

FOOD SAFETY AND MEAL PREPARATION FOR OLDER ADULTS

HOME SKILLS ENHANCEMENT PROJECT

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The Cleaning the Homes of Older Adults, Meal Planning and Shopping for Older Adults, & Food Safety and Meal Preparation Modules were written by Chris Curtin, B.A., RN,C. The Steering Committee included Lead Researcher Maureen Mickus, Ph.D.; Researcher & MSU Extension Liaison Karen Shirer, Ph.D.; Michigan Office of Services to the Aging Liaison and editor Lauren Swanson, M.A. The Home Skills Enhancement Project was piloted by Community Services Network of Michigan in 2006. The final report may be viewed at <http://www.michigan.gov/miseniors>.

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Food Safety and Meal Preparation for Older Adults

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FOOD SAFETY AND MEAL PREPARATION FOR OLDER ADULTS

Background For The Trainer

It can be a challenge to prepare a meal for an older adult. Some direct care workers were not taught how to cook at home or in school. Some of us like to cook, others do as little as possible. Our society likes to eat on the run, and have food instantly available. Unfortunately, fast foods do not always offer the healthiest or the most economical choices.

Good, wholesome food can be prepared in the older adult's kitchen with a little knowledge and practice. Boiling a hot dog is easy, but putting a meal or snack together that has more variety and nutrition can be easy, too. An older adult is more susceptible to infections, so food safety is important.

This module will prepare the direct care worker to work safely in the kitchen through hands on training. Skills will be learned that can be taken into the homes of older adults. Specific topics include:

- Understanding the importance of meals to older adults
- Handling food safely
- Cooling and thawing foods
- Knowing when foods are cooked to the right temperature
- Using personal hygiene in the kitchen
- Preparing recipes

Goals

1. Apply basic principles of food safety when preparing meals.
2. Describe safe practices for cooling and thawing food.
3. Identify the importance of food for older adults.
3. Select and prepare a simple recipe as the basis for a healthy meal plan.

Reserve Training Site

This class requires a kitchen for meal preparation and a classroom. Some of the locations that have been used include Churches, Senior Centers or the Intermediate School District.

Materials to be ordered in advance:

- Flip chart and markers
- A laptop computer with a data projector or an overhead projector, if desired
- Copies of handouts
- Food and supplies for the cooking demonstration

- Purchase an Insta-read thermometer for each participant
- Purchase copies of the Michigan State University (MSU) Extension cookbook – Eating Right is Basic (contact your **local MSU Extension office** to purchase copies or go to <http://www.msue.msu.edu/portal/>). If you have questions or are unable to locate cookbooks, contact Joyce McGarry, Ingham County Extension Educator at mcgarryj@msu.edu or 517-887-4587.
- Order brochures and magnets from IsItDoneYet.gov--a website about using a food thermometer
- Order the brochure “Food Keeper” from www.cfan.fda.gov or call 1-888-723-3366
- For the Handout- Germ Growth Over Time- you may want to fill plastic containers with jelly beans or packing peanuts to show germ growth over several hours.

Other Supplies for the cooking demonstration:

- Copies of each recipe
- Dishes or paper plates for serving food
- Plastic silverware
- Serving dishes
- Serving spoons
- Measuring spoons and cups
- Food for all recipes—you may wish to prepare a few dishes from the cookbook in advance such as the Michigan Bean Salad that has to sit overnight or the meatloaf.

The training program is three (3) hours.

Preparing Safe and Healthy Meals for Older Adults

	Section	Activity	Handout	Amount Of Time
1	Introduction		-Agenda -Power Point Handout	10 min
2	Food Safety	Group Discussion Role play	-Keep Hands Clean -Germ Growth Over Time -Safe Temperatures for Food -Is It Done Yet? -Fight Bacteria -Role Play -Manual Dishwashing in a Sink -USDA Food Keeper Brochure	50 min
3	What Makes a Meal?	Small and Large Group discussion	-The Importance of Food	45 min
4	Cooking Demonstration	Prepare recipes in kitchen from cookbook	Eating Right Is Basic Cookbook Copies of all recipes	75 min
5	Evaluation			10 min

CURRICULUM

Introduction	10 minutes
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To Get Started

- Welcome the participants.
- Introduce the trainers and then have the participants introduce themselves. Ask the participants to tell the group about the setting where they work and how long they have been cooking for older adults.
- Have the participants tell the group if they have clients that they are currently preparing meals for.
- Encourage participation and questions during class. The levels of experience among the group members will vary.
- We want to acknowledge that those who have been doing this job for many years have wisdom and experience to share.

As a person gets older, the desire to remain independent is strong. Chronic disease and sensory impairments can affect the older adult's ability to function. A functional assessment looks at a person's ability to do their Activities of Daily Living or ADLs. These include normal activities people perform daily including walking, bathing, toileting, dressing, transferring and being able to feed your self.

In order to remain independent, other skills are necessary. Instrumental Activities of Daily Living or IADLs measure a person's abilities to do these things:

- Shopping
- Transportation
- Telephone use
- Preparation of meals
- Taking medications
- Managing money
- Cleaning
- Doing laundry

Many older adults are choosing to remain in their own homes or in a community-based setting instead of a nursing home. They may be able to do some of the above things for themselves, but need help with others. A direct care worker is in their home to do what they need help with. Filling in the gaps helps the person to remain in their own home. Nutrition plays an important role in helping the older adult remain as healthy as possible. This training program will discuss the basics about food safety for older adults.

2. Food Safety

50 minutes

BRAINSTORM SESSION

What challenges have you seen in the area of food safety with older adults?

Some answers may include:

- The older adult may **not wash their hands** after using the bathroom.
- They may want to **thaw food on the counter**.
- The older adult may **want to eat food that has been in the refrigerator** for a long time.
- They may **not be able to see bugs in stored foods** such as rice or flour.
- There may be foods that are **past the expiration date** and the older adult thinks that it is still safe to eat.
- There may be **stockpiling of home delivered meals or commodity foods**.
- The person may have **digestive problems** that affect the types of food that they can eat.
- The older adult may want to **eat the same thing** every day.

The focus of food safety is to learn how to handle and store food properly and safely, and to reduce the risk of harmful substances. Food borne illness is a disease that is transmitted to people by food. In the USA there are 76 million cases of food borne illness annually.

Every year 325,000 people are hospitalized and 52,000,000 people die due to food borne illness. Modern circumstances create new food safety risks with newly emerging pathogens and new strains of old ones. Older adults did not have to deal with these concerns in the past. The food industry has expanded so much that now we get food in our grocery store from all over the world. Meat and poultry are produced in factories and food can be more easily contaminated.

Bacteria, molds, viruses, yeast and parasites are called microorganisms because they can only be seen through a microscope. They live everywhere around us; in the soil, water, air, and on insects, animals and humans. Once they find the right environment, they begin to reproduce quickly. Food, wet cutting boards, knives and utensils, countertops, sinks, dishes, drains, sponges and dishcloths are environments that are common sources for bacterial growth. Some bacteria can potentially be destroyed by heat, refrigeration or freezing. Some create a hard coating or spore which allows them to survive heat and freezing. When they reach a favorable temperature, they begin to grow again.

Refrigerator temperatures should be below 40 degrees F. Food kept in the refrigerator will continue to spoil as the cold only slows the growth of the microorganisms.

People can get sick from bad tasting, moldy, discolored and rotten food. In the kitchen, countertops, dishes, pots and pans and chopping boards can get contaminated. Spills

and smears, grease spots and not washing hands are other sources of contamination. Some people get sick because they don't put the food in the refrigerator promptly.

Symptoms of a food borne illness include vomiting, diarrhea, weakness, chills, fever, headache and general flu-like symptoms. Some of the toxins in the food can make a person sick within hours; others can take up to a week or more to show an effect. Older adults are at higher risk because of their depressed immune system which doesn't work as efficiently as it does for younger people.

Personal Hygiene



Handout: Keep Hands Clean

Use **utensils** and touch food with your hands as little as possible.

- **Wash hands for at least 20 seconds** (equivalent to singing the Happy Birthday song twice) and use a paper towel to dry your hands. Use the towel or your arm to turn off the faucet to avoid recontamination. Proper hand washing practices can decrease your chance of infection by 35-50% and reduce risk of stomach illness by 80%. Wash your hands when arriving at the client's home and before leaving.
- **Wash your hands every time you touch raw meat**, or go from one food to another. Dry your hands on a paper towel.
- **Don't sneeze or cough** around food.



Handout: Germ Growth Over Time

You may wish to fill plastic bags or containers with jelly beans or packing peanuts to show the number of germs



Handout: Safe Temperatures for Food

Safe Temperatures For Food

- Most bacteria grow in the temperature range of between **60° F and 125° F**
- Molds grow best between **64°F and 84 °F**
- To be safe, remember the **Temperature Danger Zone (TDZ)** which is between 40° F. and 140° F. The shorter the amount of time a food is in the danger zone, the fewer the number of microorganisms will grow. **Food should not be left in the TDZ for more than 2 hours.** Reheat leftovers thoroughly to 165° F. and bring gravy, soups and sauces to a rolling boil.
- Freezing below 0 degrees stops microbial growth, but does not kill most bacteria. **Bacteria will begin to grow once the food is thawed.**
- **Temperatures above 160 degrees F kill most microorganisms.**
- The USDA recommends the **use of a food thermometer.** There are many different kinds of thermometers. Some instantly read the temperature of the food. They are not left in the meat when it is cooking.



Handouts:

- **Is it done yet? Brochure and Magnet**
- **Food Thermometers**

GROUP DISCUSSION



How many participants already use a food thermometer?



Do any of the older adults they work with have one?



Review the brochure and the temperatures of food.



Handout: Fight Bacteria Brochure

ACTIVITY Role Play

Recruit two volunteers to read the scripted role play. After they have finished, ask the role play questions.

Questions:

1. **Was Mary disrespectful in challenging Mrs. Right?**
2. **How would you have handled the situation when Mrs. Right did not want to wash her hands after using the bathroom?**
3. **What other challenges have you had with older adults in the area of food handling?**

LARGE GROUP DISCUSSION



Do the participants see food handled and thawed correctly in the homes they work in?



Is there time allocated to clean out the client's refrigerator?

Some of the issues that may be discussed:



Tips for Food Handling and Safe Dishwashing



Handout: Manual Dishwashing in a Sink

- Knives and cutting boards that touch **raw meats** should be washed immediately or put into the dishwasher. It is best to have one cutting board for raw meats and one for fruits and vegetables. Clean any drips off counters.

- Use **different spoons to stir different bowls** or pots if one has raw meat. If you used a spoon that was used when the food was raw, wash it before stirring again.
- Every time food is tasted that is being prepared, use a **clean spoon** or fork. Do not use a utensil that has been in your mouth to stir food that will be eaten by others. Germs in your mouth may be deposited into the food.
- **Wash fruits and vegetables just before using them**, even if they are going to be peeled. If not, the microorganisms will get on fingers and/or the knife and contaminate the food. Bacteria grow in the bits of soil that are on vegetables. Wash fruits and vegetables under a stream of water, scrubbing those that have a hard skin. Do not use soap.
- When cooking in the **microwave, stir frequently** to avoid cold spots that will not reach a safe temperature.
- **Wash lids of cans** with soapy water before opening them. The cans have been handled by many people, and may have been stored where there are dust or rodent droppings. If the lids are not washed, the dirt on the lid will drop into the food in the can.
- **Clean up while cooking**; wash, dry and put away dishes and clean up spills. This makes cooking easier and more organized.
- **Don't pack the refrigerator** or freezer too full. Air needs to be able to circulate.

Cooling and Thawing

- **Keep raw meat, poultry and fish juices contained.** Put plates under foods that drip, and don't allow raw meat juices to drip onto foods that are fresh or ready to eat. Store in leak proof containers on the lowest shelf in the back of the refrigerator.
- **Don't refreeze raw food** that has completely thawed.
- **Frozen foods should not be thawed on the counter.** As the outside thaws, bacteria may begin to grow even if the middle is still frozen. Store foods in the refrigerator overnight to thaw.
- **Keep hot foods hot and cold foods cold.** Don't leave foods out in the TDZ for more than 2 hours. If the air temperature is over 90 degrees, throw the food away. Avoid tasting the food to see if it is still good. It may look and smell good, but it may still be unsafe for consumption.
- **It is unsafe to let food cool on the counter.** Some people object to putting food in the refrigerator or freezer while it is still warm. They believe that it warms the refrigerator or freezer and causes the motor to run more.

Leftovers

When we choose recipes, there will usually be more than one serving. These meals may be used for the next day or frozen. Some older adults don't like leftovers. The Anglo American tradition of cooking may give us a reason why. The traditional American diet for many older adults was meat and potatoes. Large amounts of food were made at a meal. The plan was to have leftovers so that they can be used over the next few days. The food appeared in casseroles, croquettes, in gravies and many other

forms. Some foods lose their taste after the first day and don't taste good as leftovers. Examples of these are broccoli and potatoes.

Some foods like tomato-based dishes taste better the next day and are good for reheating and freezing for future meals. When selecting recipes to cook for older adults, plan how leftovers will be stored and when they will be eaten.



Handout: Food Keeper Brochure
(Describes many types of foods and how long they are considered fresh.)

3. What Makes A Meal?

45 minutes

Having a meal is not the same as just eating something. Meals include foods that are defined by our customs and occur at customary times of day. There are rituals about how meals are prepared and served especially during holiday meals.

Most people in the Western world think a “real meal” has some kind of meat or protein, some type of starch or carbohydrate and one or more fruits or vegetables. Many of our ancestors came from families who had the custom of eating three meals per day. Some people prefer to eat four or five smaller meals per day.

Food preparation is just the beginning of the dining experience. A meal is a combination of setting and decorating the table, gathering together and having social interaction. The dining experience includes the set up of the dining area, special dishes, candles and placemats. It includes smelling the aromas of the food in anticipation of the meal as people wait for it to be ready.

ACTIVITY

Self Reflection

Small and large group discussion. Distribute the handout, The Importance of Food. Allow 10 minutes to answer the questions.

Break into small groups and ask the participants to share anything they feel comfortable sharing. Allow 10 minutes for discussion, then ask for comments or highlights.

For many older women, cooking meals and cleaning up after them took most of their time every day. Women stayed home and tended to the family. Providing meals was an exercise in skill and organization. There were usually many mouths to feed then and it was not uncommon for families to have 10 children.

Choosing Recipes to Prepare for Older Adults

Foods can be part of a routine. The key to good nutrition for older adults is variety and moderation. A diet that includes a variety of types of foods and food groups will provide more key nutrients and play a positive role in promoting good health. The more variety that is in a diet, the more likely a person will be getting the key nutrients that are important for good health.

We can provide a variety of foods, but they are of no value if the person is anxious or frustrated. Most of us have routines, and routines are important to older adults. If we can follow their routine as much as possible, the person will be more comfortable.

A person who has dementia depends on routine and is less flexible. If a person is upset after an unpleasant bath, they will not be hungry. It is important to set the mood and tone, and transition efforts toward helping the adult to be ready to eat a meal.

The more we know about the older person and their preferences, the more we can understand them. We can include the older adult and encourage them to help when we prepare a dish that is familiar.

People desire meals that are predictable, taste good, and are of good quality.

4. Cooking Demonstration	75 minutes
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Handout: Eating Right Is Basic Cookbook (see page 2 for information)

How to Conduct the Cooking Demonstration

- Locate a kitchen that will accommodate the number of students in the class.
- Determine the supplies that will be needed.
- Distribute the cookbooks and allow enough time for the participants to look through them.
- Break the participants into groups and direct them to stations set up in the kitchen.
- Each station will have a different recipe.
- Have the participants prepare their recipe.
- While the recipes are cooking, go over the various handouts and allow students to identify strategies or tips for the others that are helpful.

5. Evaluation

1. Has this program changed the way workers view meal preparation for older adults?

2. What information from this program can the DCW apply to their own families in preparing meals?

Resources

The following resources were used in developing this module:

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