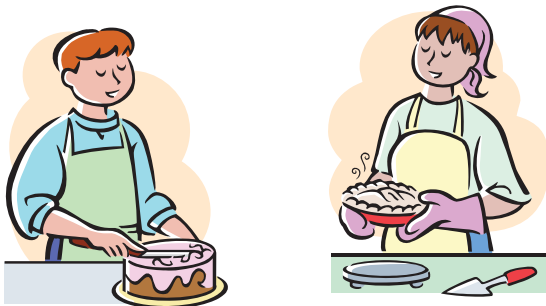


Foods

Nutrition



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FOOD & NUTRITION – (EC)

BAKING

GENERAL SUGGESTIONS TO HELP LEADERS

- Members should not use mixes of prepared foods.
- Exhibits MUST include recipe on a 3 x 5 card.
- See Fair book for project suggestions in different age categories.
- Resources are available at the Extension Office or your local library.
- Baked items should be uniform.
- Items should be presented in appropriate kitchenware, disposable if possible.
- Use size plates appropriate to project for nice presentation.

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn the food pyramid.
2. Learn to be responsible for cleaning up after oneself.
3. Be familiar with basic kitchen tools, appliances, and how to safely handle them (stove, mixer, microwave, wire whip, knives, etc.).
4. How to read and understand a recipe.
5. The importance of checking ingredients before starting.
6. Learn to have sanitary conditions while preparing food (wash hands, clean fingernails, tie hair back, start with clean kitchen).
7. Understand these terms: stir, beat, cream, fold, chop, grate, dice, and whip.
8. Learn how to test for doneness of certain foods.
9. How to work with eggs (cracking properly, how to soft-boil or hard-cook).
10. Know basics of food storage.
11. Learn how to set the table properly.
12. Learn that practice makes perfect (if a practice batch turns out well, they can freeze them until fair time).

SUGGESTED PROJECTS FOR BEGINNERS

- Cookies
- Brownies
- Muffins
- Biscuits

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INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Have basic knowledge of what basic ingredients contribute to a recipe (flour, baking powder, baking soda, fat, sugar, flavorings, etc.). Experiments are a fun way of illustrating this knowledge.
2. Understand the following food preparation terms: boiling, scalding, simmering, steaming, pan-fry, deep-fat fry, broiling, baking, basting.
3. Understand importance of sanitation techniques.
4. How to melt chocolate.
5. Standard grading system of meat and eggs.
6. Learn of vitamins, minerals, proteins, carbohydrates, fats.
7. Choosing foods that give you the most for your money.
8. How much to buy – serving sizes of foods.
9. Importance of nutritional labeling – how to read a cereal box.
10. Measuring in metric.
11. Understand the different kind of cakes and why they are different (sponge, butter, chiffon).
12. Time management for meal planning – preparing meals so all food is done at the same time.
13. Know how to cook frozen foods.
14. Learn to be responsible for cleaning up after oneself.
15. Learn how to use substitutions.

SUGGESTED PROJECTS FOR INTERMEDIATES

- Muffins
- Coffee cake
- Biscuits
- Yeast rolls
- Quick breads
- Cupcakes
- Breads
- Variety cakes

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ADVANCED

(5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. How to plan meals for color, texture, and flavor.
2. How to analyze a one-dish meal for nutrition content.
3. How to alter recipes and use emergency substitutions.
4. Know measurement equivalents (i.e. 3t = 1T)
5. How to cut a pineapple.
6. How to clean, cut up, and prepare a chicken and/or a fish.
7. Know the vitamins, their functions, and which foods they can be found in.
8. Learn to be responsible for cleaning up after oneself.
9. Know how to make and plan a meal so all the food will be ready to eat at the same time.
10. Understand different kinds of food poisons and ways to prevent each.
11. How to properly set a table for formal occasions.
12. Know how to work with flour as in breads and pies.

SUGGESTED PROJECTS FOR ADVANCED

- Bread
- Jelly roll
- Pie
- Cakes
- Raised doughnuts
- Cheesecakes

International cultural foods (i.e. lasagna, spaghetti – sauce from scratch, chop suey, different pastries).

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FOOD & NUTRITION – (EC)

PREPARED FOODS

GENERAL SUGGESTIONS TO HELP LEADERS

- Members should learn the food pyramid, about vitamins and minerals, basic nutrition, exercise, etc.
- More advanced members should learn about special diets: low cholesterol, sugar free, etc.
- Members should learn to plan menus, to budget meals, and about calories and fitness.
- Members should not use mixes or prepared foods – recipe should be included with exhibit.
- Resources are available at the Extension Office on Nutritious Snacks, Dairy food, International Food, and Early American Food. There are many cook books available as well.
- How to cook vegetables to retain color and vitamins.
- What to look for when buying fresh fruits and vegetables.
- How to make white sauce, gravy, spaghetti sauce.

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED PROJECTS FOR BEGINNERS

- Nutritious snacks

INTERMEDIATES & ADVANCED

(3+ years in project/12+ years old)

SUGGESTED PROJECTS FOR INTERMEDIATES & ADVANCED

- Appetizers
- Dairy foods (ice cream)
- Casseroles
- International foods
- Gourmet foods
- Early American foods

FOOD & NUTRITION – (EC)

CAKE DECORATING

GENERAL SUGGESTIONS TO HELP LEADERS

- Members should be encouraged to become familiar with their equipment and have working knowledge of the equipment used for this project.
- Members should be encouraged to seek additional resources for ideas, designs, and techniques. There are a number of cake decoration books and periodicals.
- Decoration to be exhibited may be made over Styrofoam or cardboard bases. The cake should not be more than 1 ½” smaller than the cake board. Recipes for icing should accompany the exhibit.

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn the basic essentials of cake decorating: how to frost a cake, the proper consistency of frosting, how to crumb coat your cake, how to decorate your cake.
2. Learn to make and use parchment paper decorating.
3. Learn to level and put together a layer cake.
4. Learn smoothing techniques.
5. Learn simple writing techniques.
6. Learn to do simple borders.
7. Learn to make drop flowers.
8. Learn to make leaves.
9. Learn to make basic sugar moldings.

SUGGESTED PROJECTS FOR BEGINNERS

- Decorated cookies, regular cupcakes, or shaped cupcakes.

INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Continue to improve present cake decorating skills.
2. Learn new and more advanced skills of cake decorating in the following application:
 - a. More complex borders
 - b. Advanced writing techniques
 - c. Begin basic figure piping
 - d. Begin basic nail flowers (daisies, chrysanthemums, etc.)

- e. More advanced sugar moldings (hollow bells, eggs, etc.)
 - f. More advanced air brushing – learn to cut basic stencils or do simple free-hand pictures
 - g. Cake should be smoothed with no crumbs by now – try other smoothing techniques (paper toweling, hot water, etc.)
3. Become familiar with different types of frostings and icings (chocolate, cream cheese, etc.)
 4. Learn to make and decorate cut cakes.
 5. Composition – learn what makes a cake attractive and pleasing including harmony, color choices, types and placements of decorations. A good decorator learns early that less is more. Do not use every technique you have learned on a cake. Pick out one or two borders, flowers, etc. to use that work well together. Don't over decorate!

SUGGESTED PROJECTS FOR INTERMEDIATES

- Loaf, large party cake, or holiday cake.

ADVANCED

(5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Continue to improve present skills and develop new and more advanced skills.
2. Learn more complex nail flowers (roses, apple blossoms, violets, etc.)
3. Learn advanced figure piping.
4. Learn to make royal icing decorations.
5. Learn skills in color flow techniques.
6. Learn to make, assemble, and decorate tiered (separated) cakes.
7. Air brushing – cut a portrait stencil or do a complex free-hand picture.
8. Learn to apply the skills of cake decorating to decorate other foods.

SUGGESTED PROJECTS FOR ADVANCED

- Loaf, large party cake, holiday cake, or wedding cake.

FOOD & NUTRITION – (EC)

CANDY MAKING

GENERAL SUGGESTIONS TO HELP LEADERS

- Encourage members to do different things each year and to make a broad range of candy.
- Be aware of the flavor of the chocolate. Don't store chocolate where it can pick up any other odors.
- To retain shape and flavor, mints cannot be made too far in advance. Chocolate items can be transported in Styrofoam for temperature control.
- Be neat and present your exhibit attractively.

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn how to correctly handle and melt chocolate.
2. Learn how to prepare homemade peanut butter filling.
3. Learn how to use flavoring oils properly.
4. Learn how to use molds correctly.
5. Learn how to hand dip with a dipping fork.

SUGGESTED PROJECTS FOR BEGINNERS

- 6 molded chocolates.
- 6 flat chocolate mints, shapes approximately 1” diameter, flavored with mint oil.
- 6 hand dipped coconut bon bons.
- 6 peanut butter cups.
- 6 pieces cereal candy.

INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn how to use thermometer correctly.
2. Learn how to make homemade fillings for centers.
3. Learn how to layer chocolate.
4. Learn how to paint candy.
5. Learn how to use double molds for hollow molding.

SUGGESTED PROJECTS FOR INTERMEDIATES

- 4 painted articles using at least 2 colors.
- 4 turtles.
- 4 chocolate covered cherries.
- 4 pieces chocolate fudge – homemade.
- 4 articles of hollow chocolate molding (such as 2 piece bunny, Santa Claus boot).

ADVANCED (5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn how to use candy funnel.
2. Learn how to make caramel from scratch.
3. Learn how to use decorating bag to fill candy molds.
4. Learn how to use rubber molds.
5. Continue to increase candy making skills and try new things.

SUGGESTED PROJECTS FOR ADVANCED

- 4 caramels – homemade from scratch recipe (not just steaming sweetened condensed milk.)
- 1 detailed painted article using 3-5 different colors.
- 1 box of assorted varieties displayed in appropriate 1 pound box.
- ½ pound peanut brittle.
- Any candy not listed in any other class above.

FOOD & NUTRITION – (EC)

OUTDOOR MEALS

GENERAL SUGGESTIONS TO HELP LEADERS

- Try a variety of foods and methods of cooking.
- Let members rotate clean-up responsibility so all members learn all phases of clean-up (extinguishing the fires, leaving campsite clean, washing dishes, etc.).
- Resources are available at your local library.

BEGINNERS (1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. A meal planned for a cook-out should be as well-balanced and nutritious as meals eaten at home.
2. Learn how to pack a sack lunch.
3. Learn how to pack a picnic basket.
4. Learn what foods must be kept hot and which cold and how to keep them that way.
5. Know the importance of proper temperature, storage, and clean-up.

SUGGESTED PROJECTS FOR BEGINNERS

- Packing a picnic basket or box lunch with menu.

INTERMEDIATES (3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Continue to use skills learned previously.
2. Know how to build and extinguish fires (hunter-trapper fire, wigwam tepee fire).
3. Know safety precautions around a campfire and cooking utensils.
4. Know the proper stage of coals to get best heat and least burning and blackening of cooking utensils.
5. Know how to select wood to make a good campfire.
6. Learn how to wrap food in foil for baking and how to turn packages without punching holes in it.
7. Know how to plan a days worth of balanced meals to be cooked outdoors.
8. Learn how to make and use a buddy burner.
9. Make and use a tin can charcoal stove.
10. Know the importance of proper temperature, storage, and clean-up.

SUGGESTED PROJECTS FOR INTERMEDIATES

- Picnic lunch with menu and report.
- One piece of homemade equipment for use on a campfire.

ADVANCED (5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Continue to use skills learned previously.
2. Know how to cook, using different methods (i.e. foil, tin can cookery, coals, reflector oven, cooking on a plank, bean hole baking, charcoal broiling, and barbecuing).
3. Know how to construct above equipment and which foods can be best used in each.
4. Understand the importance of keeping cooking area and utensils sanitary.
5. Know how to clean up.
6. Know how to use a charcoal or gas grill.
7. Know the importance of proper temperature, storage, and clean-up.

SUGGESTED PROJECTS FOR ADVANCED

- Make reflector oven
- A piece of homemade equipment for use with the campfire.
- Make an educational exhibit illustrating some of the above ideas.
- Make homemade cooking equipment.
- Outdoor meal with menu and report more extensive than a simple picnic.

FOOD PRESERVATION – (ECC)

GENERAL SUGGESTIONS TO HELP LEADERS

- The Objective of food preservation projects is to help the member understand how food spoils with improper handling, storage, and preservation methods.
- The member should learn the appropriate method of preservation for a variety of foods and the appropriate equipment needed for each method of preservation.
- The most important factors in food preservation are safety and quality. It is recommended that young members not participate in the preservation methods that may cause bodily harm, such as hot water bath, pressure canning, and blanching.
- Food preservation methods include: freezing, canning, and dehydration.
- Resources are available through the Extension Office or your local library.
- Suggested to leave rings on jars for displays.

FOOD PRESERVATION – (ECC)

FREEZING

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn how to select quality food for freezing (fresh, good varieties without blemishes).
2. Learn that food should be frozen as soon as possible after picking.
3. Learn what qualities a freezer container should have (air tight, moisture proof, leak proof, odor proof, vapor proof, and easy to fill, close, and empty).
4. Learn how to prepare fruit for freezing (wash, hull, core, or pit) and how to prepare containers.
5. Learn how to make a syrup or dry pack.
6. Learn storage time recommendations.
7. Label all containers by identification of item, month, and year.
8. Learn amount of food to freeze at one time, temperature of freezer, etc.

SUGGESTED PROJECTS FOR BEGINNERS

- Freeze blueberries, cherries, strawberries, or raspberries.
- Baked goods (cookies, muffins, bar cookies)

INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn how to properly prepare additional fruits and vegetables for freezing and how to keep fruits from turning brown.
2. Learn how to properly select and prepare the recommended variety of vegetables blanched and understand the importance of timing and learn how and why vegetables are chilled and drained after blanching.
3. Learn storage time recommendations.

SUGGESTED PROJECTS FOR INTERMEDIATES

- Fruits such as: peaches, apples, applesauce, etc.
- Vegetables
- Desserts or salads
- Freezer jams

ADVANCED (5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn to use individual quick freeze technique with fruits and vegetables.
2. Learn how to freeze meat (include packaging and storage time).
3. Learn how to freeze baked goods (i.e. which should be baked before freezing and which can be baked after).
4. Understand freezer burn and how it can be prevented.

SUGGESTED PROJECTS FOR ADVANCED

- Fruits, vegetables, baked goods, meats, or a meal prepared and frozen.
- Desserts, salads, and jams.

FOOD PRESERVATION – (ECC)

CANNING

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn importance of planning what to can – varieties, amount, and size of jars.
2. Be familiar with different types of canning jars and lids.
3. Learn to follow reliable sources for canning instructions; sources that are up to date, and don't suggest short cuts.
4. Learn to read all recipes and instructions for canning before starting. Arrange all equipment needed, check rim of jars for imperfections, and learn to sterilize jars. Thoroughly wash and rinse jars.
5. Know how to prepare produce for canning with minimum time from harvest to can.
6. Understand these terms: hot pack, raw pack, hot water bath, low acid, high acid.
7. Understand that sugar syrup helps fruit hold its shape, color, and flavor. Learn how to make syrup.
8. Know importance of leaving headspace, removing air bubbles, and wiping tops of jars.
9. Learn how to check, prepare, and apply lids and rings, how to tell when they are sealed, and how to cool the jars.
10. Know how long canned foods should be stored and what proper conditions of storage are.
11. Know how to test seal and signs of spoilage.

SUGGESTED PROJECTS FOR BEGINNERS

- Fruits, tomatoes (exhibit requires 5 jars of 4 kinds of fruit)

INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Know how to select and prepare fruits and vegetables for canning.
2. Understand canning terms: pressure canner, low acid, etc.
3. Know the parts of a pressure cooker and how to safely use it.
4. Know when to start timing when processing food in pressure canners.
5. Know the essential ingredients in making jam, jelly, or preserves (fruit, pectin, acid, sugar). Learn to make jam, jelly, or preserves.
6. Learn to pickle.

SUGGESTED PROJECTS FOR INTERMEDIATES

- Fruits, vegetables, pickles, jam, or jelly.

ADVANCED (5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Understand food spoilage terms as they relate to canning: bacteria, yeasts, molds, enzymes, botulism, flat sour, and fermentation.
2. Learn to select and prepare meat, fish, or poultry for processing.
3. Learn how to use a preserve pressure canner.
4. Learn how to process low sugar/salt foods.
5. Learn how to make low sugar jams and jellies.
6. Learn how to make butters, conserves, or marmalade.
7. Learn to pickle fruit, meat, and special relishes.
8. Learn how to preserve pizza sauce, mixed vegetables, and other sauce.

SUGGESTED PROJECTS FOR ADVANCED

- Relishes, pickles, marmalades, meats, complete meal (soup, juice, meat, vegetable, fruit, etc.)

FOOD PRESERVATION – (ECC)

DEHYDRATION

BEGINNERS

(1-2 years in project/9-11 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Compare time and energy of drying and other methods of food preservation.
2. Learn proper methods of preparing fruits and vegetables for drying.
3. Learn different methods of food drying.
4. Learn proper storage of diced foods.
5. Must exhibit in proper containers – at least ½ pt. containers.

SUGGESTED PROJECTS FOR BEGINNERS

- Vegetables, herbs, and fruit.

INTERMEDIATES

(3-4 years in project/12-14 years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Learn proper methods of preparing fruits for drying using anti-darkening agents.

SUGGESTED PROJECTS FOR INTERMEDIATES

- Fruit LEATHER, blueberries, bananas, apples, cherries, tomatoes, chili peppers.

ADVANCED

(5+ years in project/15+ years old)

SUGGESTED KNOWLEDGE / SKILLS TO BE LEARNED

1. Try to microwave drying (herbs ONLY).
2. Learn food safety principles when working with meat.

SUGGESTED PROJECTS FOR ADVANCED

- Meat jerky, herbs, fruit, vegetables, make your own onion flakes, diced celery, etc.
- Bulletins available at the MSU Extension Office.