

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

The primary objective of this study was to determine the food safety knowledge and practices of older adult participants in the Food Stamp Nutrition Education Program in Virginia. Results revealed that many older adult participants of FSNEP may have inadequate food safety practices to prevent foodborne illness. A majority of participants did not know that leftovers could only be safely stored for three days and reported storing ground meats for longer than recommended. In addition, a majority of participants did not know proper refrigerator temperatures and half of the participants reported they never check refrigerator temperatures. Furthermore, most participants were unaware that doneness of meat, poultry, and vegetable dishes is best determined by a meat thermometer and reported never using a thermometer.

The second and third objectives of the study was to examine changes in food safety knowledge and practices of FSNEP participants after a food safety lesson from the *Healthy Futures Series* (Group 1) and from using an instructional food safety video in conjunction with the current FSNEP food safety lesson (Group 2). Results indicate that both lessons were effective in making overall gains in food safety knowledge and practices scores. However, participants in Group 1 had higher gains in food safety knowledge and practices than Group 2 participants. Improvements for each individual item on the food safety knowledge and practices questionnaires for both groups were also made from baseline. After receiving the lessons, a majority of participants in both groups knew that refrigerated and frozen foods should be purchased just prior to checkout and that they should return home within 30 minutes from the grocery store. Also, most participants knew that potentially unsafe food should not be held at room temperature. Correspondingly, a majority of participants in both groups reported that they did not let meat and dairy products remain out of the refrigerator for longer than two hours and did not thaw frozen foods at room temperature.

However, after the lessons nearly two-thirds of participants in both groups did not know that leftovers should be reheated to 165°F and the frequency of re-heating leftovers did not improve adequately. In addition, only half of participants in both groups knew ground meat should be stored for only 24 hours. Furthermore, only small improvements were made in

checking refrigerator temperatures and using meat thermometers. These are key areas that should be emphasized in future educational materials developed for future food safety lesson in FSNEP.

The fourth objective was to determine if socioeconomic variables such as age, gender, ethnicity, income and education were correlated with food safety knowledge and practices. Results indicate that there were no strong relationships between food safety knowledge, practices, and observations pre-test and gain scores and any of the demographic and food safety variables tested.

The fifth objective was to compare observed food safety practices with self-reported practices of FSNEP. The food safety practices of FSNEP participants observed by the Program Assistants were consistent with the self-reported practices of FSNEP participants.

CONCLUSIONS

In conclusion, FSNEP participants' food safety practices were similar to the food safety knowledge and practices of the general population. Without proper education, older low-income adults may not have adequate food safety practices to prevent foodborne illnesses. FSNEP participants lack adequate food safety practices in proper handling of leftovers, storage of ground meats, and use of thermometers to check refrigerator temperatures and doneness of meat, poultry, and vegetable dishes. FSNEP participants who received the *Healthy Futures Series* and participants who received both the *Healthy Futures Series* and *From Store to Fork Safe Food Handling Guidelines for Older Adults* made improvements in their food safety knowledge and practices from baseline. However, participants who received only the *Healthy Futures Series* had higher gains in food safety knowledge and practices. This finding indicates that instructional videos may not be an effective way to convey food safety information to a senior audience. However, more research is needed to examine the use of videos as education tools for older adults. Future food safety materials used with FSNEP audience should emphasize the proper handling of leftovers and ground meats, and use of thermometers. Observations of FSNEP participants' food safety practices were consistent with participants self reported practices. No strong relationships between demographic variables and food safety knowledge and practices scores were found. This indicates that demographics may not play a major role in food safety knowledge and practices of FSNEP participants.

RECOMMENDATIONS FOR FUTURE RESEARCH

There is a need to examine the use of videos as educational tools for senior audiences. In addition, one limitation of this study was the teaching methods used by the Program Assistants were not assessed. Since teaching methods may influence educational outcomes, future studies should examine the various teaching methods used by the Program Assistants. Furthermore, the survey instruments used in this study could not be assessed for reliability. Therefore, a need exist to develop reliable survey instruments to measure food safety knowledge and practices of older adults.