing the functions of an area agency under section 305(b)(5) (Wellman, Weddle, Kamp, Podrabsky, Reppas, Pan, Silver & Rosenzweig, 2005).
6. Congregate Meal Site –A federally funded meal program provided by the Title III National Nutrition Program, in order to serve the elderly age 60 and over to provide them with a nutritious meal at a low cost (Gitelson, 2008).
7. Elderly- accepted in the United States of America as someone of the chronological age 65 years or older (Department of Health and Human Services, 2011).
8. Focus Group- “a group interview – centered on a specific topic and facilitated and co-coordinated by a moderator or facilitator which seeks to generate primarily qualitative data by capitalizing on the interaction that occurs within the group setting” (Sim & Snell, 1996).
9. Malnutrition- “the imbalance between intake and requirement which results in altered metabolism, impaired function, and loss of body mass or as a

state of nutrition in which a deficiency or imbalance of energy, protein, and other nutrients causes measurable adverse effects on tissue and/or body form” (Norman, 2007).

10. Older American- accepted in the United States of America as someone of the chronological age 65 years or older (Department of Health and Human Services, 2011).

11. Perception-capacity for comprehension; an understanding of (Merriam-Webster, 2011).

12. The Older Americans Act Nutrition Program- “a community based program that promotes health and independence among older adults” (Quigley, 2008).

13. Young old-those who are in their mid-50s to mid-70s in age (Department of Health and Human Services, 2011),

Summary

Nutrition education is an important part of keeping people healthy, especially in the elderly population. Participants in congregate meal programs are often presented with nutrition handouts and other information as required by the Older Americans Act Nutrition Program, which funds the LifeStream congregate meal program. The information presented to congregate meal participants however may or may not be of interest to this population. If congregate meal participants are able to voice their opinions about what health and nutrition topics are of interest to them, the information has the potential of being more useful and beneficial. It is much easier for anyone to learn about

something that is of interest to them, rather than information presented based on other premises such as the topic is of interest to the presenter.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. This chapter will present a review of the literature that describes the current health status of the elderly population, the effects of nutrition on aging, nutrition beliefs of the elderly, and a review of past focus group studies concerning the elderly.

Background

Since 1990, life expectancy in the United States has increased dramatically (Sahyoun, Lentzner, Hoyert & Robinson, 2001). By 2050, it is predicted that the adult population aged 65 and older will double from the current estimate of 40.2 million to more than 88.5 million (Vincent & Velkoff, 2010; Weeden & Remind, 2010). It is estimated that 42 percent of Americans aged 65-74 years self-reported their health as very good to excellent (Kuczmarski & Weddle, 2005; Schiller & Bernadel, 2002). AdvantAge Initiative (2008) surveyed 88,016 people in Area Six of Indiana, which

includes Delaware County, and found that 77 percent of the respondents aged 60 years or older who were community dwelling reported their health to be excellent, very good, or good, while only 22 percent reported their health to be fair, poor, or very poor. Similarly, Kuczmarski & Cooney (2001) found that a majority of women self-reported their health status as “good”. Women in this study were more likely than men to rate their current health status as better than their peers. It has been shown that age is a predictor of what types of health topics are important to seniors (Fischer, Crockett, Heller & Skague, 1991).

For older women and the old-old (those over age 85), there is a much higher risk for declining health status compared to the young-old which are those in their mid-50s to mid-70s (Barrocas, White, Gomez & Smithwick, 1996). Nutrition is one of the best predictors of aging successfully. Good nutrition has been linked to a lower risk of disease and disease-related disability, high mental and physical function, and active engagement in life. Quality of life and health are positively related, therefore the better a person’s health status, the better their overall quality of life (Kuczmarski & Cooney, 2001). Age-related health problems can be further exacerbated by a diagnosis of malnutrition which is defined loosely as “a nutritional deficit or imbalance” and is common in many elderly Americans (Norman, Pichard, Lochs & Pirlich, 2008; Pai, 2011; Portero-McLellan et al., 2010; Sampson, 2009).

Congregate Meal Programs and LifeStream

Under the Older Americans Act (OAA), the Older Americans Nutrition Program (OANP) is the largest and most visible, federally funded community-based nutrition

program for older adults. The Nutrition Program is administered by the United States Department of Health and Human Services, Administration on Aging (AoA) who provides leadership, coordination, and support to an Aging Network that includes 57 State Units on Aging (SUAs), 655 Area Agencies on Aging (AAAs), and thousands of local providers under Title III (Wellman et al., 2005).

Congregate Meal Programs

Congregate meal sites were started to assist socioeconomically disadvantaged, rural older individuals to improve their health related practices (Thomas, Almanza & Ghiselli, 2010). Meals provided by Title III meal programs are intended to promote health and help manage chronic disease in the United States. In a pilot study conducted by the U.S. Administration on Aging (2004), 43 percent of respondents were at high nutritional risk, and 48 percent were at moderate nutritional risk. Nutritional interventions help significantly in the prevention of or the progression of current diseases in the elderly (Pai, 2011). Congregate and home-delivered meals are currently served to 236 million older adults annually (Kamp et al., 2010).

LifeStream Services

LifeStream Inc. is a division of the Area on Aging which serves Area six of Indiana which includes Grant, Madison, Henry, Blackford, Delaware, Jay, and Randolph counties located in East Central Indiana. In the past year LifeStream has served over 32,000 people through their services which include transportation, nutrition, in-home care, caregiver support, housing, and guardianships. LifeStream has served 60,860 meals

to 1,018 people within the past year through the congregate meal program. The mission of LifeStream is to improve the quality of life for people at risk of losing their independence. LifeStream serves meals to their participants through senior cafes where there is a recommended donation of \$3.50 per meal at any of the 11 cafes available plus the Blackford County Hospital offers an evening meal (LifeStream, 2011).

Health Status of the Elderly Population

The health status of the elderly in America is determined by many things including socio-economic status, disease state, and age. People over the age of 65 represent the fastest growing age group in the U.S. which has a direct effect on the increased demand for healthcare and social services (Fischer et al., 1991). Participating in a congregate meal program has a positive effect on the many things that the elderly combat in order to maintain good health. Benefits of participating in a congregate meal program include physical, recreational, social, and learning opportunities which all help to improve the health of the elderly (Gitelson, 2008).

In the United States

An estimated 87 percent of older adults have diabetes, hypertension, dyslipidemia, or a combination of these diseases (Kamp, Wellman & Russell, 2010; Institute of Medicine Committee, 2000). The number of chronically ill seniors in the United States is predicted to dramatically increase between now and 2030 (Coombs, Baroccas & White, 2004). NHANES III data for non-institutionalized elderly Americans over the age of 65 indicated that 11 percent of men and 10.2 percent of women were

anemic (Guralnik, Eisenstaedt, Ferruci, Klein & Woodman, 2004). Anemia has been shown to be a strong independent contributor to morbidity, mortality, and frailty in elderly patients and is commonly misdiagnosed as a nutritional deficiency during lab tests for this population (Vanasse & Berliner, 2010). If the iron status of the elderly could be improved through education and screening, the number of sick elderly may decrease. As the number of elderly Americans increases, the rate of this population that will develop a disease will increase proportionally, creating an increase in the total number of Americans with a chronic disease.

Rivlin (2007) stated that interventions, even late in life, can improve health outcomes, specifically for osteoporosis and heart disease patients. Early detection of disease is important and exacerbation of these diseases can occur if malnutrition goes undiagnosed. Many elderly, especially those who are free-living and not receiving any meal support, are not screened for nutrition status in a routine check-up, therefore increasing the risk of undiagnosed malnutrition.

Health Status of Congregate Meal Participants

There are several causes of nutritional health decline in the elderly population including decreased oral intake, polypharmacy, disease presence, and decreased overall independence (Norman et al., 2008). Quigley, Hermann, & Warde, (2008) reported that 88 percent of females and 81 percent of males participating in an Oklahoma congregate meal program were at high nutritional risk. The goal of any food and nutrition program, such as a congregate meal program, is to provide meals to those in need, as well as

provide nutrition education, screening, and assessment to promote healthful aging, but all of these areas are not always covered effectively (Kamp et al., 2010).

Addressing the nutritional needs of the elderly is important in preventing chronic disease development and increasing the overall well-being of elderly Americans (Dausch, 2003). Fifty-eight percent of those who participate in a congregate meal program reported that the meal they receive makes up half of their daily intake. People who participate in a congregate meal program also tend to have lower incomes, less education, less access to transportation and be in poorer health than those not participating in a congregate meal program (Gitelson, 2008).

Because good nutrition plays such a role in disease prevention, participating in a congregate meal program can significantly reduce the risk of developing a chronic disease. The goal of the Older Americans Act, which allows for federal funding to the Title III congregate and home delivered meal programs, is to provide nutritional services that help manage chronic disease. Congregate meal participants tend to have a better nutritional intake than those who are at risk and do not participate in a supplemental meal program (U.S. Administration on Aging, 2004). Not only is the Title III program helping the elderly consume healthy meals, it also reduces food insecurity. The cost of one year's supply of home delivered meals is about the same as staying one day in the hospital (Dausch, 2003; Lee et al., 2010).

Summary: Health Status of the Elderly Population

While there are many different aspects treating and preventing health issues among the elderly, the aim of the Title III Nutrition Act is to provide nutritious meals for

those who might not otherwise receive one (Gitelson, 2008). For many seniors, the meal that is provided to them by the congregate meal program is the only meal they consume the entire day. This essential health promotion and disease prevention program helps delay the start of more serious diseases and conditions (U.S. Administration on Aging, 2004). An estimated 87 percent of older adults have diabetes, hypertension, dyslipidemia or a combination of these diseases making it more important than ever for programs such as the Title III Nutrition Act to prevent the onset of disease (Kamp, Wellman & Russell, 2010; Institute of Medicine Committee, 2000).

Health and Nutrition Effects on Aging

An increase in knowledge in any subject will help a person better themselves. In this case, an increase in nutrition knowledge has the potential of helping this elderly population improve their overall health. Healthful aging is a main goal of the American Dietetic Association, and all nutrition recommendations for seniors are geared to meet this goal (Kamp, 2010). Older adults place greater emphasis on psychosocial factors that are key to successful aging, with less emphasis on factors such as longevity, genetics, absence of disease/disability, function, and independence (Reichstadt, Depp, Palinkas, Folsom & Jeste, 2007). Age-related changes that cause the most frustration for older learners include changes in sight and hearing, reaction time, and memory (Kicklighter, 1991).

Nutrition Knowledge of the Elderly Population

Nutrition knowledge and attitudes are strongly associated (Fischer, 1991). Coombs (2004) found that in a survey of older adults, they believed that nutrition is either very important (80%) or somewhat important (16%) in management of their chronic disease. Older adults in this survey also stated that they currently depend on methods other than nutrition to treat their chronic disease such as medication (81%) and exercise (80%). Most participants stated that they would be likely to use a short, easy to understand guide regarding nutrition care if they were provided with it by their physician (Coombs, 2004). Some of the most preferred ways the elderly would like to learn new topics were through TV, meetings or social gatherings, lessons with demonstrations, or instruction given in a one-on-one setting (Crockett et al., 1990). Kirkpatrick, Page, & Hayward (2008) found that when the elderly were asked about vitamin and mineral use a majority said that they believed the supplements they were taking were safe and effective, but they worried about interactions with prescription medications. Nutrition education that focuses on vitamin and drug interaction may be helpful for this population. Fischer (1991) found that younger seniors were more concerned with unsaturated fats and reduced calorie foods while older seniors were more interested in healthful food preparation methods and how to introduce low-fat items into their diets. Patacca, Rosenbloom, Kicklighter, & Ball (2004) found that disease specific information was an interest among the elderly during focus group research concerning nutrition education. Frustration was also reported stating that nutrition information specifically on TV changes too fast to know what information is correct (Patacca et al., 2004).

Roth (1995) found that after nutrition education lessons were presented to congregate meal participants in Northeast Indiana with varying nutrition risk levels and varying levels of formal education that those with the highest level of education, mostly females, had the highest level of nutrition knowledge. Those with the lowest nutrition knowledge scores were people of 85 years of age or older, and a majority of these congregate meal participants were defined as a level two, or moderate, nutrition risk. There was also a significant difference between nutrition knowledge of men and women during this survey; women tended to score higher. A greater proportion of females than males were in the lowest nutrition risk category; the 65-74 year olds had a higher nutrition knowledge average score than did the two older groups studied. Roth concluded that more nutrition education is needed for these participants, but it must be geared toward their learning level to be effective (Roth, 1995).

Sahyoun, Pratt, & Anderson (2004) determined that older adults responded best to nutrition education materials when certain guidelines were considered. The following predicted the most positive behavior changes: limiting educational messages to one or two, reinforcing and personalizing messages, providing hands on activities, incentives, and cues, and access to health professionals (Sahyoun, Pratt & Anderson, 2004). Taylor-Davis et al. (2000) proposed that positive nutrition education outcomes were linked to understandable concrete messages, newsprint that contained large print, newsletters that could be read at the participants' convenience, and allowed extended time to process information. It is necessary to tailor a nutrition education program specifically to older adults to allow for an increased understanding for all participants. Nutrition education is not a one size fits all program. Crockett et al. (1990) found that participants responded

positively to nutrition classes, especially if someone would be available to ask questions. When participants were able to interact with the person teaching the lesson, the chances of older people attending nutrition classes increased (Crockett, 1990). Parker, Powell, Hermann, Phelps, & Brown (2011) found the most preferred delivery method to learn new health material in limited income older adults was video followed by PowerPoint and then handouts. Handouts were treated as supplemental information, and therefore, the seniors preferred a more interactive method of learning. LifeStream currently uses the handout method to present new information to its clients. Parker et al. (2011) found some reasons that older adults liked the handouts were because they can read over it if they forget something. They also like handouts because they cannot always hear presentations so they like to look back at information. Some people, however, did not like handouts stating that they did not read them or they take the handouts with the intention of reading it and never do. Retention of information is often an issue with elderly nutrition education. Patacca et al., (2004) found that after nutrition education lessons, most participants agreed that they learned something, but few could name specific examples. Even when examples were given, participants could rarely expand on what they had learned.

Health Risk and Nutrition Status

Quigley et al. (2008) reported that, of the subjects found to be at high nutritional risk, 50 percent reported they either had an illness that affected the foods they consumed. It is also common for those at high nutritional risk to eat alone, take three or more medications, and/or be unable to feed themselves (Sampson, 2009). Malnutrition creates

many problems for the elderly population including increased risk of infection, osteoporosis, fractures, poor wound healing as well as respiratory and cardiac issues (Sampson, 2009; Portero-McLellan et al., 2010). Maintenance of optimal achievable nutrition status helps older persons maintain health and independence (Barrocas et al, 1996). Malnutrition undeniably promotes morbidity, and nutrition screening is necessary to prevent problems before they occur, therefore screening should be part of a routine health exam for older adults (Kuczmarski et al., 2000). Malnutrition increases significantly when patients have other health problems which cause an increase in morbidity and mortality (Norman et al., 2008). Dehydration, which is a form of malnutrition, can also have a detrimental health effect on the elderly because it results in inadequate energy intake and decreased essential nutrient intake (Kuczmarski & Weddle, 2005). Certain demographic factors are also the cause of elderly nutrition decline including those with limited economic resources, those who are isolated from family and friends, and those whose physical, cognitive, or emotional status prohibit self-care of limit access to a healthy diet (Barrocas, 1996). Low income elderly adults are at the highest risk for developing diet related chronic disease due to lifestyle and dietary practices (Stewart, Brochetti, Cox & Clarke, 1998).

Summary: Health and Nutrition Effects on Aging

While there are many issues that seniors face daily in order to maintain proper health, an advance in education would help improve their chances of aging healthfully (Kamp, 2010). Malnutrition is a large issue for older Americans, however, congregate meal programs aim to reduce malnutrition in the elderly and improve their health by

giving them access to nutritious foods (Sampson, 2009; Portero-McLellan et al., 2010). Healthy older adults are capable of continuing to learn and change behaviors into their 60's, 70's, and 80's. Older adults perceive themselves as capable of learning new information, and research supports that the desire to learn does not lessen as individuals grow older (Roth, 1995).

Focus Group Studies and Nutrition

Focus groups are interviews and are a qualitative research method often used to generate a rich understanding of participants' experiences and beliefs (Morgan, 1998). Focus groups have often been used with seniors and others to plan and evaluate nutrition and health education programs. Some previous purposes include eliciting perception of elderly persons about food, assessing beliefs and needs of senior citizens, planning work-site nutrition programs, designing a smoking prevention program, and many others (Crockett et al., 1990; Loeb, Penrod, & Hupcey, 2006). Knowledge about the target population is necessary to plan an intervention that uses preferred educational approaches that is appropriate for the group's lifestyle (Crockett et al., 1990).

Focus Group Research with the Elderly

Focus group research has been performed for years in order to obtain a wide variety of information. Focus groups have become an increasingly popular form of qualitative data collection (Kidd & Parshall, 2000). The focus group approach has been found useful when developing nutrition education materials for older adults (Crockett et

al., 1990). Focus groups help to reveal the most appropriate topics for nutrition education as well as how the education should be conducted (Patacca et al.,2004).

As with any population but particularly the elderly it is important to show that the moderator is caring and to build a rapport with the focus group. It is important that moderators of focus groups go beyond saying that they care and show it in their behavior. (Krueger & Casey, 2000). There have been a growing number of research studies using older adults and focus groups as an efficient and effective way to gain insight. Communications among focus group participants are useful for uncovering the needs, attitudes, and behaviors of people which may not be revealed through individual interviews or individual studies (Loeb, Penrod & Hupcey, 2006). Group dynamics which take place in a focus group are central to its success. In a focus group it is sometimes difficult to determine the strength of a particular viewpoint, the number of individuals who express it, and the intensity or emphasis with which it is expressed and the number of dissenters (Sim, 1998).

Morgan (1998) suggests that a focus group should be six to ten participants but other authors have found that small groups of five to seven were ideal for their study. If there are ten or more participants then people in the group tend to lose interest while waiting for their turn to speak or listening to others speak, however with groups of less than five, it was sometimes hard to engage the individuals in thought provoking interactions. Things that should be considered when planning the group size are the number of questions posed, the depth of response desired, anticipated “no-shows”, and time period allotted. The length of the session is something that is very important with this population. The typical session is one to two hours but this should be gauged on the

energy level of the participants. When the session lasts over an hour, some participants tend to get fidgety, and some will even indicate that they need a break (Loeb, Penrod & Hupcey, 2006). Barrett and Kirk (2000) reported that one and a half hours was too long, and participants began to lose interest. Patacca et al. (2004) found that during their focus group research with the elderly, it was best to use one person to lead the group discussions. The assistant was available to take notes, audio-record the discussion, and distribute name tags and refreshments (Patacca et al., 2004).

Analysis by Patacca et al. (2004) used methods recommended by Kreguer and Casey (2000) where each response was cut from the typed transcript and was placed underneath the question to which it corresponded to. After each of the responses were read and all answers were placed under the appropriate question, a summary for each question was developed to identify emerging themes (Patacca et al., 2004). Crockett et al., (1990) analyzed typed verbatim transcripts that were generated from audiotapes to evaluate key ideas, words, phrases, or verbatim quotes that captured sentiments and potential trends and patterns in the responses. A condensation of the responses related to each question was prepared, and consideration was given to actual words, contact, nonverbal response notes, internal consistency of the group, and specificity of the responses. Summary statements were prepared for each question and conclusions were drawn (Crockett et al., 1990). There are a few types of generalizations that are usually drawn. Empirical generalization uses data assumed to represent a wider population of people's view of a situation. Theoretical generalization gains insights which possess a sufficient degree of generality to allow their projection to other contexts or situations

which is comparable to that of the original study (Sim, 1998). In the current study, it will be most feasible to use theoretical generalization.

Barriers of Focus Group Research

One of the most common reasons why a topic is not appropriate is that the participants have too little involvement in it. Another common issue is that participants have involvement with a topic but not to the level that the researcher wants or needs (Morgan, 1998). Focus groups are sometimes used for the wrong reasons such as to come to a consensus, to educate people, or if other methodologies can produce better information (Krueger & Casey, 2000).

At the start of a focus group research study, it is the best practice to resist the urge to ask the group if they have any questions. If the discussion is begun in this manner, it may preempt the discussion and place the moderator in a very defensive position. Within each focus group there are always participants who talk more than others and some who prefer to say nothing at all or agree with everything that is being said. In order to get the latter to speak it is useful to ask a question directly to a quieter participant. If some participants seem to dominate the conversation, it is a good practice to politely interrupt and state that everyone is an expert in a certain topic, and the goal of the focus group is for everyone to voice their opinions (Krueger & Casey, 2000).

Summary: Focus Group Studies and Nutrition

Nutrition education needs to put an emphasis on the health benefits of optimal nutrition, address the needs of the older age group by providing food-specific

recommendations to optimize eating behaviors, and present achievable goals to enhance attitudes about food (Fischer, 1991). Focus groups are ideal when your goal is to listen to and learn from other people and your purpose is to plan for programs (Morgan, 1998). In a focus group, it is important to hear the views of all participants and for the moderator to build rapport in order to obtain the information that is needed (Krueger & Casey, 2000).

Summary

In the next few years, the number of elderly Americans will nearly double, which means an increase in the rate of disease development in the U.S. The consequences of poor nutritional status can only exacerbate other chronic conditions; therefore the importance of nutrition education cannot be underestimated in the elderly U.S. population (Quigley et al., 2008). Nutrition education, screening, and assessment can play a key role in helping older Americans identify nutrition related health problems in order to improve their overall health status (White et al., 1991). It is important to recognize that nutrition plays an important role in healthful aging, and early nutrition interventions can improve nutritional status and help improve the aging process (Kamp et al., 2010). Nutrition education that is specifically created for the needs of the elderly population will increase nutrition knowledge (Roth, 1995). Nutrition educators who can communicate the benefits of nutrition through print media and through work with physicians treating older adults will have the best chances to promote the health of older adults through better nutrition (Krinke, 1990).

CHAPTER III

METHODOLOGY

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. This chapter describes the methodology that was used to conduct this study.

Institutional Review Board

This study was approved as exempt by the Institutional Review Board at Ball State University on September, 16 2011 (Appendix A-1). The primary researcher as well as other members of the research team conducting this analysis completed the Collaborative Institutional Training Initiative (Appendix A-2).

Subjects

Subjects in this focus group research study included 60 participants from 11 LifeStream Services Inc. congregate meal program who dine at senior cafes in Area Six of Indiana. Participants were men and women of all races and ethnicities 60 years of age

or older. However some participants at certain meal sites were not 60 years of age, but they lived at an assisted living facility where the meal program was held. Participants who were not 60 years of age or older were allowed to participate in the study as long as they dined at a LifeStream Senior Café. Congregate meal sites included the following locations: Forest Park Senior Center 2517 W. 8th St. Muncie, Indiana; Gillespie Tower 701 W. Jackson St. Muncie, Indiana; Marion Senior Center 503 S. Gallatin Marion, Indiana; New Castle Senior Center 108 S. Main St. New Castle, Indiana; Portland Place Senior Housing 430 W. Lafayette St. Portland, Indiana; Central Community Café 2120 Central Ave. Anderson, Indiana; Geater Center 1611 Chase St. Anderson, Indiana; Longfellow 319 E. 12th St. Anderson, Indiana; Pendleton 595 E. Water St. Pendleton, Indiana; Southdale Towers Senior Housing 524 W. 53rd St. Anderson, Indiana, and Hoosier Place Senior Housing 310 N. Walnut St. Union City, Indiana. Focus group interview questions were asked to participate on a volunteer basis.

Methods

Subjects were recruited from LifeStream Inc. congregate meal sites on a volunteer basis. A letter of information was mailed to each Senior Café Supervisor for distribution to the congregate meal site participants. The letter of information served the purpose of telling potential participants exactly what the study would entail if they chose to participate. A date and time for each focus group was agreed upon between the principal investigator and each site supervisor via phone. After a time and date were determined for each site, the principal investigator arrived at the agreed time along with a graduate assistant. Upon arrival the principal investigator asked the participants to convene at a

specified table at the site when they were finished eating in order to conduct the focus group. Many site supervisors helped in the recruitment process on the day of the focus group. At some sites the focus groups were conducted before lunch, therefore participants convened at a table before the meal was served. A graduate assistant was responsible for making sure everyone had a name tag. Participants provided their first names on name tags or were allowed to create a name tag of their own with the markers provided. An informed consent form (Appendix E) was presented and explained to each participant to sign and date. The diners were all asked if they would like to keep a copy of the consent form; however only a few wanted a copy. The participants were also asked to fill out a short demographic information sheet (Appendix F) on a volunteer basis. After these forms were signed and completed, the focus group took place at each congregate meal site. Each focus group lasted fifteen to thirty minutes. Questions for these focus groups were adapted from Patacca et al., 2004. At the start of each focus group session, a tape recorder was used to record the dialogue during the focus group, which is generally recommended during focus group research (Sim, 1998). One of two graduate assistants acted as a note taker writing down specifics of each site such as the number of participants, who was speaking, the date, and the site location. A note taker is also desirable in order to determine who is saying what for subsequent analysis as well as taking other pertinent notes as the focus group takes place (Sim, 1998).

Instruments

A focus group interview guide (Appendix D) was developed based on the methods described by Krueger and Casey (2000), with questions modified to reflect the

purpose of the study. Focus group questions were asked of the participants via the principal investigator, and audio was recorded during each focus group session with an audio tape recorder. A copy of the focus group interview questions are found in the moderator guide (Appendix C). Both graduate assistants received training and instructions as to how to take notes that were pertinent to the goal of the study. The principal investigator has had previous experience conducting a focus group and relayed all information to the graduate assistants in order to conduct a successful focus group. The primary researcher has also completed an extensive literature review about focus groups which can be read in chapter two.

Letter of Permission

A letter of permission was obtained from Joy Winslow, nutrition manager for LifeStream Services, Inc. stating that the principal investigator had permission to have access to seniors participating in the Area six congregate meal programs through LifeStream (Appendix B). A letter of consent was read, signed, and dated by each participant the day of the focus group to explain the study and all procedures. Participants were allowed to ask any questions about the consent form if needed before signing the form.

Data Analysis

Demographic data collected was used to describe the participants according to age, race, education level, ability to care for themselves, and health status. Focus group analysis was performed according to methods recommended by Krueger and Casey

(2000) with some adaptations such as using Microsoft Excel to organize data instead of a cut and paste paper method. The faculty advisor for this project was also consulted to confirm themes. Each focus group was transcribed from audio, and the long table approach was used to organize all focus group responses with the appropriate questions. Each focus group question was organized into a Microsoft Excel spread sheet with responses to these questions organized under each question in order to develop themes. After each focus group discussion, the principal investigator and graduate assistant discussed the overall attitudes participants had about nutrition and developed emerging themes. Some participants might provide answers to questions asked earlier or later in the discussion Krueger and Casey (2000), therefore some answers were reorganized from the original order they were displayed in the transcript. Once all responses were placed under appropriate research questions, a summary for each question was developed to identify emerging themes. Each question's corresponding responses and summaries of these responses were reviewed by the principal investigator and the faculty advisor for this study. Several themes were agreed upon, and the results were written about themes which corresponded to the research questions instead of the focus group questions from the interview guide (Patacca et al., 2004). The primary researcher categorized responses as appropriate according to agreed upon themes.

CHAPTER IV

RESULTS

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. Results of this study will be presented in this chapter.

Subjects

A total of sixty people participated in one of 11 focus groups located at a LifeStream congregate meal site in East Central Indiana. The research conducted in this study focused on participants of the Title III congregate meal program in Area Six of Indiana. A majority of the participants were female 66.7%, (Table 1). Participants in this study had an average age of 75 with a majority of people falling into the 71-80 year old category (26.7%). Four people (6.7%) chose not to answer this question. A majority of the participants were Caucasian (83.3%). African Americans represented the second most prevalent category (11.7%), while one person (1.7%) was Latino, one was a mixed race (1.7%), and one participant did not answer this question (1.7%). When asked about

their highest level of education completed twenty-three people (38.3%) said they were high school graduates. Another 13 people (21.7%) answered that they had completed less than 12 years of high school, and 11 people (18.3%) said they had completed some college. Six people (10.0%) said they were college graduates and another four (5.0%) have a graduate level degree. The demographic survey also asked participants how they rated their health status compared to others their age. Half of the participants (50%) stated that their health status was as good as others their age while 18 participants (30%) thought their health status was better than others their age. Considerably fewer people said they did not know (6.7%), or they thought their health status was not as good as others their age (6.7%). Four people chose not to answer this question (6.7%). A majority of diners said they were always able to shop, cook, and feed themselves (86.7%), while only a few stated they were not always able to shop, cook, and feed themselves (6.7%). Four people chose not to answer this question (6.7%). In table 1, these results are summarized.

Table 1 Demographic Characteristics of Study Participants (n = 60)

Variable	N	Percent
Gender		
Male	16	26.7
Female	40	66.7
Did not answer	4	6.7
Age range (y)		
≤60	5	8.3
61-70	12	20.0
71-80	16	26.7
81-90	14	23.3
>90	3	5.0
Did not answer	10	16.7

Race/Ethnicity		
White (non-Caucasian)	50	83.3
African American	7	11.7
Latino	1	1.7
Mixed Race	1	1.7
Did not answer	1	1.7
Education		
Less than 12 years of High School	13	21.7
High School Graduate	23	38.3
Some College	11	18.3
College Graduate	6	10.0
Graduate Level Degree	4	6.7
Did not answer	3	5.0
Rate your health status compared to others your age		
As Good	30	50.0
Better	18	30.0
Do Not Know	4	6.7
Not as Good	4	6.7
Did not answer	4	6.7
Always able to shop, cook, and feed yourself		
Yes	52	86.7
No	4	6.7
Did not answer	4	6.7

Table 2 below, is a summary of the responses to the focus group questions asked in this study, organized by research question. A representative comment from each research question was chosen to give an example of a response from a congregate meal site participant. The number of times a similar response was given during focus groups is given on the right side of each section. For research question two, the third theme did not have verbatim repetitive response however this theme was reached by reviewing a similar strain of thoughts. Table 3 represents the number of focus group participants at each of the 11 LifeStream meal sites, for a total of 60 people.

Table 2 Summary of Focus Group Responses

Research Question	Comment	Frequency
What nutrition topics are important and of interest to the elderly congregate meal participants?	High cholesterol, high blood pressure, diabetes, heart disease - everything!	15
	Your budget takes into account to, you have to be careful on what you spend	8
	How much calories of food do you need to start losing weight	11
What methods are most favored to present nutrition education materials to the elderly congregate meal participants?	Cooking for one person is difficult	4
	I like handouts because you can always go back and refer to it if you have forgotten something	9
	Ya know personally me, my situation is I can't read anymore. I enjoy talking and sometimes it sticks more instead of just reading it	6

*Elderly seek out nutrition information through many different venues.

How is nutrition knowledge currently obtained by congregate meal participants?	Well we get all of these handouts on nutrition	9
	I get things from the hospital	7
	I see a nutritionist because I am borderline diabetic	10
	read the newspaper	5
What could be done to nutrition education materials to make them more helpful to congregate meal participants?	It is kinda nice to have the interaction of someone talking to you, then it sticks better	4
	Keep it simple	4
	I like activities	6

*this was not an actual comment from a focus group rather a theme drawn by the PI after review of transcript information

Table 3 Participants per Site

Site	Participants
Central	3
Forest Park	4
Geater	10
Gillespie	6
Hoosier Place	6
Longfellow	9
Marion	5
New Castle	3
Pendleton	5
Portland	7
Southdale	
Towers	2
Total	60

The following information is an interpretation of Table 2. Information displayed in the table above will be discussed in the next section. Focus group results are organized by research questions and will be discussed in that order.

RQ #1: What nutrition topics are important and of interest to the elderly congregate meal participants?

After conducting focus groups at LifeStream meal sites in East Central Indiana, four themes emerged concerning this research question: 1) how to treat different diseases such as diabetes or heart disease, 2) how to budget your money to eat a variety of healthy foods, 3) diet issues concerning weight loss and a balanced diet, and 4) how to cook for one or two people.

A large majority of focus group participants stated that they wanted to know more about a specific disease or disease state, simply because they suffered from a specific ailment. The most common disease that was discussed at nearly every site during every focus group was diabetes. Diners seemed to know a lot about diabetes if they currently had it; however, they wished to have more information. High cholesterol or information about heart problems in general was another emerging theme. Participants wanted to know what foods to eat and how to manage their heart issues. Many mentioned high cholesterol or wanting to learn about how to read food labels to look for things like cholesterol in foods. One man stated that he wanted to know more about “how much cholesterol is in foods.” Many issues with eye problems came up in conversation. Some participants wanted to know what to eat so they could see better and how to manage

problems with their eyes by changing the foods they eat. A select few had serious eye diseases and were adamant about telling others how important it is to know about eye health.

Seniors expressed great concern about wanting to know how to budget their money. Many stated that they “don’t have the money to purchase all of the foods that they should eat.” Participants said that they knew they were supposed to buy healthy foods, but they simply purchase what they can afford, and sometimes it does not include healthy foods. Those who voiced their opinions about this topic said they would love for someone to come teach them how to plan meals for a week and get the most out of their money so they could eat more healthy foods. One woman said “you can’t just buy whatever you want. I don’t have that kind of money.”

Participants knew they should eat a healthy balanced diet and for the most part knew what foods were healthy and which were not. A large number of participants expressed interest in losing weight and wanting to eat a healthy diet. One man said he simply wanted to know “what types of foods are good for you, specifically lunch meats.” Some expressed interest in wanting to know more about what foods they should eat to keep them healthy and how to identify which types of foods are the best to eat. Diet guidance was an emerging theme that was expressed about this topic. Participants wished to know more good health habits such as how to read labels or how many calories they should eat each day. The elderly at these sites expressed much interest in being healthy, and most knew how to do it, however, they wanted to know more about what they could do to keep in good health by controlling what they eat. Some expressed

wanting someone to come in and teach them how to prepare quick and easy meals so they could eat healthy foods at home.

How to cook for one or two people came up at four of the 11 sites. The elderly said that they found that it is “hard to cook for one or two people.” Most stated they would love to have more information on how to add variety to their food when cooking for one. They liked coming to eat at the senior cafes because it allows them to eat a wider variety of foods compared to eating at home. Participants said if they cook something at home, they eat it until it is gone and eventually grow tired of eating the same thing all week long.

RQ #2: What methods are most favored to present nutrition education materials to the elderly congregate meal participants?

After conducting focus groups at LifeStream meal sites in East Central Indiana three themes emerged concerning this research question: 1) participants like the handouts that LifeStream currently provides, 2) one-on-one interaction helps participants learn more information, and 3) elderly seek out nutrition information through many different avenues.

Currently the most common way LifeStream diners receive nutrition or health information is through handouts. This was the most favored method at nearly every site. Reasons people stated as to why they liked handouts were because they were able to take it home with them and go back and “refer to it if they had forgotten something.” Others stated they were “visual” learners so seeing the handout helped them. At one site the supervisor customarily gives the handouts out with lunch, that way participants can read

the information while they are eating. All members at this site seemed to like this method. At six of the 11 sites, seniors expressed positive viewpoints toward the handouts that are provided to them. Most were excited to learn new information of any kind and were appreciative that it was given to them.

Elderly at the congregate meal sites also expressed that they would better learn and absorb the information if they are in a one-on-one personal setting. Seniors stated that a positive of going to the doctor's office is an opportunity to ask questions about health concerns. Some expressed that they cannot see to read anymore so having someone teach new information to them verbally is a great help. One woman said "I enjoy talking and sometimes it sticks more instead of just reading it." When the participants received new information, they stated that they would like the chance to ask questions to someone in the health field to help them better understand it. When prompted and asked if they would prefer a one-on-one setting a majority of the participants said it would help them greatly. Seniors wanted one-on-one interaction not only to learn new information but they would also be talking to someone new.

The types of media that congregate meal site participants preferred to receive information from were vast. Answers to where they liked to receive nutrition information varied from the pharmacy to nutrition magazines. Interest was also voiced in wanting to learn independently. Most said they like to read the newspaper or watch the news, however, it was expressed that health information changes so fast it is hard to learn what is the best behavior to adopt. Seniors expressed the want and need to learn about new health information; however, they were frustrated at how fast information seems to change on TV. Most said that they enjoyed going to their doctor especially when the

doctor was willing to take time with them. Almost all of the seniors at LifeStream sites were on some type of medication and said that they like to go to the pharmacy to get lots of their health information. Again, the one-on-one interaction with the pharmacist seemed to be the more preferred way for this population to absorb information.

LifeStream participants preferred to receive their health information from many different avenues therefore it is hard to determine if the methods they receive information from are accurate or if they take certain advice such as the TV or newspaper because it is easier to obtain. Nutrition labeling is something that most seniors seemed to be aware of, and they liked to be able to read the information on food packages and labels. It was expressed, however, that it was nice to have the information, but it was not always understood.

RQ #3: How is nutrition knowledge currently obtained by congregate meal participants?

After conducting focus groups at LifeStream meal sites in East Central Indiana, four themes emerged concerning this research question: 1) handouts familiar and received often, 2) healthcare venues are a constant source of information, 3) new information is often presented by a nutritionist/dietitian or taught in a classroom setting, and 4) reading the newspaper or watching the TV is common for obtaining information.

Handouts were a familiar and common way of receiving nutrition knowledge according to congregate meal participants. At seven of the 11 sites, the seniors said that receiving handouts was the most frequent way they receive nutrition information. While some sites were more active about discussing and explaining the handout information, a majority stated that they received them at the very least. With further consultation with

the site supervisors, it was determined that handouts are given to all meal site participants on a regular basis. Even if the handouts were not a preferred way of receiving handouts, it was determined that this was the way most seniors were used to seeing new information. Some participants acted with disdain about receiving handouts from LifeStream stating that they receive the information but they ignore it. One participant stated “we get handouts and they lay them over on the desk sometimes.” This response was found at a few sites. However, at other sites the same view of negativity was expressed. However, at sites where the site supervisors actively discussed the handout information with the diners, there was a positive outlook on the information. At Pendleton Senior Café one diner stated “last week we had a discussion about osteoporosis” and one diner said she was “pleased with the information.”

Most elderly people see a doctor for one thing or another, as expressed by diners at LifeStream sites. Healthcare professionals of one type or another was the second most common way that seniors said they receive nutrition information. One woman stated “after my husband had heart surgery, I kind of learned to read labels and what to look for” while another woman stated “after my heart surgery I had to do a complete turnaround.” It seemed that after a health crisis seniors received health or nutrition information on ways to improve their current health status. Others simply stated that they “get things from the hospital” or that they “go to the doctor.” Many expressed having received nutrition information on specialized diets while staying in the hospital. Information concerning health practices that would improve overall health status seemed to be very well received by this population.

New nutrition information is often presented by a nutritionist or dietitian in a classroom setting to LifeStream participants. At several sites diners said that someone had come in the past to teach them about nutrition or health. One woman at Hoosier Place Senior Living Facility stated “a gal from Purdue Extension came and she was telling us how to cook and not kill ourselves.” This diner was speaking of someone coming to talk to them about how to keep foods at a safe temperature when having picnics or eating outside. The elderly at this site also said that she gave them a food thermometer, and one woman in particular was very excited to have it. At a majority of the sites, diners’ said they had been to classes about diabetes and learned how to count carbohydrates and control their blood sugar. When classes are taught to the diners by an outside professional, they seemed to remember someone coming but not exactly what they said or what the purpose of their visit was. One person stated “don’t they have people come here every once in a while and talk about food and stuff?” Another person said “a girl from Purdue came and told about the Pyramid and different things.” A few diners said they had taken classes throughout their career. One woman was a nurse and said that she had “taken nutrition classes, once a year” and another woman said she was a volunteer at Alpha Senior Center in Muncie, Indiana.

Reading the newspaper or watching the TV is common for obtaining health information. Watching the news was a common practice voiced during the focus groups. One participant stated that he liked to watch “Dr. Oz” for health information. Frustration was also expressed with information presented in the news. One person said “they tell you one thing one day on TV and then six weeks later they change it!” When health and nutrition information is presented in the news or on TV, many participants are weary to

accept this advice simply because they seem to think information changes too rapidly.

One woman said she uses the internet to find out new health and nutrition information; however, using the internet was not a popular media category at any meal sites.

Obtaining information via TV or newspaper is easy for this population simply because these are activities that they would be doing anyway. Receiving information via TV and the newspaper requires no extra work; therefore many seniors receive this information without having to actively seek it.

RQ#4: What could be done to nutrition education materials to make them more helpful to congregate meal participants?

After conducting focus groups at LifeStream meal sites in East Central Indiana, three themes emerged concerning this research question: 1) seniors would prefer if new information was presented to them in a one-on-one interaction, 2) keeping things simple is necessary, and 3) active learning is favored.

Seniors at the congregate meal sites expressed that they would better learn information presented to them by LifeStream if someone would sit down and explain it to them. At some sites, the supervisors did a very thorough job at creating a discussion forum about the handouts. However, at some sites the participants simply said they received the information and do not do much with the paper after that. One woman at Forest Park Senior Center said, “It is kind of nice to have the interaction of someone talking to you, (and) then it sticks better.” At other sites they wished to have someone talk to them about the new information simply because they had sight problems. A majority of seniors at each meal site would agree when one person stated that they would

like someone to be there if they had questions. At Longfellow Senior Café, it was said “if someone would come teach lessons to us (it would be helpful).” Most seniors were open to learning more information if it was explained to them during a question and answer session.

When seniors received handout information at their meal sites, they seemed to like receiving information this way. It was expressed however that if things were in larger print, it would be much easier to see. Many of the participants had eye issues and said they would read the information if they were able to see it. One man said “have patience with us,” when speaking about presenting new information. During the focus groups, one person said “keep it simple.” Overall keeping new information in handouts and other avenues concise and simple would be favorable.

Active learning was stated as one of the ways that this group of people learned the best. At four of the 11 sites, it was expressed that if an interactive portion was present on the handouts it would be absorbed more easily. Several women at Marion Senior Café said, “It would be nice to have a recipe on it if it is something to fix.” While one woman at this site said she recalled recipes sometimes being on the handouts, it was simply expressed that more easy recipes on the handouts would help. When the handouts had lots of pictures or an activity to coordinate with new information, more people said they would view the information. If there is a puzzle or crossword, more people said they would look at the new information as opposed to a simple handout with no activity. Other ideas expressed to make the handouts more interesting were “to attach a personal story” and to have “definitions of things like the word carbohydrate.” While these two

ideas were only expressed at one site, all of the diners present during the focus group agreed with these statements.

Summary

The following summary reflects the key themes identified in this study:

Nutrition topics that were important and of interest to the elderly congregate meal participants:

- How to treat different diseases such as diabetes or heart disease
- How to budget your money to eat a variety of healthy foods
- Diet issues concerning weight loss and a balanced diet
- How to cook for one or two people

Methods that were favored to present nutrition education materials to the elderly congregate meal participants:

- Participants like the handouts that LifeStream currently provides
- One-on-one interaction helps participants learn more information
- Elderly seek out nutrition information through many different avenues.

The most common ways that elderly congregate meal participants currently obtain nutrition information:

- Handouts are received often and familiar
- Healthcare venues are a constant source of information
- New information is often presented by a nutritionist/dietitian taught in a classroom setting to LifeStream congregate meal program participants

- Reading the newspaper or watching the TV is a common way for the elderly to obtain nutrition information

Things that could be done to nutrition education materials to make them more helpful to congregate meal participants

- Present new nutrition information via one-on-one interaction
- Keeping things simple
- Active learning is favored.

CHAPTER V

Discussion

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. A discussion of the results will be presented in this section.

Stories, opinions, and feelings shared by this group of LifeStream congregate meal participants in East Central Indiana shed light of their perspectives about nutrition education. Many themes were identified that were consistent with current research findings. This discussion will combine the results from this research effort with findings from previous studies to determine ways that nutrition education at LifeStream could be improved. When performing the focus groups, most sites were happy to have myself and a graduate assistant present. Supervisors were very helpful at most sites. They helped to recruit the most talkative people at sites where there were many diners. Most focus groups had between five and seven people which was optimal. One site had ten participants, and it was a little hard to keep everyone on task and stop people from talking at the same time. At sites where there were few participants, useful information was

collected; however, it was only the view and opinions of two or three people. Diners at LifeStream sites were very talkative for the most part and enjoyed a break from their daily routine. Many people thanked us for coming to talk to them and said that they had enjoyed talking with us. Performing the focus groups was not only informative but fun. The ideas, views, and beliefs of this population are much different than those of younger generations. For some questions diners would answer in general positive comments such as “I’m just glad to be here” or “I think I am doing well.” A positive outlook on life was an overall theme that was not originally intended to be captured by this study, however, it was a common theme among sites. Comments and ideas expressed in these focus groups were generally positive and information generated was very useful in drawing conclusions for this study.

RQ #1: What nutrition topics are important and of interest to the elderly congregate meal participants?

Participants were least shy about answering questions about what types of nutrition or health topics they would like to know more about. A common issue is that participants have involvement with a topic but not to the level that the researcher wants or needs (Morgan, 1998). However, in this study participants were willing to answer questions about what topics they were interested in, most likely because they felt there was no wrong answer to this question.

Participants mentioned many nutrition and health topics that they wanted to learn more about. While a large set of people at each site wished to know more about a specific disease, diabetes in particular, others simply wanted to know about how to eat

better to treat their current disease. This was also identified by Patacca et al., (2004) which found that disease specific information was an interest among elderly during focus group research concerning nutrition education. Most participants said they attended a class on diabetes if they currently had the disease but still wished to have more information. Managing high cholesterol and fat in the diet was mentioned as well as how to eat a low fat diet. These findings were consistent with Fischer (1991) who found that younger seniors were more concerned with unsaturated fats and reduced calorie foods while older seniors were more interested in healthful food preparation methods and how to introduce low-fat items into their diets. Many seniors expressed interest in learning about a healthy diet and what foods to eat to stay healthy. Nutrition is one of the best predictors of aging successfully. Good nutrition has been linked to a lower risk of disease and disease-related disability, high mental and physical function, and active engagement in life. Quality of life and quality of health are positively related, therefore the better a person's health status, the better their overall quality of life (Kuczmarski & Cooney, 2001). Therefore nutrition education needs to put an emphasis on the health benefits of optimal nutrition, provide food-specific recommendations to optimize eating behaviors, and present achievable goals to enhance attitudes about food (Fischer, 1991).

Budgeting money and how to cook for one or two people was mentioned often. Previous research by Crockett et al. (1990) found that participants found it difficult to change eating habits because of little motivation to cook for one when some foods come in large packages. A majority of seniors in this study however stated that they were always able to shop, cook, and feed themselves. Seniors expressed concern about getting tired of eating the same meal for the entire week simply because they were not educated

on how to cook for one or two people. Many diners are on a fixed income and chose to eat at LifeStream Senior Cafes in order to get more variety in their diets. Others said that they cannot purchase the foods they should because they simply do not have enough money to do so. For many seniors the meal that is provided to them by the congregate meal program is the only meal they consume the entire day. This essential health promotion and disease prevention program helps delay the start of more serious diseases and conditions (U.S. Administration on Aging, 2004).

RQ #2: What methods are most favored to present nutrition education materials to the elderly congregate meal participants?

A majority of the participants like the handouts that LifeStream currently provides. As also found by Patacca et al., (2004), many participants found handouts beneficial and helpful to remember nutrition information. Participants liked to be able to go back and look at the information if they had forgotten something. Handout information seemed to be accepted by congregate meal site participants. Similar to findings by Coombs (2004) most participants stated that they would be likely to use a short, easy to understand, guide regarding nutrition care if they were provided with it by their physician or other healthcare professional. It was voiced often that this group of people would learn best through one-on-one interaction. A venue where they could ask questions or make sure they understood a topic was the main reason as to why they would like interaction with someone. Similarly, some of the most preferred ways the elderly would like to learn new topics were through TV, meetings or social gatherings, lessons with demonstrations, or instruction given in a one-on-one setting (Crockett et al., 1990).

Congregate meal site participants seek out health information through many avenues as previously mentioned by Crockett et al (1990). Therefore it is more important than ever to provide valuable nutrition information to the elderly through the most preferred methods in order to improve overall health and wellness of this population.

RQ #3: How is nutrition knowledge currently obtained by congregate meal participants?

A common answer to how LifeStream participants receive health information was simply handouts. Most responded that they receive something, even if not nutrition related, from LifeStream about health twice a month or so. Similarly Parker et al., (2011) found that the elderly viewed handouts because they could go back and review if they had forgotten something. Handouts are readily available and distributed to the elderly at LifeStream sites therefore not much effort has to go into seeking out new information. At some sites it was revealed that participants do nothing with the handouts and throw them away which is consistent with findings of Parker et al. (2011). Participants who had negative views about the handouts were few; however, they said it was because they were bombarded with health and new nutrition information from many different avenues. Those who wanted to seek out new information liked the handouts, and those who thought they did not need to learn any new health information saw the handouts as bothersome.

An estimated 87 percent of older adults have diabetes, hypertension, dyslipidemia, or a combination of these diseases (Kamp, Wellman & Russell, 2010; Institute of Medicine Committee, 2000). As confirmed by these focus groups, many

elderly said that they receive nutrition information from a doctor. The most common disease that participants stated that they wanted to know about was diabetes. Diabetes is on the previously mentioned list of popular diseases among older Americans. Receiving nutrition information from a doctor or other healthcare venue was common among the elderly at LifeStream congregate meal sites. Adults who do seek out information from their doctor do so because they wish to know more about their health. As seen by Roth (1995), older adults perceive themselves as capable of learning new information and research supports that the desire to learn does not lessen as individuals grow older.

A surprising number of educators and presenters visit LifeStream meal sites to teach health lessons. While many participants remembered someone coming to talk with them, it was hard for them to remember exactly what was being taught. Patacca et al., (2004) showed similar findings. Even when elderly participants had received nutrition information, they were able to recall that they had learned something, but they could not remember exactly what they had been taught. Even with prompting, participants could rarely expand on what they had learned.

Reading the newspaper and watching TV was a common practice among this population. While frustration was voiced with new health information being presented in this manner, it did not seem as though participants would stop listening to these venues of information. As seen in Patacca et al., (2004) many focus group participants stated “it’s confusing!” and “all this stuff you hear on TV, it seems like once you say one thing is good for you, then it goes away and it’s something else.” Other participants in this study agreed with these statements. Similar comments were noted at LifeStream meal sites. The elderly were receiving information from the TV and newspaper simply because these

are common activities for them. LifeStream participants were also skeptical of new health and nutrition information. Similarly some of the most preferred ways elderly would like to learn new health topics were through TV (Crockett et al., 1990).

RQ#4: What could be done to nutrition education materials to make them more helpful to congregate meal participants?

The elderly at LifeStream sites suggested that if someone would come and teach classes to them in a one-on-one setting, they would enjoy it much more. According to Sahyoun et al., (2004), having access to health professionals was named when creating nutrition education for an elderly population. Similarly, participants at LifeStream sites said they would like it if someone would come to explain the handout information to them and be available for a question and answer session. Similarly, social gatherings, lessons with demonstrations, or instruction given in a one-on-one setting were favored by Crockett et al. (1990). Participants in this study always reported that they liked to attend nutrition classes especially if someone would be available to ask questions Crockett et al. (1990). While there are many issues that seniors face daily in order to maintain proper health, an advance in education would help improve their chances of aging healthfully (Kamp, 2010). Some site supervisors did a great job at starting a discussion among the diners. At other sites, it seemed that the supervisors were rarely involved in teaching handout information. Sites where handouts were viewed negatively were sites that the supervisors had little interest in teaching the seniors at their specific site.

Participants also voiced that things should be kept simple. They said that they needed some words to be explained to them such as “carbohydrate”. As seen by Parker

et al., (2011) interactive learning is favored by participants. Taylor-Davis et al. (2000) proposed that positive nutrition education outcomes were linked to understandable concrete messages, newsprint that contained large print, newsletters that could be read at the participants' convenience, and allowed extended time to process information. LifeStream diners said that if there is a puzzle or other activity, it is easier for them to comprehend and remember information because they are having fun. Age-related changes that cause the most frustration for older learners include changes in sight hearing, reaction time, and memory (Kicklighter, 1991). Therefore, a fun game that also teaches them something new would be great for this population.

Summary

LifeStream congregate meal site participants are interested in learning about many new nutrition topics. However, the most common response for nutrition education topics were those that pertain to specific disease states. Another topic of interest was budgeting money simply because many are on fixed incomes and must cook for just themselves. Currently the elderly receive nutrition education handouts through LifeStream, and most of the participants seemed to like these handouts as seen by other studies. Handouts are a familiar way of receiving information of this sort, therefore a continuation and expansion on this form of media would be favorable Patacca et al. (2004). Congregate meal diners receive health information from many different venues, and therefore, it is important that the information they receive from LifeStream is educational but easy to understand. One-on-one interaction would improve the understanding of new nutrition information

presented on handouts. It was stressed by participants that new information needs to be simple as well as fun and interactive (Parker et al, 2011).

Participants at the congregate meal sites in East Central Indiana will benefit in the long term after results are reported to LifeStream Services Inc. Participants will have assisted in improving the nutrition education portion of the Title III congregate meal program. LifeStream Services Inc. and other similar institutions will be able to use this information to become more in tune with what their participants want and need out of a nutrition education program in order to improve their overall health status.

CHAPTER VI

Conclusions, Limitations, and Recommendations

The purpose of this study was to determine perspectives related to nutrition education needs and interests of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes. Conclusions, limitations, and recommendations for both LifeStream and future research will be presented in this chapter.

Conclusions

Overall this was a successful research study. Participants were willing to speak about most every topic, however some prompting was necessary to delve deeper into responses. Site supervisors were very helpful in the recruitment of participants which contributed to the success of the focus groups. LifeStream Service Inc. can now take the findings of this study to review their current nutrition education program to tailor it to the current needs of senior café diners. There were several themes identified during this focus group which are discussed in this section.

The following summary reflects the key themes identified in this study: Nutrition topics that were important and of interest to the elderly congregate meal participants were how to treat different diseases such as diabetes or heart disease, how to budget money, diet issues concerning weight loss and a balanced diet, and how to cook for one or two people. Methods that were favored to present nutrition education materials to the elderly congregate meal participants were handouts, one-on-one interaction, and other healthcare venues, such as a pharmacist and a doctor. The most common ways that elderly congregate meal participants currently obtain nutrition information were handouts, healthcare professionals, dietitians/nutritionists in a classroom setting, and by reading the newspaper and watching TV. Things that could be done to nutrition education materials to make them more helpful to congregate meal participants were to present new nutrition information in a one-on-one setting, keep things simple, and initiate active learning.

Limitations

The research was limited in the following ways:

- The study was confined to the geographical area served by LifeStream Services Inc., in East Central Indiana.
- Congregate meal site participants were not informed in advance at all sites or participants had forgotten that there was a focus group occurring on the specified date – (not all site supervisors received a letter of information either because of lack of mail delivery at the site or a misaddressed envelope.
- Participants were often hesitant to participate because of prior engagements, such as card games after lunch or daily routines that they would like to keep.

- If the site supervisors were not active in helping in the recruitment process, it was much harder to get quality participants.
- This study relied on focus group data collection for collecting data therefore some participants were apprehensive about sharing their thoughts or ideas with a group.
- A convenience sample of individuals from LifeStream congregate meal sites was used, therefore feelings and thoughts reported may be not be representative of all congregate meal site participants in general.
- The strength of a particular viewpoint, the number of individuals who express it and the intensity or emphasis with which is it expressed, and the number of dissenters is difficult to determine.

Recommendations for Future Research

Based on the results of this study, the following recommendations for future research are made:

1. Differentiate questions about the “best” way of receiving nutrition education and “how you use nutrition education.”
2. Delete the focus group questions pertaining to attending nutrition lessons.
3. Add survey research using the same research questions to inquire about congregate meal site participants views on how to make LifeStream nutrition education more helpful and useful.
4. Add one-on-one interviews with pre-selected congregate meal site diners to delve deeper into how LifeStream nutrition education could be improved.

Recommendations for LifeStream

1. Develop nutrition education training for LifeStream site supervisors.
2. Evaluate current nutrition education handouts and change topics to match what diners stated they wished to know more about as a result of this study.
3. Allow for a question and answer session about nutrition education materials as often as possible with a healthcare professional.
4. Create handouts that are interactive, simple, and fun for LifeStream diners.

Recommendation for Focus Group Research

1. Arrive early to focus groups to develop a rapport not only with participants but whoever is in charge of the group you are interviewing.
2. Allow participants to voice opinions about the focus group in general, not necessarily about the topic you are collecting information on by using a survey after the focus group is over.
3. Offer an incentive for participating in the focus group.
4. Confirm focus group participants before arriving to alleviate confusion.

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APPENDIX A

Institutional Review Board Documents

APPENDIX A-1

Letter from Ball State IRB



Institutional Review Board

DATE: September 16, 2011

TO: Miaga Biggerstaff, Dietetics

FROM: Ball State University IRB

RE: IRB protocol # 263145-1

TITLE: Perspectives of Older Americans Participating in a Congregate Meal Program
in East Central Indiana.

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: September 16, 2011

The Institutional Review Board reviewed your protocol on September 16, 2011 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

Editorial notes:

1. Approved- Exempt (Category 2) with Informed Consent

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. **Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project.** Please contact please contact John Mulcahy at (765) 285-5106 or jmulcahy@bsu.edu if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (<http://www.bsu.edu/irb>) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

Reminder: Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

APPENDIX A-2

**CITI Collaborative Institutional Training Initiative Certificate
Certificate of Completion**

CITI Collaborative Institutional Training Initiative

Social & Behavioral Research - Basic/Refresher Curriculum Completion Report Printed on 2/11/2011

Learner: Miaga Biggerstaff (username: mkbiggerstaf)

Institution: Ball State University

Contact Information

Department: Family Consumer Sciences

Email: mkbiggerstaf@bsu.edu

Social & Behavioral Research - Basic/Refresher: Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in Social/Behavioral Research with human subjects.

Stage 1. Basic Course Passed on 02/09/11 (Ref # 5433265)

Required Modules	Date Completed	Score
Belmont Report and CITI Course Introduction	01/25/11	3/3 (100%)
Students in Research – SBR	01/21/11	9/10 (90%)
History and Ethical Principles - SBR	01/21/11	3/4 (75%)
Defining Research with Human Subjects - SBR	01/21/11	5/5 (100%)
The Regulations and The Social and Behavioral Sciences – SBR	01/25/11	5/5 (100%)
Assessing Risk in Social and Behavioral Sciences - SBR	01/25/11	4/5 (80%)
Informed Consent – SBR	01/25/11	5/5 (100%)
Privacy and Confidentiality – SBR	01/25/11	5/5 (100%)
Research with Prisoners – SBR	02/02/11	4/4 (100%)
Research with Children – SBR	02/02/11	4/4 (100%)
Research in Public Elementary and Secondary Schools – SBR	02/02/11	4/4 (100%)
International Research – SBR	02/06/11	3/3 (100%)

Internet Research – SBR	02/06/11	4/4 (100%)
Research and HIPAA Privacy Protections	02/07/11	9/11 (82%)
Workers as Research Subjects-A Vulnerable Population	02/09/11	4/4 (100%)
Conflicts of Interest in Research Involving Human Subjects	02/09/11	2/2 (100%)
Ball State University	02/09/11	no quiz

For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator

APPENDIX B

Letter of Permission from LifeStream Services, Inc.



July 21, 2011

Miaga Biggerstaff
c/o Dr. Alice Spangler
Department of Family and Consumer Sciences
Applied Technology Building
Room 150
Ball State University
Muncie, IN 47306

Dr. Spangler,

My name is Joy Winslow, Nutrition Manager for LifeStream Services, Inc., I oversee the nutrition program.

I am writing to give Miaga Biggerstaff, provided that you get the approval of the review committee on human experimentation (IRB), permission for her senior study. I would allow you to have access to the seniors participating in the Area 6 congregate meal program through LifeStream. Miaga and I have discussed that she will interview the participants at the lunch sites about health and nutrition issues.

We also discussed that I will receive the results from Miaga's study.

Please send the written approval, if granted, from the review committee (IRB) when it is decided for my records.

Sincerely,

Joy Winslow
Nutrition Manager
LifeStream Services, Inc.

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E-mail: mail@lifestreaminc.org | www.lifestreaminc.org

APPENDIX C

Moderator Guide and Focus Group Questions

Moderator Guide

August 2011

Good afternoon and welcome. Thank you for taking the time to join our discussion of Nutrition. My name is Miaga Biggerstaff. I am a graduate student at Ball State University. You were selected because you have chosen to volunteer in this focus group concerning nutrition and health topics. The information we gather from this discussion will be used to help design educational materials for you. There are no right or wrong answers but rather differing points of view and experiences. We are not trying to come up with a consensus; we are here to gather information. Please feel free to share your point of view, even if it differs from what others have said. Keep in mind that we are interested in both positive and negative comments, as we often learn the most from the negative ones. Before we begin, let me remind you of some ground rules. Please speak up with only one person speaking at a time. We are tape recording the session because we do not want to miss any of your comments. If several are talking at the same time, the tape will become garbled, and we will miss your comments. A student volunteer will be taking notes during our discussion. We will be on a first name basis tonight, and it will be helpful to us if you would identify yourself by first name every time you begin a comment. No names will be used in the write up of this project. To get us warmed up and started everyone please feel free to get refreshments before we get started. (5 minute break)

1. I would like everyone to answer the first question. Please tell me your name and what your favorite food or type of food is.

Transition (questions adapted from Patacca, Rodenbloom, Kicklighter & Ball, 2004)

2. What is the first thing that comes to mind when you hear the phrase “nutrition education”?
3. What food, nutrition, or health topics are you interested in? Why? – prompting statements below
 - a. Food preparation
 - b. Disease prevention/treatment
 - c. Budgeting
 - d. Recipes for one or two people
 - e. What to eat in addition to what is provided here
 - f. Importance of fluid intake
 - g. Drug and nutrient interaction
 - h. What other things are you interested in knowing more about?
4. What types of nutrition education have you received in the past (from LifeStream or anywhere else)?
 - a. What did you like about these handouts?
 - b. What do you like about this information?
 - c. What did you not like about these handouts or information?

5. How did you use the nutrition education materials that you were given in the past from LifeStream or anywhere else? (Cooking, shopping, lifestyle changes, exercise, drug interactions, new information?)
 - a. What topics were most useful and important?
 - b. What topics were neither useful nor important?
 - c. What do you like or not like about the topics that are chosen as a focus?
6. What is the best way of receiving nutrition or health information so that it is useful and you understand it?
 - a. TV
 - b. Handouts
 - c. Billboards
 - d. One-on-one interaction
 - e. Grocery store
 - f. Newspaper
7. From what sources do you usually receive nutrition education materials?
8. What would make nutrition education you receive from LifeStream easier to understand? (what changes would you make to the way that you currently get information?)
9. What are some barriers to why you do not attend nutrition education sessions? (ride picks you up right after lunch, cannot see the information, it is old information to you, no interest in learning more about the topic, no one else attends)
 - a. If you participate, what is your favorite thing about the lessons?
 - b. What do you think could be improved?
10. If you could give advice to someone writing nutrition lessons or handout information so that it would be more valuable to you, what would you say?
11. I am really interested in learning as much as I can about the best ways that you like to learn new material about nutrition. Is there anything you would like to tell me but didn't get a chance to?

We have just a few minutes remaining. Does anyone have any last thoughts or comments to add? Thank you for participating.

APPENDIX D

Letter of Information to Congregate Meal Participants from Investigator

August 2011

Dear Senior Café Diners:

I, Miaga Biggerstaff, am investigating the perspectives of congregate meal participants about nutrition and health in a focus group setting. The title of my research study is, “Perspectives of Elderly Americans Participating in a Congregate Meal Program in East Central Indiana “. I would appreciate it if you would assist me in this endeavor. This research project will provide a better understanding in this area of older people and nutrition which will help LifeStream Services Inc. and other similar services provide you with nutrition education materials that are of interest and benefit to you, the participants.

This focus group will take approximately 45 minutes but will not exceed one hour in time. All data collected will be confidential and no personal identities will be collected. Your responses are anonymous. Only the researcher and her thesis committee will have access to the data which will be stored in a locked file cabinet and destroyed after three years. Your participation is voluntary, and you may withdraw from the study at any time and for any reason. There is no penalty for not participating in or withdrawing from this study.

If you agree to participate you will be asked to participate in a focus group where you will be asked to express your ideas and thoughts about certain topics along with other members who eat at the same congregate meal site. After this study is completed, the goal is to use the information in order to develop nutrition education materials that are of interest to the participants of the LifeStream Service Inc. congregate meal programs. There are no other known physical, psychological, legal, social, economic, or other risks associated with participation in this research project. There are no costs to you or any other party.

This project has been reviewed according to Ball State University’s procedures governing participation in this research. If you have any questions about this survey, you may contact me in the Department of Family and Consumer Sciences at Ball State University. I may also be reached at (219) 861-6154 or via email at mkbiggerstaf@bsu.edu for questions or complaints. Additionally, you can contact my thesis advisor, Dr. Alice Spangler, in the Department of Family and Consumer Sciences. She can be reached by phone at (765) 285-5931 or via email at aspangle@bsu.edu and will be glad to answer any questions or complaints. For questions about your rights as a research participant, please contact Research Compliance, Sponsored Programs Office, Ball State University, Muncie, IN 47306, (765) 285-5070, irb@bsu.edu. You may also contact the Ball State University’s Office of Academic Research and Sponsored Programs at (765) 285-1600 or at <http://cms.bsu.edu/About/AdministrativeOffices/SPO.aspx> if you have any questions or comments regarding your rights as a participant in this research.

Thank you so much for your willingness to participate in this study.

Sincerely,

Miaga Biggerstaff
Graduate Student
Department of Family and Consumer Science

APPENDIX E
Informed Consent

Study Title Nutrition Education Needs and Interests: Perspectives of Older Americans Participating in a Congregate Meal Program in East Central Indiana. Principal Investigator: Miaga Biggerstaff.

Study Purpose and Rationale

The purpose of this research study is to determine perspectives related to nutrition education needs of elderly people who currently participate in a congregate meal program in East Central Indiana in order to improve the current nutrition education materials that are being presented to those who dine at LifeStream Inc., senior cafes.

Inclusion/Exclusion Criteria

To be eligible to participate in this study, you must be a participant of the congregate meal program sponsored by LifeStream Services Inc.

Participation Procedures and Duration

For this project, you will be asked to participate in a focus group where you will be asked questions about nutrition and health. This focus group is intended to last for 45 minutes but will not exceed one hours' time.

Data Confidentiality or Anonymity

All data will be maintained as confidential and no identifying information such as names will appear in any publication or presentation of the data. Data from this study will be kept at Ball State University and a copy of any and all results are available upon request.

Storage of Data

Paper data and recordings will be stored in a locked filing cabinet in the researcher's office for three years and will then be shredded. The data will also be entered into a software program and stored on the researcher's password-protected computer for three years and then deleted. Only members of the research team will have access to the data.

Risks or Discomforts

There are no other known physical, psychological, legal, social, economic, or other risks associated with participation in this research project. There are no costs to you or any other party.

Who to Contact Should You Experience Any Negative Effects from Participating in this Study

Should you experience any feelings of anxiety, there are counseling services available to you through the Still Waters Professional Counseling Center in Muncie, IN 765-284-0043. You will be responsible for any care that is provided.

Benefits

After this study is completed the goal is to use the information in order to develop nutrition education materials that are of interest to the participants of the LifeStream Service Inc. congregate meal programs and other similar types of programs. Participants

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will benefit because the nutrition education program will improve and hopefully benefit their long-term health status through increased knowledge.

Voluntary Participation

Your participation in this study is completely voluntary and you are free to withdraw your permission at any time for any reason without penalty or prejudice from the investigator. Please feel free to ask any questions of the investigator before signing this form and at any time during the study.

IRB Contact Information

For questions about your rights as a research subject, please contact the Director, Office of Research Compliance, Ball State University, Muncie, IN 47306, (765) 285-5070 or at irb@bsu.edu.

Consent

I, _____, agree to participate in this research project entitled, “Nutrition Education Needs and Interests: Perspectives of Older Americans Participating in a Congregate Meal Program in East Central Indiana”. I have had the study explained to me, and my questions have been answered to my satisfaction. I have read the description of this project and give my consent to participate. I understand that I will receive a copy of this informed consent form to keep for future reference.

To the best of my knowledge, I meet the inclusion/exclusion criteria for participation (described on the previous page) in this study.

Participant’s Signature

Date

Researcher Contact Information

Principal Investigator:
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APPENDIX F

Demographic Data Sheet

What is your date of birth?

Are you male or female?

What is your ethnic background?

_____ African American (Black)

_____ Asian-American

_____ Caucasian (White)

_____ Latino

_____ Mixed race

_____ Other

What is your educational background?

_____ Less than 12 years of high school

_____ High school graduate

_____ Some college

_____ College graduate

_____ Graduate level degree

Are you always physically able to shop, cook, and feed yourself?

_____ Yes

_____ No

In comparison to other people your age, how do you consider your health status?

_____ Not as good

_____ Do not know

_____ As good

_____ Better