Managing Community Meals

Mary E. Mennes
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# TABLE OF CONTENTS

Records Are Important 3  
Community Meal Summary 4

Planning A Flavorful and Functional Menu 5  
Buying Food for the Meal 7  
Suggested Menus 8  
Market Order Form 10  
Setting a Price for the Meal 11

Work Smarter -- Not Harder 11  
Serving the Food Efficiently 13

Dining Room Management 14  
Space Requirements for Table Arrangements 14  
The Place Setting 14  
Suggestions for Waitresses 15  
Styles of Table Service 16  
Serving Safe Food 17  
Bacteria: How They Live and Grow 17  
Control of Food Poisoning Bacteria 18

Housekeeping In The Kitchen 18  
Food Supply 19  
Food Preparation and Storage 19  
Personal Cleanliness 20  
Care for Leftovers Properly and Promptly 21  
Cleaning Up Afterward 21  
Washing Dishes by Hand 22  
Use of Dishwashing Machine 23

Work In A Safe Kitchen 23  
Prevent Fires 23  
Safety With Electric and Gas Equipment 24  
Safe Cooking Utensils 24  
Avoid Burns 25  
Use Knives Correctly 25  
Avoid Falls, Strains, Sprains 25  
Clean Kitchens Are Safer 26

Quantity Food Preparation References 26  
Standardized Quantity Recipe Collections 26  
Quantity Food Purchasing 26  
Sanitation 27  
Food Service Facilities 27

General Planning Committee 28
Managing Community Meals

Mary E. Mennes
Institution Management Specialist

Food is hospitality -- that's the American tradition. It's part of good business too. Meals are a popular feature of clubs and meetings as well as of church, business, fraternal and farm gatherings. The community meal may range from simple coffee hour to a picnic, barbecue, formal reception or banquet. The sociability of the meal and ease with which it's served counts almost as much as how the food tastes. Eating with friends is part of community life.

Cooking for crowds -- friends, family, guests or business associates -- can be as rewarding for you as for your guests if you: 

Plan every detail well in advance.
Set up committees carefully and outline duties precisely.
Select an appealing and practical menu.
Prepare the food carefully, using safe procedures.
Safeguard the food by thorough sanitation.
Serve the meal attractively and efficiently.
Arrange kitchen, dining room and storage area conveniently.
Keep complete records of plans, costs and income for future use.

Successful management of a community meal brings satisfaction to everyone -- and reflects the thoughtful preparation of the planners.

Careful planning before a meal can compensate for many deficiencies in layout and equipment. Without effective management, it will be difficult to work in the most modern and well-equipped kitchen or dining room.

Effective planning means dividing the work and assigning the responsibility for getting it done. This is the job of the general chairman.

The number and size of committees will vary according to the type of meal to be served. A General Planning Committee is necessary and must function smoothly. This group should include the chairman or co-chairman for the meal and the head of each work committee (kitchen, dining room, clean-up and publicity). In this way, all work can be coordinated.

Advanced planning is the key to a smoothly functioning activity. Assign work to each committee as early as possible. The major plans -- menu, price, method of service, buying and work policies -- are made by the General Planning Committee. Meet following the event to evaluate and summarize all records and reactions, and to make suggestions for future meals.

Work committee heads have a real challenge to organize, schedule and supervise the work of their committee. They should arrange to have enough time to supervise others. Written time schedules for each worker, with lists of jobs to be done, will help the leader to supervise without seeming "bossy".

All workers should be very familiar with sanitation techniques -- in preparation, service and clean-up. Regular kitchen safety checks are a good idea. Posted safety reminders help prevent accidents.

Records Are Important

Records help less experienced persons take charge of community meals. All details should be included: the name of the group to whom the meal was served and the occasion, the method of serving the meal, the menu, the recipes, the number of people planned for and the number of people served, the cost of food, decorations and other expenses, the income from the meal, the market order, those who served on each committee, and the detailed time and work plans used by each committee.

The general chairman of a community meal will find standard forms easier to keep and use. These record forms may be printed, mimeographed or typed. Your organization may want to set up its own forms to meet its particular needs. A suggested form is included. A brief written comment by the chairman can be a helpful part of the final report.

Community meal records can be kept in a loose leaf notebook. Receipts and bills may be kept in envelopes, one envelope for each meal, punched to fit the notebook. Recipe cards should be kept in a permanent file box or notebook, and a careful record of which recipes were used for the meal should be made on the menu. Make a note of the quantity prepared for each recipe -- for example, 350 1/2 cup portions or 4 times the recipe.
COMMUNITY MEAL SUMMARY

OCCASION OR GROUP SERVED ___________________________ DATE ___________ TIME ______

PLACE ___________________________ TYPE OF MEAL ___________________________

ESTIMATED NUMBER TO BE SERVED
   Adult guests ________ Children ________ Workers ________ Total ________

MENU ___________________________

NUMBER OF PORTIONS OR TOTAL AMOUNT PREPARED ___________ RECIPE SOURCE ___________

VOLUNTEER WORKERS
   KITCHEN ___________ DINING ROOM ___________ CLEAN-UP ___________ PUBLICITY ___________

GENERAL CHAIRMAN ___________________________

FINANCIAL STATEMENT

INCOME:
   No. of adult meals sold ________ @ $ ________ = $ ________
   No. of children’s meals ________ @ $ ________ = $ ________
   No. of workers’ meals ________ @ $ ________ = $ ________
   No. of free meals ________ = $ ________
   Sale of leftover food ________ = $ ________
   Other income ________ = $ ________
   TOTAL INCOME $ ________

EXPENSES:
   Food purchased $ ________
   Dining room supplies $ ________
   Decorations, flowers $ ________
   Clean-up supplies $ ________
   Labor $ ________
   Rental of hall $ ________
   Other $ ________
   TOTAL EXPENSES $ ________

PROFIT (OR LOSS) $ ________
PLANNING A FLAVORFUL AND FUNCTIONAL MENU

The menu spells the success or failure of any meal. It helps you organize the preparation and serving tasks. In planning a menu for a community meal, consider these 12 points.

2. PEOPLE
Consider the age, sex and occupation of the group. Include foods which are liked by all ages when you serve family groups. A menu suitable for a men's club would not be as appropriate for a teenage group. Meals planned for women's groups may include fancier, less ordinary items. Serve hearty foods to people who do heavy physical work.

1. VARIETY
Put eye and appetite appeal into every meal. Arouse appetites with contrasting colors and a variety of shapes on the dinner plate. For example, if you are serving roast pork, apple sauce and mashed potatoes, add a bright green, red or orange vegetable for color accent. Repetition of white and brown will make this meal dull and unappetizing. A meal of similarly shaped foods is monotonous; meat balls, new potatoes and brussel sprouts, for example. The soft shape of whipped potatoes relieves the straight lines of glazed carrot strips.

Plan a variety of textures -- serve something crisp and crunchy along with soft and chewy foods. Too many soft foods or too many dry foods are not appealing in the same meal. Vary flavors -- some should be mild, one dominant. Avoid repeating the same flavor. Tomato juice followed by spaghetti and tomato sauce or repeated use of onions are common errors.

Serve some hot and some cold foods -- and serve them at the proper temperature.

3. NUTRITION
Plan a well-balanced meal, including foods from each basic food group. Provide milk for children and offer it to adults. Remember the present trend toward weight-watching, and keep the number of sauces, gravies or fried foods at a minimum. Rich desserts may not be a good choice for women's clubs, whose members may be dieting.

4. MARKET
Choose hearty, hot foods in winter; cold items, main dish salads in summer. Serve foods which fit the season, the occasion and the plentiful foods of the area. Capitalize on local products and seasonal buys.
5. COST
Keep the cost in mind. Consider how much the group will pay for the meal, and plan the menu to allow a reasonable profit. Remember that extra garnishes, second helpings and large servings will raise the cost. It will be more difficult to estimate the cost of buffet or family style meals because portion sizes vary.

6. NUMBER
The number to be served will influence your menu choices. For very large groups, foods will have to be kept more simple than if only a small group were being served. For example, chicken salad garnished with tomato wedges would be easier to serve to a large group than tomatoes stuffed with chicken salad. Desserts which can be cut and served quite simply are easier to manage than ice cream sundaes or parfaits which are dipped at the last minute.

7. FLAIR
Use imagination in planning for new food items on the menu. Serve ordinary foods in new shapes or in new ways. For example, try ham with whipped cream-mustard sauce instead of raisin sauce; parsley-buttered tiny new potatoes instead of mashed potatoes and gravy; hot turkey salad and rolls instead of sliced turkey sandwiches.

8. SCHEDULING
Select foods which will enable you to set up a smooth, well-spaced work schedule. Some items can be prepared well in advance and frozen; other foods can be prepared the previous day or many hours before the meal. Make as few last-minute preparations as possible. If you carefully consider preparation steps and times when you plan the menu, you will avoid last-minute rush and confusion. Hot foods will be served hot and cold foods properly chilled.

9. EQUIPMENT
Plan a menu which makes the best use of the available equipment -- refrigerators, oven, surface burners, mixers and counter space. For example, if refrigerator space is limited, do not plan to serve a cold salad main dish, potato or gelatin salad, and a cold dessert in one meal. Likewise, consider the size and number of ovens you have available, and the baking temperatures required for various items. It is difficult to serve roast, baked potatoes, hot rolls and a baked pudding dessert with limited oven space. Electric roasters can increase your oven space, but if you plan to use them, be sure to check the electrical outlets, circuits and current capacity. Blown fuses and overloaded circuits have spoiled many community meals, and seriously endangered the safety of the food by shutting off refrigerators and ovens.
10. SAFETY
Remember these holding temperatures:
Cold foods: 40 degrees F. or below
Hot foods: 165 degrees F. or above

When foods are to be served over a period of several hours, plan a menu which is suitable.
Serve foods which can be safely held or which can be prepared in small batches at intervals throughout the serving period.

11. SKILLS
The experience of the cooks and time available for food preparation is an important menu-planning consideration. Keep the preparation simple unless you have experienced workers. Make use of special skills.

12. SERVING
Select a menu appropriate to the serving method. When portions are served in the kitchen, be conscious of food arrangement on the plate. Edible garnishes add appeal. For buffet service choose foods which the guests can take easily and which will not run together on the plate. For picnics, select foods which can be carried easily and which do not spoil quickly. For potluck or covered dish suppers, plan the menu and ask people attending to check with the chairman to see what they should bring. This kind of planning will result in an attractive, well-balanced supper without undesirable duplication.

Check to see that you have the right kind and number of serving dishes and utensils, china, salad bowls, glassware and dessert dishes.

BUYING FOOD FOR THE MEAL
How Much Food Should Be Prepared? To estimate the quantity of food to be purchased, you need these figures.

1. Estimated number to be served. Selling tickets in advance is the best way to estimate numbers accurately. Requesting that reservations be made by a specific date is another accurate method. Past records will help you to estimate the number to be served if advance tickets cannot be sold.

2. Size of servings. This is particularly important in the preparation of meat items which are roasted, and for which there may be no specific number of portions of a certain size. If you wish to serve a different-sized portion, adjust recipe quantities accordingly.

3. Estimate of the number of servings each person will eat of each menu item. Most adult groups will take second helpings of basic menu items. Second cups of coffee, seconds on hot rolls and butter should also be planned for at least two-thirds of most adult groups. Selecting an original portion size which is appropriate to the group being served may eliminate the necessity for offering seconds on the main dish, vegetable, and dessert.

Remember that extra portions must be planned when guests serve themselves -- at buffet, picnic, or family-style meals.

Use Standardized Quantity Recipes. If you want to prepare high quality food in accurate amounts, use standardized quantity recipes.

Family-sized recipes cannot always be successfully multiplied to 50 or 100 portions. Portions of ingredients, mixing and baking times may change as the recipe size increases. If small quantity recipes must be used, prepare several small batches. Because this is time-consuming, it is much better to have a collection of tested, reliable quantity recipes. These recipes will yield a known quantity of food of consistent quality if followed carefully. Servings of food must be portioned accurately. Remember that if the portion size is changed from that stated on the recipe, the recipe must be increased or decreased accordingly. (See the list of Standardized Quantity Recipes Collections at end of this Circular).

Prepare a Market Order. Before any shopping, prepare a detailed market order listing all food and supplies which must be purchased for the meal. The planning committee should supply the kitchen committee with the standardized recipes which are to be used, portion sizes for each menu item, the estimated number to be served and number of portions needed. The kitchen committee can then make out the market order, step by step.

Start with the first item on the menu, list all foods and supplies needed to prepare and serve each item. Remember to include these items too:

- Garnishes for main dishes, sauces, gravies, relishes.
- Butter for bread and rolls.
- Beverages -- coffee, tea, milk, chocolate milk. Lemon for tea.
- Ice for cold drinks or ice water, if needed.
- Cream, sugar, salt, pepper, for table use.
- Extra shortening for pan greasing.
- Detergent for pan washing, dishwashing; hand soap and paper towels. Scouring pads and powder.
### Suggested Menus

The recipes used in the following menus are basic ones. They can be found in almost any quantity recipe file. (See list of references at the end of this circular). The suggested menus are planned at varying cost levels, use many time-saving convenience foods, and may be prepared easily in most community kitchens.

#### BREAKFAST

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Main Dish or Entree</th>
<th>Bread</th>
<th>Beverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grapefruit Halves</td>
<td>Scrambled Eggs with Ham</td>
<td>Streusel-Topped Coffee Cake</td>
<td>Tea, Coffee, Milk (or Cocoa in winter)</td>
</tr>
<tr>
<td>Orange and Apricot Juice</td>
<td>Buttermilk Pancakes with Maple Syrup Pork Sausages</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Fresh Fruit Cup</td>
<td>Creamed Chipped Beef on Hot Corn Bread</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

#### LUNCHEON

<table>
<thead>
<tr>
<th>Main Dish or Entree</th>
<th>Salad</th>
<th>Bread</th>
<th>Dessert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Seafood, Chicken or Turkey Salad Sweet Pickle Sticks</td>
<td>Sliced Citrus Salad on Shredded Lettuce - Honey French Dressing</td>
<td>Caraway Cheese Muffins</td>
<td>Cream Puffs with Chocolate Sauce</td>
</tr>
<tr>
<td>Turkey a la King on Hot Baking Powder Biscuits Vegetable Relishes</td>
<td>Grapefruit in Lime Gelatin Salad</td>
<td>&quot;</td>
<td>Chocolate Fudge Pudding</td>
</tr>
<tr>
<td>Shrimp Creole on Fluffy Rice Broccoli with Lemon Butter</td>
<td>Green Salad with Italian Dressing</td>
<td>Coconut Twist (from Baking Powder Biscuit Dough)</td>
<td>Fresh Fruit Cup with Lime Sherbet</td>
</tr>
<tr>
<td>Chinese Sweet and Pungent Pork on Rice Vegetable Relishes</td>
<td>Fresh Vegetable Relishes</td>
<td>Hard Rolls</td>
<td>Cantaloupe Wedges or Angel Food Cake with Strawberries</td>
</tr>
<tr>
<td>Swedish Meat Balls Whole Green Beans Sliced Harvard Beets</td>
<td>Frozen Fruit Salad</td>
<td>Rye or Whole Wheat Rolls</td>
<td>Apple Dumplings</td>
</tr>
<tr>
<td>Ham and Baked Beans</td>
<td>Cabbage Salad</td>
<td>Steamed Brown Bread</td>
<td>Orange Ambrosia</td>
</tr>
<tr>
<td>Chili</td>
<td>Fresh Fruit and Cheese Tray</td>
<td>Hot Buttered French Bread</td>
<td>Coconut Covered Ice Cream Balls with Hot Caramel Sauce</td>
</tr>
</tbody>
</table>

8
<table>
<thead>
<tr>
<th>Main Dish or Entree</th>
<th>Salad</th>
<th>Bread</th>
<th>Dessert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasagne or Italian Spaghetti with Meat Sauce</td>
<td>Mixed Greens</td>
<td>Hot Garlic Bread</td>
<td>Individual Lemon Tart with Whipped Topping</td>
</tr>
<tr>
<td>Baked Ham with Mustard-Horseradish Sauce</td>
<td>Creamy Cabbage Salad</td>
<td>Hot Rye Rolls</td>
<td>Apple-Cranberry Crisp with Whipped Topping</td>
</tr>
<tr>
<td>Parsleyed New Potatoes Glazed Carrots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baked Chicken</td>
<td>Cranberry-Orange Relish</td>
<td>Hot Rolls</td>
<td>Brownie with Ice Cream and Hot Fudge Sauce</td>
</tr>
<tr>
<td>Potatoes au Gratin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Beans with Slivered Almonds and Brown Butter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roast Turkey with Sage Dressing</td>
<td>Sweet-Sour Bean Salad</td>
<td>Hot Rolls</td>
<td>Hot Mincemeat Pie</td>
</tr>
<tr>
<td>Buttered Squash</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Peas and Tiny Onions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole Cranberry Sauce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baked Stuffed Pork Chops</td>
<td>Carrot-Raisin Salad</td>
<td>Hot Cornbread and Honey Butter</td>
<td>Blueberry Crumb Pudding</td>
</tr>
<tr>
<td>In Sour Cream Gravy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluffy Buttered Rice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buttered Brussel Sprouts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiced Cherries (Garnish)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country-Style Pork Back Ribs and Sauerkraut</td>
<td>Lime Gelatin with Spiced Grapes Topped with Grated Cheese</td>
<td>Hot Rolls</td>
<td>Orange Sherbet and Pecan Cookies</td>
</tr>
<tr>
<td>Baked Potato</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parsleyed Carrots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corned Beef and Cabbage Whole Buttered Potatoes and Carrots</td>
<td>Pickled Beets Sliced Dill Pickles</td>
<td>Baking Powder Biscuits</td>
<td>Cherry Ice Cream Pie</td>
</tr>
<tr>
<td>Hungarian Goulash Potato Dumplings</td>
<td>Apple-Celery-Grape Salad</td>
<td>Kolache</td>
<td>Chocolate Nut Torte</td>
</tr>
<tr>
<td>Sweet-Sour Carrots</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roast Beef (Boneless Rump)</td>
<td>Lettuce Wedge with Cottage Cheese French Dressing</td>
<td>Hot Rolls</td>
<td>Strawberry Shortcake or Rhubarb Pie</td>
</tr>
<tr>
<td>Oven-Browned Potatoes Mixed Vegetables</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coffee, tea or milk may be served.
# Market Order Form

<table>
<thead>
<tr>
<th>Food Items and Description</th>
<th>Supplier or Store</th>
<th>Portion Size</th>
<th>Number of Portions</th>
<th>Amount to Order</th>
<th>Unit Price</th>
<th>Total Price</th>
<th>Amount Over or Short</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat, Poultry, Fish</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy Products and Eggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh Fruits and Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits and Vegetables (Canned, Frozen)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breads and Cereals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staple Groceries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies and Paper Goods</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Shopping will be easier if you group similar items on the market order in Food Group categories:

- Meat, Poultry, Fish
- Dairy Products
- Fresh Fruits and Vegetables
- Canned and Frozen Fruits and Vegetables
- Bread and Cereals
- Staples

Non-food items should be listed separately.

Describe each item completely. State the quality, U.S.D.A. grade, brand, quantity, container size, (also specify the amount of trim desired, and any special cutting you wish done on meat, fish, or poultry items).

After all foods needed for each menu item have been listed, summarize the amounts of each food needed. For example: three recipes may require milk -- 3 cups, 2 gallons and ½ cup. Add these quantities together to arrive at the total amount to be ordered, and convert to the nearest purchase unit. In this example, you would list: Milk, homogenized, 2 gallons plus 1 quart.

When foods are delivered, check the deliveries against the market order to be sure that the foods and amounts are exactly what you ordered. The market order form on page 10 will help you set up the order.

Shop carefully. Consider quality, seasonal supply of foods, storage facilities, convenience, delivery and special services, as well as the price. Remember -- PRICE DOES NOT ALWAYS INDICATE QUALITY. Keep a record, on the market order, of the store where each item was purchased, and make a note of the quality or any special services received. This information can be extremely valuable to future planning committees.

3. Divide the estimated total meal cost by the estimated number of people to be served (including volunteer workers). This will give you the approximate meal cost for one person. (If donated food is served for profit, estimate the cost of the donated food and include it when the cost of the meal is calculated. This food also represents time and money.)

When a meal is to be served at cost, charge only enough to insure that you do not lose money. Figure all costs of preparing and serving the food, including the cost of food served to volunteer workers. Allow a margin of safety to cover changes in the cost of the meal or number of people served. Multiply the estimated cost per person by 1½. For example, if the estimated cost is $1.00, charge $1.25 per person.

When the meal is served to earn money, a fair profit is considered to be up to 50 percent above the costs. For 50 percent profit, estimate all costs per meal (not labor) and multiply by two to arrive at the selling price. Round the selling price to simplify change making: $1.00, $1.25, $1.75, etc. At this mark up rate, guests will receive a good value for their money, and you will receive a substantial profit. (You may want to serve volunteer workers and children at lower rates.)

**EXAMPLE:**

<table>
<thead>
<tr>
<th>Estimated Food Cost</th>
<th>$41.30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decorations and Paper Goods</td>
<td>$3.70</td>
</tr>
<tr>
<td>Rental of Hall</td>
<td>$5.00</td>
</tr>
<tr>
<td><strong>Total Estimated Cost</strong></td>
<td><strong>$50.00</strong></td>
</tr>
</tbody>
</table>

| Estimated Number of People: | 100 |
| Estimated Cost per Person | $50.00 ÷ 100 = $0.50 |
| Selling Price (50% Profit): | $0.50 x 2 = $1.00 |

**WORK SMARTER -- NOT HARDER**

Many small tasks can involve much time when workers are inexperienced in quantity food preparation. Make work simpler by applying these basic principles:

**Use both hands whenever possible.**

- When setting tables, use both hands to place silver rather than holding silver in one hand and placing with the other. Wheel trays of silver on a mobile cart as you move among tables.
- When shaping rolls, cut dough to correct size (use a small scale to check the weight of pieces). Place the pieces of dough on a board or table and roll it into balls with both hands.
Arrange work area so that work proceeds in one direction.

- Salad assembly

1. Stack trays.
2. Place bowls on top tray only.
3. Fill bowls with salad.
4. Place filled trays on carts.
5. Repeat steps 2, 3 and 4.

Use drop delivery whenever possible.

- When chopping ingredients for a recipe, arrange cutting board close to the end of a work table. Place the mixing bowl or a pan on a lower cart or table so that chopped foods can be scraped into the bowl without being handled a second time.

Combine as many jobs as you can into one operation.

- When preparing a meat or fish patty which is rolled in bread crumbs before cooking, try this. Place a layer of crumbs on a large sheet pan or tray. Portion ground meat or fish mixture onto the crumbs, using an ice cream scoop of the correct size. Space portions evenly over the surface of the pan and sprinkle with crumbs once again. Place a second tray on top of the first one and press evenly to flatten the scoops into patties. Lift the top pan, and remove crumbled patties to the baking pan or cooking utensil. In this way, several patties can be portioned, crumbed, and flatten in one operation. (This method can be used to flatten hamburger patties without crumbs, or any other type of meat or fish mixtures before cooking.)

Use dippers, ladles, and other small equipment to good advantage.

- Ice cream dippers can be used to portion muffin batter into baking tins; to portion salads of many types, mashed vegetables, and meat mixtures. Ladles can be used to portion soups, stews, gravies, fruit sauces, toppings. Slotted spoons are excellent for serving vegetables. Weigh ingredients to eliminate tedious measuring. Scales can also be used in the serving line to check on portion sizes.

Avoid transferring food unnecessarily.

- Whenever possible, use the same pan for baking as for serving.
Store small utensils needed for preparation in kitchen work centers.
- Keep mixing equipment in preparation centers, serving utensils in the serving area, dish pans near sinks and dishwashing machine. Label the storage areas so that equipment is returned to its proper place.

Prepare as many items as possible in advance.
- Cream, butter, and cold appetizers can be readied early and refrigerated. Ingredients for salads may be prepared and refrigerated. Add dressing just before serving. (If possible, set up the individual salad plates or bowls on trays and refrigerate.) Add dressing and place on the tables just before guests are seated. Dressing wilts greens if allowed to stand on the salad. Chill plates for cold foods, and heat plates for hot foods to help maintain proper food temperature.

Maintain a comfortable working position.
- Bring your work directly in front of you, so that you can use the fewest, shortest and simplest motions. If possible, arrange the work area so that you can sit or stand alternately to avoid fatigue.

- Pre-set plate garnishes on miniature lettuce cups and refrigerate on trays or in flat pans. Then set garnishes on the plates at serving time.
- Use some canned, frozen and partially prepared food items if your budget permits. Mixes will save preparation time and provide uniform, high quality products, as well as eliminating the many steps in measuring and preparing a recipe from the basic ingredients. (See Wisconsin Extension Circular 506, Prepared Mixes.)
- Plan cooking times for main dishes and vegetables so that they are not all done at once. If cooking times are staggered (items come out of the oven or from the range at intervals during the serving period), you will be certain of serving foods at the peak of quality and can avoid overcooked vegetables and excessive holding times. (See Wisconsin Extension Circular 629, Vegetables in Our Meals.)

Serving the Food Efficiently

Serving Plates from the Kitchen. The kitchen chairman should also set up a diagram for the serving line, if foods are to be served from the kitchen. All portioning spoons, ladles and serving dishes should be put on the serving table before foods are set up for serving. See the figure for how a double serving line could be used for rapid filling of individual plates. A similar setup can be worked out for filling serving dishes to be taken to the dining room for other types of meal service. The serving line will handle food most efficiently if each person is assigned only one task.

Assigning one or two persons to bring fresh supplies of food to the serving line will prevent delays.
The dining room chairman should meet with her committee after the menu and type of service has been planned by the general planning committee. The dining room committee can then plan the physical set up: the arrangement of tables, chairs, waitress stands, coat racks and cashier's table. A scale diagram of the tables will be helpful in table setting.

Plan a work schedule for the dining room committee which includes time for cleaning, arranging furniture, placing decorations, and table setting. Include instructions for cleanup of the dining room following the meal.

**Space Requirements for Table Arrangements**

A place setting requires 24 x 14 inches of table area. For example, a table 8 feet long and 30 to 36 inches will comfortably seat 8 guests (4 on each side). Seating 10 persons (a place on each end) crowds the guests and reduces aisle space.

Line up rectangular tables in rows (See Figure). Allow 5 to 5½ feet between tables (lengthwise). This provides a 2-foot aisle for waitresses after guests are seated. Allow 3½ to 4 feet between table ends (where no guests are seated) and, if possible, between the ends of the tables and the walls in order to provide adequate aisles for guests and waitresses.

If small square tables are used, the arrangement (See figure) provides more space for serving the guests, as well as for seating them.

Waitress service is much easier with tables separate rather than in long lines. (Head tables may be longer.) Main traffic lanes through the dining room should be 5 to 6 feet wide to give waitresses enough space to move to and from the kitchen or serving counter.

Keep a scale drawing of the dining room arrangement for future meals. If you prepare cutouts to scale for tables, these cutouts can be used in planning the arrangements, and will save much physical labor in moving tables.

**The Place Setting**

Use carts to good advantage in setting the tables. Place all linens on the tables, then load the cart with silver, napkins, salt and pepper shakers, and any other items which are to be placed on the tables.

Figure below shows a standard place setting. The type of silver needed will vary according to the meal served, of course.
1. Place mats one inch from the edge of the table.
2. Place the handles of the silver, plate, cup and saucer one inch from the bottom edge of the mat (or the table edge when no place mat is used).
3. When you place silver, touch only the handles, not the eating surfaces.
4. Cutting edge of knife should be toward the plate.
5. Tines of forks and bowls of spoons should be up.
6. Arrange napkin with open sides toward the plate and the edge of the table.
7. Check each place setting to be sure everything is in order.

Suggestions for Waitresses

The dining room chairman should meet with waitresses before the meal to review such things as:

- Plans for serving the guests.
- Suggestions and practice in table setting.
- Correct order for serving foods to the guests.
- Correct handling of plates in serving and clearing of tables.
- Clothing to be worn for waitressing.

Here are some suggestions for serving the guests:

1. Serve all foods (except beverages) from the guest's left. Use the left hand. Carry two plates of food (or a salad plate and a dinner plate); place the left hand plate in front of the guest, then transfer the other plate from the right to the left hand. Set it down before the next guest. Hold plates by the rim and bottom.
2. Only juice served as an appetizer is served from the left and placed in the center of the place setting. All other beverages are served from the right and are placed at the guest's right.
3. Clear first course dishes before serving the main course.
4. Grasp glasses at the bottom to avoid touching the drinking surface.
5. When plates have been served to the guests at one table, offer rolls to each guest individually, serving from the left of the guest with your left hand. Or, a basket of rolls may be placed on the table.
6. Pour coffee from a pitcher or pot which is filled only two-thirds full. Carry a napkin in your left hand to avoid drips when pouring. If filled coffee cups are carried on a tray, stack saucers separately so that coffee is not spilled into them. If coffee is accidentally spilled into the saucer while you are serving the guest, bring a clean saucer to avoid coffee stains on linens and clothing.
7. Refill water glasses during the meal, and pass rolls or hot breads a second time. When offering additional rolls, coffee and butter, avoid the words "more," "second," or "another." Ask, "would you care for a hot roll?"
8. After all the guests at a table have finished eating, clear soiled dishes and unused silver. Remove dishes from only one or two place settings at a time, from the left and with the left hand. Transfer the dinner plate and silver from the left to the right hand and securely anchor the silver with the right thumb. Remove the salad plate and place it on top of the dinner plate. Go to the next guest and remove the salad plate first, with the left hand. Place it on top of the first salad plate. Pick up the second dinner plate and take all plates to your tray. Do not stack dishes in front of the guests.
Styles of Table Service

Banquet Service. Guests are seated at tables. A three-course menu is usually served. If the first course is a cold food, it may be placed on the table before guests are seated. Salads and rolls are also frequently placed before guests are seated. Hot first courses (such as soup) are served after the guest has been seated.

Foods are placed on the guest's plate in the kitchen. This method provides for very accurate portion control. Waitresses then take plates to the dining room and place them in front of the seated guests. Dishes and silver for each course are removed before the next course is served.

For rapid banquet service, assign waitresses to work in teams. Serve guest on both sides of the table at the same time. In this way, guests seated across from each other can begin eating before their food gets cold, without being discourteous.

Service can be most efficient if some waitresses bring trays of filled plates from the kitchen to the service stands for dining room waitresses. This permits the dining room waitresses to continue serving plates and beverages without interruption.

All dishes, silver and napkins are usually removed from the table before the after-dinner program begins. Water glasses may sometimes be refilled and left on the table.

Family Style Service. Family style service is widely used by community groups. In this type of service, food is dished into serving bowls and platters in the kitchen and taken to the dining room by waitresses. Tables are set with napkins, silver and dinner plates. Seated guests pass food and help themselves. For most efficient service, tables should seat no more than eight persons. Longer tables make service more confused and involved.

Family style service is informal and lets the guests eat all they wish. With the guest controlling portions, accurate meal planning is more difficult. There are also problems of keeping foods hot, of getting all foods to the guests at the same time and of planning an attractive arrangement of foods on the plate.

You can combine the portion control features of banquet style service with the informality of family style by placing a variety of salads, rolls, and other cold foods on the tables for guests to serve themselves. Waitresses can bring filled plates of hot foods from the kitchen.

Cafeteria Service. In the most popular form of cafeteria service, guests form a line and pick up filled plates from a kitchen serving window. When trays are available, guest may also pick up their own silver and napkins, water and beverage. When trays aren't used, place silver and water on the table and serve the beverage to the guest after he is seated.

Cafeteria style gives you control over portions. You can also arrange food attractively on the plate. If large numbers of people are to be served, the serving line must be very well organized. Two or more serving lines may be desirable. Plan so that people who have picked up their plates do not have to cross through the waiting line to reach the tables. Waitresses should not have to cross the waiting line to reach the kitchen either.

Buffet Service. Buffet meals provide a compromise between formal and informal service, and portions can be controlled if desired. A buffet menu may be elaborate or simple. If a very large group is to be served, a simple menu will permit faster service. More than one buffet table should be set up for large groups rather than using both sides of the single buffet table. Keep supply routes from the kitchen open, and avoid crossing the waiting line.

Arrangement on the buffet table:

1. Empty plates are placed first on the buffet table. If the guest is to pick up his own silver, it should be placed last.
2. Place cold foods first on the table and hot foods toward the end, so that they remain hot while the guest selects other food.
3. Foods should be portioned or prepared so that guests can serve themselves easily with one hand. Molded gelatin salad rings are difficult to serve and they lose their attractive appearance rapidly. Serve individually molded or cut gelatin salads instead. (Provide a separate bowl for tossed green salad. Salad dressing will run into other foods on the dinner plate.)
4. Assign women to serve the main dish or meat item to the guests. Portions can be controlled and guest will not burn themselves on hot serving pans or dishes.

5. Serve beverages after guests are seated. When guests carry filled coffee cups, they risk burns or spills.

6. A separate dessert buffet may be set up. Or, waitresses can clear first course dishes and serve dessert to guests who remain seated.

SERVING SAFE FOOD

Food handling methods deserve careful attention. Public health officials have frequently traced outbreaks of bacterial food poisoning or food-borne diseases to community meals. All persons serving food to the public or to their own family must understand the causes of food-borne illnesses and know how to avoid the danger.

Bacteria: How They Live and Grow

Bacteria are all around us and are spread by people, animals, insects, and in dust- or moisture-laden air. Because some bacteria are harmful, their presence or growth in food must be inhibited.

Bacteria must have food, moisture and warmth to live and grow. Most bacteria grow and multiply best at temperatures around 90°F, which is half way between 45°F to 140°F. (Boiling point is 212°F; freezing 32°F; your refrigerator is about 40°F.) Some of the bacteria which cause food poisoning outbreaks grow quite well even at temperatures as low as 45°F. Below 45°F their growth is slowed until it ceases. Freezing stops bacterial growth but does not necessarily kill the bacteria. Bacteria are killed faster as the temperature rises above 120°F and as the length of exposure to these temperatures increases.

Most bacteria grow best in food that is neither acid nor alkaline. Acid foods -- tomatoes and most fruits -- discourage bacterial growth. These foods can spoil through the action of yeasts and molds, but these yeasts and molds are not necessarily dangerous.

Because low acid foods provide ideal growing conditions when they are at temperatures between 40°F and 120°F, this group of foods must be handled very carefully. Meat, fish, poultry, eggs, cheese, milk, milk products and food mixtures such as sauces, cream fillings and puddings, gravies, sandwich fillings, ground and minced meats or fish are in the "special care" group. In addition to low acidity, many of the foods listed have been exposed to bacteria in grinding or chopping.

Bacteria multiply rapidly under favorable conditions. In 4 hours one bacterium may multiply into approximately 4,000 or in 24 hours to 281 trillion!

Common Types of Bacterial Food Poisoning. STAPHYLOCOCCUS BACTERIA are probably responsible for most cases of food poisoning. Many people become seriously ill if enough of the toxin (poison) is present in food they eat.

The usual symptoms of Staphylococcus food poisoning are diarrhea and vomiting. Weakness, nausea, headache, and abdominal pains may also be present. An attack usually occurs within 1 to 4 hours after the infected food is eaten. The illness may last from one-half to three days, but is rarely fatal.

Staphylococcus bacteria are common. They are carried on the skin and in the lungs of man, and can get into food from boils, acne infections, infected cuts, coughing and sneezing of persons who handle food.

As the bacteria grow, some strains develop the enterotoxin (inflammation of the stomach and intestine) which causes intestinal disturbance even though the food tastes, smells and looks safe.

It takes only a few hours at room temperature for the bacteria to produce the toxin, and once it is formed, heat has little effect upon it. In fact, the food can be heated enough to kill the bacteria but the toxin will still remain.

Prevention of staphylococcus food poisoning requires careful, clean preparation of food. Any food which can provide a medium for growth should be quickly and carefully refrigerated, or kept hot at temperatures of 150°F or above during serving.

Most outbreaks of staphylococcus food poisoning have been caused by the bacteria carried in carelessly prepared or unheated foods such as custard-filled pastries, cream or custard pies, salads, fish, poultry, meat products, sandwiches, and creamed foods. Ham, especially when pre-cooked and reheated or minced, has been a frequent carrier. Poultry and poultry products, especially poultry dressing and salads, are excellent growing places for this toxin-producing bacteria. Improperly handled hors d'oeuvres and canapes are other potential sources. Gelatin-glazed meat and fish can be particularly dangerous when permitted to stand at room temperature.

SALMONELLA FOOD POISONING (Salmonellosis). Salmonellosis is a bacterial infection, not a poison. The salmonella multiply in the gastrointestinal tract and usually produce symptoms after incubation of 12 to 24 hours. The onset may be
sudden, with chills, headache, cramps and abdominal pains, diarrhea and elevated temperature. Nausea and vomiting may occur.

Many strains of salmonella live as intestinal parasites in domestic animals and pets, poultry, birds and people. Foods may contain the organisms because they have been contaminated in processing. Sometimes the animal from which the foods came was infected.

Careful handling of meat, poultry, egg, and bakery products is essential in preventing salmonella food infections. Heat treatment of contaminated foods can destroy the bacteria. Foods must also be carefully protected from recontamination.

PERFRINGENS FOOD POISONING. This mild, less infectious kind of food poisoning is caused by Clostridium perfringens. This germ grows even in sealed containers. It causes stomach ache and diarrhea in 8 to 24 hours. These bacteria are most usually associated with meat, poultry, or fish which has been cooked, allowed to cool slowly and then reheated.

You can best prevent perfringens food poisoning with sanitary preparation and handling of the foods, and rapid chilling of meat between cooking and reheating.

LESS FREQUENT FOOD POISONING. Many less common illnesses also result from bacterial growth in food: Streptococcus food infections, bacillary dysentery (Shigellosis), and amoebic dysentery. They may be introduced by unsanitary food handling or by persons who are carriers. Prevention depends on strict personal cleanliness, sanitary methods of preparation and handling, and appropriate refrigeration or heating.

BOTULISM has long been the most dreaded type of food poisoning. Clostridium botulinum grows in sealed, non-acid foods, particularly meat and vegetables which have not been heated enough to sterilize them. The toxin (poison) produced causes death unless the correct anti-toxin is administered promptly.

Commercial canning processes are designed to sterilize foods effectively. Most cases of botulism result from eating home-canned, non-acid foods that are improperly processed. A few cases have resulted from cured fish which are not refrigerated nor sterilized, and are packaged in evacuated film (water vapor-proof packaging from which the air has been removed).

Properly sterilize all home-canned foods by canning under approved methods. Non-acid home canned foods should be boiled thoroughly for 15 to 20 minutes immediately before serving.

TRICHINOSIS is caused by a parasitic worm which may be found alive in under-cooked pork and pork products. The disease is characterized by fever, pain, swelling and lameness of muscles. If pork is cooked until every bit of the meat reaches 137°F, the trichinae are killed. BUT TO BE SURE THAT EVERY PORTION OF THE MEAT REACHES THIS TEMPERATURE, AS WELL AS TO DEVELOP FLAVOR, HIGHER INTERNAL TEMPERATURES ARE RECOMMENDED. FRESH PORK LOIN SHOULD BE COOKED UNTIL A MEAT THERMOMETER INSERTED INTO THE CENTER OF THE LARGEST MUSCLE READS 170°F. OTHER FRESH PORK CUTS SHOULD BE COOKED LONGER (to 185°F).

Cured and smoked pork products which are not fully cooked by the processor should be cooked until the internal temperature is 170°F. Smoked and cured pork products labelled "ready-to-eat" have been fully cooked and are completely safe. If served hot, they need only be heated to 130°F or according to the directions on the label. ALWAYS READ THE LABEL ON CURED PORK PRODUCTS.

CONTROL OF FOOD POISONING BACTERIA

Some knowledge of what happens in the life cycle of bacteria is useful in planning measures to protect quality and prevent contamination of food.

A program to prevent food poisoning must emphasize SANITATION MEASURES to prevent bacteria from contaminating the food. REFRIGERATE to prevent bacteria from growing and HEAT to destroy bacteria in food. Cool or heat rapidly to decrease the time foods are at temperatures favorable to bacterial growth.

HOUSEKEEPING IN THE KITCHEN

HOW Use water from a safe municipal supply or from another source known to be safe.
WHY You can catch typhoid fever (as well as other diseases) by drinking contaminated water.
HOW Practice good housekeeping. Wash table tops and other work surfaces before and after using them. Defrost and clean refrigerators at regular intervals.
WHY Frequent cleaning of work surfaces will reduce the danger of food contamination. A refrigerator clean and free of frost is a more efficient cooling appliance than one with a layer of insulating ice on the refrigerator coils.
HOW Windows should be tightly screened. Screen doors should open outward.
WHY Insect control is essential. Keep insects out of the kitchen by screens and careful housekeeping.
HOW Keep your kitchen free of flies, roaches, rats and mice. Do not permit household pets in the community building kitchen or dining room.
WHY Insects and animals, even domesticated animals, carry bacteria and other pathogenic organisms on and in their bodies and will contaminate any surface they touch.
HOW Label pesticides; store them apart from food -- preferably outside the kitchen. Store in original container away from food, and where children, pets and irresponsible people cannot reach them. Read labels of all pesticides each time you use a pesticide. Use only as directed. When spraying in kitchen or serving areas, all utensils and work surface must be covered. Remove food before spraying.
WHY Memory is not always reliable. Other products and containers often resemble pesticides in appearance. It's easy to mistake a pesticide for some harmless product. If not handled and applied properly, many household pesticides can injure humans or household pets.

**Food Supply**

HOW Buy meat which bears the federal inspection stamp, or which is from a locally inspected source.
WHY Inspection insures that animals used for food were healthy when killed, and that slaughter conditions were sanitary.
HOW Use only pasteurized milk, cream, ice cream, butter and cheese.
WHY Bovine tuberculosis, typhoid fever, and brucellosis may be carried through unpasteurized milk and milk products.
HOW Serve milk in the original container or from an approved type of dispenser for bulk milk.
WHY Laws regulating the processing of milk are designed to protect the consumer. The guest should be served safe milk.
HOW When serving peas, string beans, beets, corn and meat, and other low-acid foods, use only commercially canned products.
WHY Inadequately sterilized home-canned foods may contain a tasteless, odorless toxin which may cause the often fatal disease, botulism. The toxin may be destroyed only by prolonged heating at a high temperature.

HOW Serve fish and seafood from approved sources only. A list of approved shippers and dealers may be obtained from state or city health officers.
WHY Fish and shellfish may be contaminated if grown in polluted water. Contamination may also occur if precautions are not taken in shucking.
HOW Provide adequate refrigeration to store perishable foods and to cool foods quickly after cooking if they are to be held.
WHY Proper refrigeration is absolutely necessary for safe handling of raw and cooked foods.

**Food Preparation and Storage**

HOW Keep all foods in the refrigerator at temperatures between 35° and 40°F.
WHY Temperatures below 50°F will slow bacterial growth, but lower temperatures insure greater safety and hasten the cooling of the food.
HOW Thaw frozen meat under refrigeration, under cold running water (if still in water-tight package) or as part of the cooking process. For safety, do not thaw at room temperature.
WHY Although bacterial growth is inhibited, bacteria are not destroyed at freezing temperatures. Thawing meat at room temperature gives bacteria ideal conditions for growth.
HOW Frozen turkeys can be thawed 1.) under refrigeration, 2.) in the water-tight package in cold running water, or 3.) in the original plastic wrapping at room temperature in a paper bag.
WHY The surface of poultry should not be exposed to room temperatures while thawing because bacterial growth can occur. These three recommended methods of thawing keep the surface of the bird at safe temperatures (55°F or below).
HOW Cook pork and pork products until a meat thermometer registers an internal temperature of:
- 185°F for Fresh pork other than loins
- 170°F for cured pork and fresh pork loin
- 130°F for "ready-to-eat" cured pork
WHY Cook pork to these temperatures to be sure that all parts of the meat have passed the temperature needed to destroy trichinae. Flavor development in fresh pork is best when cooked to temperatures between 170°F and 185°F.
HOW Do not stuff turkeys or other poultry for community meals. Bake the dressing in shallow pans. Prepare the dressing just before it is to be baked or refrigerate it until needed.
WHY Dressing may be contaminated in preparation or by contact with the inside of the turkey. Even though carefully washed, the bird may retain bacteria introduced in cleaning. Dressing in stuf-
fed turkeys remains between 40° and 120°F for the 5 or more hours of cooking time from stuffing to serving -- ideal bacterial growth temperatures.

**HOW** Do not serve cream puddings, cream puffs, cream pies, or pies with a custard base (pumpkin and squash included) unless you can place them in the refrigerator as soon as prepared, and keep them there until served.

**WHY** Bacteria grow well in protein foods at room temperatures. Most outbreaks of staphylococcus food poisoning can be traced to improperly handled custard-type desserts, protein sandwich filling, protein salad mixtures, potato salad and turkey dressing.

**HOW** Serve potato, egg and meat (protein) salads and sandwich filling mixtures such as ham, turkey, or egg salad ONLY if you have enough refrigeration to store them below 40°F.

**WHY** Bacteria remain on the surface of food. Finely ground or chopped foods, such as those in protein salad mixtures, have more surface area on which the bacteria may grow. Even under ideal circumstances there is considerable contamination in preparation. These foods are not highly acid. Bacteria grow on them easily.

**HOW** Keep casserole dishes and meat HOT. They must be kept at 150°F from time of preparation until served. Cold foods must be kept at 40°F or lower.

**WHY** Bacteria can multiply rapidly at ordinary room and body temperatures. State health regulations specify 40° and 150°F. for holding potentially hazardous food to decrease the possibility of bacterial growth. The U. S. Public Health Service is now recommending an even higher temperature (165°F) for the holding of hot foods. Casserole dishes for potluck suppers should be kept in a hot oven until served.

**HOW** Store leftovers or cooked foods which are to be chilled in the refrigerator immediately after serving or cooking. Place them in shallow, covered containers to promote quick cooling. Do not allow cooked foods to stand at room temperature until partially cool before refrigeration.

**WHY** Bacteria can grow rapidly during the time foods are between 40° and 120°F and can easily be introduced into cooked foods which are permitted to stand at room temperature. Food will be safer and more flavorful if refrigerated immediately.

**HOW** Food which has been served to guests should not be served again. This includes platters or serving dishes of food served to a table in family-style service.

**WHY** Unless the food is wrapped or otherwise protected from handling by guests or from exposure and contamination, it should not be re-served.

**HOW** Dispose of garbage and other wastes after every meal. Keep waste receptacles clean. Disposable paper and plastic liners are available for waste cans.

**WHY** Garbage and paper or cans with traces of food attract insects and rodents.

**HOW** Properly wash and sanitize all eating and cooking utensils.

**WHY** Dishes, properly cleaned and sanitized, will stay relatively free from bacteria if adequately protected in storage. Use plenty of hot water.

For hand dishwashing:

- 110°–120°F for wash
- 170°F for rinse for 30 seconds, or chemical sanitizer

For machine dishwashing:

- 140°F for wash
- 170°F–190°F for rinse for 10 seconds

**HOW** Store dishes in closed cupboards or at a sufficient height above the floor to prevent floor dust from settling on dishes.

**HOW** Discard cracked or chipped dishes and glasses.

**WHY** Cracked dishes present a safety hazard, are unpleasant to look at, and may harbor bacteria.

**Personal Cleanliness**

**HOW** Wash your hands often with soap and warm water. Wash in a separate sink -- not the one used for food and dishes.

**WHY** Your gastro-intestinal tract harbors bacteria which, though harmless to you, may cause disease in others. These bacteria may be passed on through food contaminated by hands soiled by touching the mouth, lips, or nose, or from the rest room.

**HOW** Regard your hands as contaminated. Keep them out of food as much as you can and away from dish surfaces that come in contact with the diner's lips.

**WHY** Clean hands are easily contaminated when they touch work surfaces, utensils and other objects.

**HOW** Learn to pick up glasses by the base, and cups and silver by the handles.

**HOW** When food must be handled (in mixing large batches of meat loaf, dressing, etc.), take extra precaution to keep hands and forearms as clean as possible. Disposable, single-use plastic gloves are available and can be used for handling foods.
WHY Use gloves only once and with the same care as if a spoon or other utensil were used for mixing or touching food.

HOW When working with food, keep your fingernails short and wear no nail polish. Do not wear jewelry, particularly rings with stones, engraved surfaces, or other rough areas.

WHY Long fingernails are difficult to keep clean and free of bacteria. Too, they may break and get into food. Fingernail polish, even the "non-chip" variety, may chip during food preparation. Jewelry can harbor bacteria, and may present a safety hazard.

HOW Wear a cap or hairnet to cover the hair completely so that none drops into the food and there is no temptation to touch the hair.

WHY Hair, less frequently washed than hands, may carry large numbers of bacteria.

HOW Wear clean, washable clothes.

WHY Clean clothes carry fewer bacteria. Washable clothes are cleaned more frequently than those which must be sent to the dry cleaner, and food stains more easily removed.

HOW Do not smoke while working with food.

WHY Tobacco and tobacco ash may drop into the food and hands come in contact with the mouth when smoking.

HOW Do not handle food while you have an open sore or boil on your hands, forearms, or face, or when you are ill.

WHY Infected sores and boils usually contain large numbers of staphylococcus bacteria which may be transferred to food.

HOW Do not handle food if you have a sore throat or have recently recovered from typhoid fever or diarrhea.

WHY Although you may be symptom-free, you may still carry and pass on to others the bacteria which caused your illness.

Do not allow foods to stand at room temperature. If large amounts of food must be cooled, place the food in fairly small shallow pans (2 inches deep) and set into a sink of cold running water and ice. Stir frequently to speed cooling. Refrigerate quickly all foods made with dairy products, eggs, and cheese and hold them under refrigeration. Sauces, gravies, whipped cream, and similar foods should be disposed of rather than sold if they are left over.

If any leftover foods are to be frozen, package in small moisture-vapor proof containers. Cool hot foods in ice water after packing in watertight containers, then freeze rapidly. Other cooler foods should be packaged and frozen immediately. Label all frozen leftovers clearly, including date of preparation.

Cleaning Up Afterward

Cleanup is simple if the waitress can place soiled dishes directly on a table used for scraping and sorting the dishes. She should not have to enter the kitchen. The sink should be next to the soiled dish table.

No matter how the dishwashing section of your kitchen is organized, planning will make the clean-up job easier. Before the committee begins to work, the chairman should be sure that there is:

- Enough work space and a convenient arrangement of dish tables and equipment. You need about twice as much table space for soiled dishes as for clean ones.

- Plenty of hot water.

- The right equipment and supplies, such as:

Care for Leftovers Properly and Promptly

Though advance planning and careful preparation help to minimize leftovers, some foods may not be completely used. Cool leftover food quickly by placing in shallow containers and refrigerating immediately. If leftovers are to be taken home or sold, provide suitable paper or aluminum foil containers, waxed paper and plastic bags for proper packaging; give instructions for refrigeration, care or reheating this food at home.
A rubber scraper for scraping dishes. Plenty of clean towels if you can't air-dry the dishes.

Synthetic detergent -- soap may leave a film on dishes and utensils.

Scouring pads, a flexible metal scraper, and a short-handled stiff brush for cleaning pots and pans.

For hand dishwashing of dishes, pans and utensils, you will also need dishpans or a three-compartment sink for washing, rinsing, and sanitizing the dishes.

For sanitizing dishes, you will need handled wire immersion baskets and a thermostatically controlled gas or electric heater to raise the water temperature to 170°F in the final rinse compartment of a three-compartment sink.

8. Send towels and dishcloths to a commercial laundry or wash them at home in a washing machine using detergent and clean, hot water. Store towels and cloths in a drawer or cupboard where they will be protected from dust, insects and rodents.

By careful washing and rinsing, you can greatly lower the number of bacteria on dishes. However, to insure the safe level of less than 100 bacteria on each dish surface, dishes should be sanitized by dipping for 30 seconds in water at or above 170°F or for 2 minutes in water containing a chemical sanitizing agent.

Many chemical sanitizing agents are available but there are three general groups: The quaternary ammonium compounds, the iodine compounds, and chlorine compounds. (Write the Wisconsin Board of Health for their annual list of approved products or contact your local public health official for information about sanitizing agents recommended for use in your community.) Since food, soils, and detergents interfere with the action of these compounds and excessive dilution reduces their effectiveness, dishes should be thoroughly washed and rinsed, then racked before they are placed in the sanitizing rinse water. This should be changed frequently enough to insure an adequate concentration. Carefully follow directions given for use of the sanitizing agent to make sure the solution is sufficiently concentrated to kill bacteria.

Hot water, 170°F, will sanitize dishes adequately if the dishes are dipped for 30 seconds. Boiling water poured over dishes is not satisfactory.

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**Washing Dishes by Hand**

The first step is done in the dining room as the waitresses sort and stack the dishes on their trays. This preliminary sorting and stacking of dishes makes it easier for a waitress to carry her tray and lightens the work of the cleanup committee.

When the dishes are brought to the kitchen:

1. Scrape the dishes to remove food particles. If space and sink arrangement permit, rinse the dishes. Stack the dishes, separating the glasses, silver and china. Soak utensils which have held eggs, cheese, meats, or starchy foods in lukewarm water. Soak utensils that have held fats and sugar or sirup in hot water.

2. Wash dishes in clean water as hot as your hands can stand (110°F to 120°F). Use a synthetic detergent even if you have soft water. Wash glassware and silver first, or leave them until last and wash them in fresh water. Change the wash water frequently.

3. Rinse the dishes in clean, hot water.

4. Sanitize dishes and silver for 2 minutes in a chemical sanitizing solution or for 30 seconds in water which is at least 170°F.

5. Allow dishes to air-dry if possible; otherwise, wipe them with clean towels.

6. Store dishes in closed cupboards or covered with clean towels or plastic film.

7. Clean dishpans, sinks and work surfaces.
Use of Dishwashing Machines

Institutional-type, single-tank dishwashing machines are being installed in many new and remodeled church kitchens. Such machines, sturdy and durable, perform both the washing and sanitizing operations.

In order to function well, the machines must be correctly installed, with sufficient continuous counter space for both soiled and clean dishes. It is usually necessary to have a booster water heater to supply the 170° to 190°F water used in the final sanitizing rinse. A small sink or overhead spray unit is frequently installed for pre-rinsing the dishes -- the garbage disposal may be located beneath the overhead spray.

The dishwashing machine will produce clean, sanitary dishes if:

1. Dishes are scraped and pre-rinsed.
2. Dishes are properly placed in racks for the machine so that the water spray can reach all surfaces.
3. The right detergent is used. It must be appropriate for the dishwasher and the local water hardness, and must be used in the right concentration. (Check machine manufacturer's instruction book and see local supplier of commercial dishwashing detergents.)
4. The working parts of the machine are kept clean, and spray openings free from calcium and mineral deposits.
5. 140°F water is available for washing.
6. 170° to 190°F water is available for rinsing.
7. The dishes are washed for the correct period of time -- according to manufacturer's instructions.
8. The dishes are air-dried after washing.

Directions for dishwashing and for operation of the dishwasher should be posted near the machine. The person operating it should be trained and should make sure it is properly operated and cleaned after use.

The investment in a dishwasher will pay off in safe, sparkling dishes, glasses and silver -- if properly operated.

WORK IN A SAFE KITCHEN

Most kitchen accidents happen during the last-minute rush to serve foods. Careful advance planning can help you avoid fatigue, tension and confusion which encourage falls, cuts, burns and spills.

An accident prevention program will make the community kitchen safer for all who work in it. Correct any safety hazards in equipment, arrangement and lighting. First aid supplies and firefighting equipment should be seen easily. The telephone numbers of a doctor or hospital and the fire department should be clearly posted. All work and storage areas should be well lighted.

Check your kitchen and food preparation techniques by using the following list of safety suggestions. Post some of these suggestions in the kitchen and review them with the kitchen workers before they begin.

Prevent Fires

Place approved types of fire extinguishers in obvious convenient kitchen locations.
Make sure everyone knows how to use the equipment. Have it checked regularly.
Keep flammable materials out of the kitchen. Do not store materials which burn easily close to unshielded light bulbs.
Keep the range grids and hood free from grease.
Clean ovens and broiler regularly.
Store matches in a metal container, in a dry place.
Provide a container for burned matches.
When lighted candles are used as table decorations, keep flammable materials away from them.

Safety with Electric and Gas Equipment
Post instructions for operating ranges, mixers, slicers, coffee urns, and dishwashing machines. Read them and learn how to operate all equipment properly.
Avoid overloading electrical circuits.
Use only heavy-duty extension cords on heating appliances such as skillets and electric roasters.
Replace any electrical cords that are worn or frayed. Move cords so that they are not exposed to moisture.
Store electric cords carefully. Protect the thermal prong of control units.
Connect cord plug to appliance first, then to wall outlet.

Safe Cooking Utensils
Discard chipped enamel pans.
Use flat-bottomed cooking utensils on top of the range. Rounded pans tip easily and have poor heating characteristics.

Large kettles with bail handles are unsafe for carrying hot food unless a side grip is used to maintain a balanced hold on the kettle.
Turn handles of cooking utensils away from the edge of the range to avoid knocking pans off.
Avoid Burns

Cook in minimum amounts of water to avoid boiling over. Do not fill pan completely.

Remove covers of pans by tilting away from you to permit the steam to escape.

Avoid overcooking fat in deep-fat fryers or skillets. Place food in fryer basket before dipping it in fat, and use tongs for placing batter-dipped food in fat to avoid splashing.

Allow deep fat fryers to cool somewhat before draining fat.

Use dry, heavy pot holders for handling hot utensils. Place pot holders conveniently near hot pans where helpers will find and use them readily.

Warn other workers when you carry hot pans across the kitchen. If a pan is heavy, use a cart or have someone help you.

Warn guests about hot plates.

Use Knives Correctly

Use a knife for cutting only -- and use the right knife for the job.

Use the proper opener for cans, jars and other containers -- not a knife.

A sharp knife is safer than a dull knife. It will cut easier with less pressure, minimizing the danger of slipping.

Cut down onto a board -- don't cut against your fingers or hand. Fold your fingers under when holding food in chopping.

Store knives in a rack or separate drawer to keep edges sharp and prevent cuts.

Don't put knives in a sink with other utensils -- when you are finished using them, wash, dry and store immediately.

If you drop a knife, don't try to catch it -- get out of the way.

Avoid Falls, Strains, Sprains
Store heavy, bulky items and utensils on lower shelves. Don't try to lift heavy items higher than waist level.

Use carts and other movable equipment to avoid strain from heavy lifting.

Practice proper lifting of heavy objects: crouching with bent knees and straight back. Lift with your legs, not your back.

Use a sturdy step-stool for reaching high shelves.

Wear comfortable, low-heeled shoes in the kitchen to avoid sprains, falls and fatigue.

Use both hands to carry a tray. Avoid overloading trays and carts.

Be sure a tray is placed securely on the counter or stand before loading it.

Distribute items evenly on the tray to keep it from tilting and spilling.

**Clean Kitchens Are Safer**

Clean the kitchen thoroughly and regularly before and after use.

Clearly label all cleaning supplies and store in a separate cupboard away from food storage and preparation areas.

Pesticides should not be stored in the kitchen. Store in the original labeled container away from food, and where children and pets cannot reach them.

Use separate waste containers for (1) glass and metal, (2) paper, and (3) food wastes.

Sweep up broken glass immediately. Use several thicknesses of damp paper towel to pick up splinters. Dispose of glass immediately in proper container.

Wash glasses separately. If glass is broken during dishwashing, drain water before trying to clean the sink.

When using very hot rinse water for sanitizing dishes, rack them or use tongs for removing dishes from rinse water.

Keep the floor clean and dry. Clean up spills immediately. If it isn't possible to clean up a greasy spill completely, cover it with paper to warn others of a slippery spot until it can be removed.

**QUANTITY FOOD PREPARATION REFERENCES**

**Standardized Quantity Recipe Collections**


**Quantity Food Purchasing**


---FOOD BUYING GUIDE FOR 50 SERVINGS. University Extension. Home Economics Programs, University of Wisconsin, Madison, Wisconsin, 53706. (In press).

Sanitation


Food Service Facilities

Bulletin 567. SELECTING, ARRANGING, AND USING FACILITIES FOR SCHOOL LUNCH PROGRAMS. Experiment Station, College of Agricultural and Life Sciences, University of Wisconsin, Madison, Wisconsin, 53706. 1964.


COMMITTEES FOR A SUCCESSFUL COMMUNITY MEAL

General Planning Committee

Members of Committee
- General Chairman of meal
- Head of each work committee

Duties:
- Plan menu, set portions, choose recipes
- Estimate number to be served
- Estimate cost/meal and set price
- Set up work committees
- Make policies for buying, workers, leftovers
- Keep complete records
- Evaluate and summarize

Kitchen Committee
- Prepare market order
- Order and buy food
- Schedule workers and assign jobs
- Prepare and serve food
- Wash and store cooking equipment
- Take care of left-overs
- Clean equipment thoroughly

Dining Room Committee
- Arrange tables and chairs
- Select decorations
- Train and provide waitresses
- Set tables and/or buffet table
- Seat guests
- Clear tables and reset if needed
- Store linens, etc. after meal
- Clean dining area

Clean-up Committee
- Schedule work assignments
- Wash and store dishes
- Plan system for dishwashing
- Clean work area thoroughly

Publicity Committee
- Prepare publicity
- Sell tickets or make reservations
- Collect tickets or act as cashier
- Assist on decorations
- Summarize guest receipts and numbers

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