

AN ABSTRACT OF THE THESIS OF

----- Gladys Emma Hedlund ----- for the M. S. in ----- H. Ad. -----
(Name) (Degree) (Major)

Date Thesis presented May 14, 1942 -----

Title ----- Recommendations for a Standard Set of Kitchen Utensils -----
----- for a Home Management House at Oregon State College. -----

Abstract Approved: [REDACTED]

(Major Professor)

The problem undertaken in this study was that of determining a basic list of necessary kitchen utensils and, also, a supplementary list of desirable kitchen utensils for a home management house at Oregon State College.

The method of procedure used in making the study was as follows:

1. A sample of menus from two home management houses was selected for analysis. These were equivalent to a full school year's menus and included seasonal variations.

2. Cards were then prepared for each food or type of food served. On these cards was listed the processes necessary to prepare each food. Utensils which were necessary and, also, those which were desirable to carry out the processes listed were included. Amounts of food necessary to serve 12 people were used as a basis for calculating sizes of utensils.

3. The group of utensils needed to prepare each meal was tabulated as a unit. Care was taken that the identity of each meal was maintained so that later adjustments in determining substitute utensils could be made.

When it was discovered that frequencies fell in definite patterns, the menus from 150 days of the original 224 days were selected for final analysis.

Frequency summaries were made to show the total number of times (a) each utensil was needed once only, (b) two or more utensils of the same kind or size were needed, (c) a utensil was used, washed, and then re-used, and (4) the number of times it was desirable but not essential to use a utensil.

The data for each group of utensils were analyzed with reference to the following:

1. Points considered when types, sizes, and numbers of utensils were assigned to the food processes.

3. Determination of possible adequate substitutes for all utensils needed.

4. The determination of basic and supplementary lists for each group of utensils.

Utensils placed on the supplementary list were further analyzed from the standpoint of their relative importance. This list was then divided into the supplementary utensils of greatest importance, those of secondary importance, and those of least importance.

As a result of this analysis, the basic list is composed of the kitchen utensils found necessary and the supplementary list is composed of those kitchen utensils found desirable for a Home Management House at Oregon State College.

RECOMMENDATIONS FOR A STANDARD SET OF KITCHEN
UTENSILS FOR A HOME MANAGEMENT HOUSE
AT OREGON STATE COLLEGE

by

GLADYS EMMA HEDLUND

A THESIS

submitted to the

OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

May 1942

APPROVED:

[REDACTED]

Professor of Child Development

In Charge of Major

[REDACTED]

Head of Household Administration Department

[REDACTED]

Chairman of School Graduate Committee

[REDACTED]

Chairman of State College Graduate Council

ACKNOWLEDGEMENTS

The writer wishes to express her appreciation to Dr. Vera Brandon, Professor of Child Development, for her kindly assistance and encouragement during the period of this study: also, to Miss Maud Wilson, Professor in Charge of Home Economics Research, and to Miss Agnes Kolshorn, Associate Professor of Foods and Nutrition, for their constructive criticism and suggestions in the handling of this material.

The writer wishes also to express her appreciation to Mrs. Eleanor Spike Oehler, Director of Home Management Houses, for suggesting the need for the problem which the writer has undertaken.

TABLE OF CONTENTS

| <u>Chapter</u> | <u>Page</u> |
|----------------|--|
| I | Introduction to the Problem, Description, and Objectives of the Home Management Houses 1 |
| | Introduction. 1 |
| | Home Management Houses 1 |
| | Objectives of the Home Management Houses 5 |
| | Necessary Objectives 5 |
| | Desirable Objectives 5 |
| II | Review of Literature 7 |
| III | Purpose and Limitations of the Study 10 |
| IV | Method of Procedure, and Analysis of Data 12 |
| | Part I. General Consideration 12 |
| | Assumed Equipment 12 |
| | General Procedure 14 |
| | Method of Selecting the Menus used in the Analysis 14 |
| | Factors in Menu Making 15 |
| | Recipes Used 16 |
| | General Factors Which Were Considered in Specifying the Utensils Needed in the Preparation of Foods 16 |
| | General Plan for the Determination of the Utensils Needed in the Preparation of Foods 17 |
| | Method of Tabulation 19 |
| | Part II. Analysis of Specific Data 20 |
| | General Factors Considered When Determining Basic and Supplementary Lists of Utensils 20 |
| | Analysis of Specific Data Relative to the Utensils Listed in the Groups 22 |
| | Sauce Pans, Pots, Kettles, Pans, and Double Boilers. 22 |

Table of Contents (cont.)

| <u>Chapter</u> | | <u>Page</u> |
|----------------|--|-------------|
| III (cont.) | Skillets and Griddles | 31 |
| | Baking Dishes. | 34 |
| | Baking Pans | 37 |
| | Other Cookers, Coffee Makers and Tea Pots | 43 |
| | Food Preparation Bowls. | 48 |
| | Measuring Cups, Spoons, and Other Measuring Devices | 52 |
| | Cutting Knives | 55 |
| | Case Knives, Forks, Spoons, and Spatulas | 61 |
| | Pastry Utensils | 65 |
| | Beaters. | 68 |
| | Molds | 71 |
| | Miscellaneous Utensils. | 73 |

V Summary and Recommendations

Recommendations for Further Studies

Reference List

APPENDIX

Part I

Exhibit A. Frequency of Serving Various
Types of Foods.

Part II

Exhibit A. Cards Showing Processes Involved
and Necessary and Desirable Utensils
for the Preparation of the Meals.

Exhibit B. Some Typical Processes Which Were
Assigned to the Various Utensils Listed.

T A B L E S

| Table | Page |
|---|------|
| I Frequency of Use List for Sauce Pans, Pots, Kettles, Pans, and Double Boilers Needed in the Preparation of 450 Meals Served in the Home Management Houses at Oregon State College | 25 |
| II Frequency of Use List for Skillets and Griddles | 33 |
| III Frequency of Use List for Baking Dishes | 36 |
| IV Frequency of Use List for the Various Baking Pans | 39 |
| V Frequency of Use List for Cookers, Coffee Makers, and Tea Pots | 44 |
| VI Frequency of Use List for Mixing Bowls Used in the Preparation of 450 Meals in the Home Management Houses. | 50 |
| VII Frequency of Use List for Measuring Cups, Spoons, and Other Measuring Devices Needed in the Preparation of Meals | 53 |
| VIII Frequency with which Cutting Knives Were Used in the Preparation of Meals | 57 |
| IX Frequency with which Case Knives, Forks, Spoons, and Spatulas Were Used in the Preparation of 450 Meals Served in the Home Management Houses | 62 |
| X Frequency of Use List for Pastry Utensils. | 66 |
| XI Frequency of Use for the Various Types of Beaters Needed in the Preparation of 450 Meals Served in the Home Management Houses | 69 |
| XII Frequency of Use for the Various Kinds of Molds Used in the Preparation of Food | 72 |
| XIII Frequency of Use for Miscellaneous Utensils | 74 |

RECOMMENDATIONS FOR A STANDARD SET OF KITCHEN
UTENSILS FOR A HOME MANAGEMENT HOUSE
AT OREGON STATE COLLEGE

CHAPTER I

INTRODUCTION TO THE PROBLEM, DESCRIPTION,
AND OBJECTIVES OF THE HOME MANAGEMENT HOUSES

Introduction

Since the writer has served as supervisor of a home management house at Oregon State College, her attention has been called to the need for adequate kitchen utensils for meal preparation. As a result of this need and because of her interest, she has undertaken to determine in this study the basic need for type, number, and size of utensils needed for the preparation of meals in a home management house at Oregon State College. As an outcome of this analysis, the writer has attempted to set forth specific recommendations for a basic list and also for a supplementary list of desirable kitchen equipment for the home management house.

Home Management Houses¹

The general purposes and the organization of the home management houses are summarized in the following paragraphs.

1. For a more complete description of the houses, the reader is referred to Cameron. (pp. 3-8)

Home Management House is a five-credit course, required of all seniors in Home Economics at Oregon State College. Three houses, Dolan, Withycombe, and Kent, are maintained to accommodate students enrolled in this course. Each house, which was a former residence, is different in size, location, and arrangement.

Usually six students, a supervisor, and frequently a student supervisor reside in each of these houses for a period of approximately six weeks. A baby is cared for in each house.

The majority of the girls carry an average of 16 term hours, or a range of from 13 to 18 term hours, while they reside in the house. Since the girls carry a fairly heavy schedule, it is important that the house be equipped and arranged so as to allow the students to do the work as efficiently as possible. Good management of time, money, and energy is stressed. An attempt is made to maintain high standards in every phase of the several homemaking activities.

The homemaking activities in the home management house are divided into the following: (1, pp. 5-7)

"Housekeeper: Cares for the entire second floor, keeps cleaning closets and equipment on that floor in proper condition, helps clear table, stacks dishes, dries and puts away glasses and silverware.

- "Assistant Cook: Assists with last-minute meal preparation, sets table, waits on table, answers door bell and telephone during meals, keeps dining room shelves and linen storage in order, cleans and keeps silver in order, washes dishes, cares for sink, table, and refrigerator.
- "Cook: Plans meals and orders food, checks orders, stores food, and prepares meals. Cares for ranges, shelves, floor, windows, and general condition of the kitchen. Keeps kitchen neat and in order while preparing meals, stores left-over food, keeps all bills, makes out food accounts, and summarizes food costs at close of week.
- "Host: Cares for the entire first floor with the exception of kitchen and service area, keeps all equipment used in this area in good condition, directs extra help, invites guests, and cares for general welfare of the family.
- "Child Director: Assumes all responsibility for care of baby, checks daily with supervisor and advises immediately of any irregularity in child's condition. Makes menus for baby and prepares daily food which is stored in special shelf in refrigerator. Keeps child's dish-closet and food in order, sterilizes dishes, and cares for nursery. Bathes and dresses and feeds child, and puts it to bed. Permits only those free from colds and infections to enter nursery, and then not over two at a time. Schedules other girls to care for the baby when she is away from the house. Keeps all records for baby and turns in records at end of week."
- "Laundress: Washes, irons, mends, stores, and cares for all baby clothing. Launders bath towels and luncheon sets. Collects, sends out, and checks in all other laundry. Keeps all linen closets in order. With aid of housekeeper changes all beds once a week. Removes soiled linen and supplies fresh linen for entire house. Cares for laundry unit."

Guest meals are served weekly. These may be breakfasts, luncheons, or dinners. However, guest dinners or luncheons are most frequently served. The Cook and Assistant Cook receive help from other students residing in the house when guest meals are served.

The home management house differs from the average home in many respects. Some of these differences are listed below:

1. The "family" consists of from six to eight adults (all women) and one small child, usually under one year of age.
2. Guest meals are served every week, which is probably more often than the average family entertains.
3. All girls are attending regular college classes in addition to carrying on the activities of the home management house.
4. The girls reside in the house for a short period of time and, therefore, have a short time for assuming the responsibility for each duty.
5. Each girl cares for one major responsibility at a time, rather than assuming entire responsibility for the house and its related activities.
6. The inexperience of the girls in comparison to that of the average homemaker with a family of com-

parable size is an important factor. (4, p. 15)

Objectives of the Home Management Houses:

An evaluation of the home management houses as set forth by Sinnard (5, pp. 35-55) include the following:

Necessary objectives:

1. To provide a close approach to home situation in which girls may apply the technical information and training that they have received in other courses.
2. To furnish a situation where students get a concept of what constitutes a harmonious and agreeable home.
3. To train the students in good house-keeping.
4. To train the students in good household management.
5. To train the students in hospitality practices.
6. To provide a place where the students of Child Development may observe the baby.
7. To demonstrate good ideas in house planning and furnishing.
8. To provide a place for hospitality practices.
9. To demonstrate cooperators' recommendations for representing a definite income level in the Home Management House.

Desirable Objectives:

1. To provide a place where girls receive guidance in personal problems, including marriage and the home.

2. To demonstrate the use of the very best household equipment.
3. To provide publicity for the School of Home Economics.
4. To give students opportunity to further their own friendships.

CHAPTER II

REVIEW OF LITERATURE

Research pertaining to Home Management Houses and selected studies related to utensils was read for the purpose of finding data pertinent to this study. Although several studies have been made on various phases of the home management house, none of them included studies on home management house kitchen utensils in particular.

Cameron (1, pp. 3-8) gives a fairly complete history of the home management houses at Oregon State College. Her description of ways in which the homemaking activities of the home management houses are divided into duties is reviewed. Although a list of kitchen equipment was given (1, p. 39 and p. 41), it was incomplete and was only a typical set of equipment found in the houses at the time of her study and was included to show the types and approximate numbers of utensils stored in a particular cupboard.

Carter's (2, p. 25) thesis on a study of practices of married graduates of the school of Home Economics at Oregon State College shows that a great majority of these graduates use electricity or gas for cooking fuel. It will be interesting to note that this conforms to the present practice with reference to the kind of fuel used

in the Home Management Houses at Oregon State College.

Dougherty (3) now has a study in progress which will set forth standards for kitchen utensils in foods laboratories of secondary schools. At the time this was written, Dougherty's results were not available.

Horning (4) found in her study that electricity was the most common type of fuel used for cooking in the homes of students living in the home management houses. She also found that the girls had "occasionally" prepared or assisted in the preparation of family meals. These same practices applied in the purchase of food for the family. (4, pp. 14-15)

Sinnard (5, pp. 35-55), in her study reported the composite judgments of graduates, faculty members, and graduate students in Home Economics with reference to the objectives of the home management houses. Two of these objectives for the Home Management Houses have a direct bearing on this study. Of those cooperating in her study, 15 per cent felt it "necessary" and 37 per cent felt it "desirable" to demonstrate the use of the very best household equipment. An additional 17 per cent felt that it "should be included unless it added to the cost of the house."

The cooperators recommended the following concerning hospitality practices for guest meals served in

the home management house:

1. Total of 12 people seated at one large table.
2. Total of 20 people served at small tables.
3. Total of 23 people served at tray luncheons.

Wilson and McCullough (6) made a study of utensils needed for the farm kitchen. "The goal was to determine the minimum number, quality, and size of utensils needed to enable a farm woman to prepare food on a year-round basis with reasonable convenience and efficiency." (6, p. 2) In preparing this list, they included only the equipment needed for the preparation, serving, and clearing away of meals served in the western Oregon farm kitchen. Experimental work was carried out to determine the most suitable sizes of utensils for various processes. Certain standards were set up by their study. The writer has referred to and made use of these standards throughout her study.

CHAPTER III

PURPOSE AND LIMITATIONS OF THE STUDY

The purpose of this study is to analyze needs with reference to kitchen utensils used in meal preparation at the home management houses at Oregon State College, and to set forth recommendations concerning types of utensils, size, and number of each. Shape has been considered only where that has a bearing on the type of food cooked in the utensil. Only those utensils needed in the preparation of meals for twelve persons or less were included.

Suggestions for the utensils needed for preparing the baby's food were not included. Recommendations for these have been made by Cameron. (1, p. 38)

Utensils needed when food is prepared by the girls for their own enjoyment, such as making candy, have not received special consideration.

The problem may, therefore, be stated as follows:

1. The determination of needs with reference to kitchen utensils in the home management houses at Oregon State College.
2. The preparation of specific recommendations for kitchen utensils and the classification of these utensils according to:

- a. utensils needed in preparing food for twelve adults,
- b. additional utensils which are desirable.

It is hoped that the recommended set of utensils will prove valuable as a guide for supplementing utensils already found in the kitchens of the home management houses at Oregon State College, and also, that in the event another house is furnished, this list or set of utensils will be useful as a guide.

CHAPTER IV

METHOD OF PROCEDURE AND ANALYSIS OF DATA

Part I. General ConsiderationsAssumed Equipment

In making this study, the writer assumed that certain pieces of basic equipment were to be found in the kitchens of the home management houses. This equipment which is described below was, therefore, not checked for frequency of use, but was considered available to supplement the utensils analyzed in this study:

1. Electric or gas range with oven and broiler. According to the Horning thesis (p. 14), electricity was the most common type of fuel used for cooking in the homes of the girls living in the home management houses. Carter's study (p. 25) agrees with the Horning findings with reference to the fuel used. Carter's subjects included married Home Economics graduates and Horning's included parental homes of girls who were undergraduates.

These two studies show that the majority of Home Economics students come from homes which use electricity as cooking fuel and probably will go into homes that use this same type of fuel.

2. Electric or gas mechanical refrigerator with freezing trays, ice cube trays, and a hydrator.

3. Sink. Either a divided sink or a sink of suitable size for two pans, one for washing and one for rinsing dishes, was assumed. Either the divided sink or the dish pan would be available for the preparation of some fruits and vegetables.

4. Two dish pans selected to fit the size of the sink.

5. A small garbage can for the disposal of waste from each meal. Large garbage cans are provided and cared for by the college garbage service. The writer suggests that the garbage can be of sufficient size to care for a regular 3-gallon pail container. The buckets could be easily replaced and are adequate for caring for the garbage from a meal which includes such bulk as corn husks and cobs, watermelon rinds, etc.

6. Waste paper basket. Since oil furnaces and electric or gas ranges are used, it is necessary to burn all paper in the fire place. Containers must, therefore, be provided to care for waste paper.

7. Kitchen scales. Students in the home management house kept accounts of the amount of money spent during each week. It was necessary, therefore, that they weigh certain items, such as potatoes and flour, that

were purchased from large amounts on hand.

General Procedure

Method of Selecting the Menus Used in the Analysis:

To determine the type, number, and size of kitchen utensils needed in the Home Management Houses at Oregon State College, a sample of menus actually prepared by students was selected for analysis. Menus for the equivalent of an entire year were selected from two houses.

A sample from each house for the complete school years of 1940 and 1941 was used. To make sure that every season of the year and also each house would be equally represented, menus were selected from the houses as follows:

- 1st week of the month, 1940 -- Withycombe House
- 2nd week of the month, 1941 -- Withycombe House
- 3rd week of the month, 1940 -- Dolan House
- 4th week of the month, 1941 -- Dolan House

During these periods of time, eight different supervisors were in charge of the houses. Attention should also be called to the fact that each house has a different kitchen and a different set of utensils. The inclusion of these variations should, therefore, insure a fairly representative sample of menus.

Factors in Menu Making

As was shown by the description of home management house duties, each student plans her own meals for the period in which she is cook.

To make sure that students in the home management houses become familiar with certain processes in food preparation, each student cook is required to prepare the following: a roast, hot bread, frozen dessert, pie, cake, coffee, tea, and hot chocolate.

All students have completed courses in either Nutrition or Dietetics before entering the home management house. They are expected to follow good nutritional standards when planning menus. The supervisor checks the menus from the standpoint of good nutrition, interest, attractiveness, and practicability. Students are urged to use the oven for more than one process at a time and to plan their schedule so that there are few last-minute details. Planning for efficient use of stove burners is also stressed.

Students are allowed a moderate amount of money to spend on food (an average of 40¢ per person per day at the time this study was made) and each student was expected to plan and prepare low cost meals for one day

of each week. An allotment of twenty-five cents per person per day was made for low cost menus.

Recipes Used

Recipes used as a basis for determining the procedure in food preparation were selected from Child and Niles (7), "Food Preparation Recipes", when available. Otherwise, they were from "America's Cook Book" compiled by the Home Institute of the New York Herald Tribune. These sources were selected because they are used by the Food Preparation classes at Oregon State College and, also, they are generally used by the students residing in the home management houses.

General Factors Which Were Considered in Specifying the Utensils Needed in the Preparation of Foods:

Factors which influenced the utensils needed are listed below. They were kept in mind as utensil needs were determined.

1. Students attend regular college classes while residing in the home management houses and, therefore, often work on a limited time schedule.
2. Each meal is prepared as an individual unit.
3. More than one student may prepare the meals.
4. The home management house is a college laboratory. High standards of household management are

maintained and it is desirable that students learn to use and care for utensils needed for the various processes of food preparation.

General Plan for the Determination of Utensils Needed in the Preparation of Foods:

As a means of determining the utensils needed for the preparation of meals included in the selected sample of menus, the writer, wherever possible, grouped foods according to method of preparation. She then prepared a card for each food or group of foods which was served.

On these cards (see Appendix II) the writer listed all processes which were necessary to prepare food. Utensils for carrying out these processes were then grouped into three classifications, as follows:

1. Utensils "necessary" to perform the processes listed.
2. Utensils "desirable but not necessary" that might be used in place of the utensils listed as "necessary". In many cases these were more expensive utensils.
3. Utensils "desirable but not necessary" that would be used in addition to the utensils listed as "necessary."

A staff member of the Foods and Nutrition Department of the Oregon State College (11) checked the cards for accuracy of process analysis and the utensils listed.

An attempt was made to determine variations in

the utensils needed for preparing meals for the home management house "family" as contrasted with guest meals, but after carefully analyzing the data which were gathered, it was found that the same types of utensils were needed for both "family" and guest meals. Therefore, it was decided that utensils sufficiently large to care for twelve people at guest meals were also satisfactory for all other meals.¹ This decision was also made because it did not seem desirable to set a standard before girls which required special utensils to care for guests. Also, it did not seem advisable to inconvenience the girls during preparation of guest meals by not having sufficiently large utensils.

In addition to the guest meals regularly served, once or twice a year special meals are served either on trays or to groups seated at small tables. According to the Sinnard study (p. 52), the recommendations for numbers to be served at the home management house are as follows:

| | | |
|------------------------|----|-----------|
| Seated at small tables | -- | 20 people |
| Tray luncheon | -- | 23 people |

1. Those cooperating on the Sinnard study (p. 52), recommended that 12 be the maximum number seated at a large table for a guest meal.

In this study no attempt has been made to recommend utensils needed for these meals because large equipment may be borrowed either from the other home management houses or from the College stockrooms.

Method of Tabulation

The group of utensils needed to prepare each meal was tabulated as a unit. Care was taken that the identity of each meal was maintained so that later adjustments based on the food actually prepared could be made if necessary.¹ In making these tabulations, it was assumed that certain utensils which were needed for more than one preparation in a given meal would be used, washed, and re-used.

It was found by scanning the tabulations for successive weeks, that the various frequencies fell in definite patterns. Therefore, menus for 150 days were selected from the original 224 for use in the final analysis. These menus were equally distributed between the two houses and also included an approximately equal sample from those of the fall, winter, spring, and summer school sessions.

1. Frequencies for various ways of preparing food are summarized in Appendix I.

Part II. Analysis of Specific Data

General Factors Considered when Determining Basic and Supplementary Lists of Utensils

When the foods prepared or the processes involved¹ in the preparation of the foods (included in the 450 sample menus) were assigned to the various utensils, a frequency of use list was made for each group of utensils. These lists appear as tables in the following analyses.

Frequency of use was one of the fundamental considerations when recommending that utensils be placed on the basic or on the supplementary list. The basic list includes the utensils which were necessary in the preparation of foods after all possibilities for adequate substitutes were eliminated. All of the utensils which were not placed on the basic list were placed on a supplementary list.

When the frequency of use was not great and another size or a different utensil would serve the purpose adequately and was available for use, a substitute utensil was chosen and the one originally listed was

1. For typical processes assigned to various types of utensils see Appendix II.

placed on the supplementary list.

Inexpensive utensils or duplicate utensils that were time savers or were needed frequently were included on the basic list although it would have been possible to prepare the food without them.

After the utensils were evaluated to determine their placement on the basic or supplementary list, those included on the supplementary list were further analyzed from the standpoint of their relative importance. This list was then divided into three groups:

Group I includes those most needed to supplement the utensils placed on the basic list. If utensils in addition to those on the basic list are purchased, the purchase of those is recommended.

Group II includes the utensils that were considered second in importance. It is recommended that they be purchased only after those included in Group I have been added to the equipment.

Group III includes those of least importance.

Analysis of Specific Data Relative to the
Utensils Listed in the Groups

In the following pages, each classification or group of utensils will be considered from the standpoint of the following:

1. Definition of terms.
2. Points considered when the foods prepared were assigned to the utensils listed.
3. Frequency of use for utensils.
4. Determination of possible satisfactory substitutes for the utensils listed.
5. Recommendations for basic and supplementary lists of kitchen utensils. The supplementary list of utensils was classified into three groups, according to the following:
 - a. Those which should be purchased as soon as possible after the basic list is completed.
 - b. Those which should be purchased soon if possible, and
 - c. Those that are less important

Sauce Pans, Pots, Kettles, Pans, and Double Boilers

Definition of terms: As used in this study, the following distinctions have been made:

Sauce Pan -- a sauce pan has a single handle, whereas

Pots -- Pots have two handles, one on either side. (10, p.168)

Kettle -- Kettle is the term used to describe the type of cooking utensil which has a bail handle.

Pans -- Pans have no handles and are rather shallow.

Double boilers -- Double boiler is a standard term.

Points considered when the foods prepared were assigned to the various size of sauce pans, pots, kettles, pans, and double boilers

1. The total amount in bulk or space needed for each food when placed in a cooking utensil.

2. The extent to which the food "creeps up" when cooking. Wilson and McCullough's standard for margins was used. This is as follows: "For milk and other liquids which 'creep up' when boiling, a minimum of 100 per cent margin over contents is allowed. For liquids which do not 'creep up', a minimum of 50 per cent margin" is allowed. (6, p. 87)

3. The use of the minimum, adequate sizes of sauce pans, etc., when preparing such foods as sauces that cling to the sides of pans, thus preventing an unnecessary waste of food which could result from spreading sauce over a large surface.

4. The kind of handle most convenient for managing the type or consistency of food cooked in a utensil.

The sauce pan type of handle was selected when:

Foods required stirring during the cooking processes, especially thick consistencies.

Hot liquids needed to be drained from food -- such as in cooking potatoes.

The kettle was selected when:

Deep fat frying was done -- the kettle type of handle is not so likely to be hit accidentally, thus reducing possibilities for accidents.

When the weight of hot food is great, the weight is more easily carried.

Frequency of use

The utensils were used as is shown in the table on the following page.

Determination of satisfactory substitute utensils

Although the frequency tables were based on the most suitable utensil for each process (Table I), the raw data were carefully analyzed to determine possibilities for finding suitable substitute utensils which were available for use and, thereby, reduce the necessary list to a minimum. Through this analysis it was found that several utensils could be dropped from the necessary or basic list and be transferred to the "desirable but not necessary", or supplementary, list because satisfactory substitutes were available.

The following reassignments for use of utensils were made. Although the $1\frac{1}{2}$ -pint pan was used a total of 48 times, an examination of the raw data showed that a 1-quart sauce pan was available for use during all of the meals in which the $1\frac{1}{2}$ -pint pan was assigned. It was also found that the type of food to be cooked could be cared for satisfactorily in the 1-quart size sauce pan. The frequencies (45 and 3, see Table I) for the $1\frac{1}{2}$ -pint pan were then added to frequencies for the 1-quart sauce pan (57 and 2). These frequencies were then changed to 102 for those used once only and 5 for those washed and re-used, making a total of 107 frequencies for the 1-quart sauce pan.

On the basis of a similar process in analysis, the following revisions were made in the foods assigned to the various utensils:

The 3-quart flat and 3-quart deep sauce pans were both included in the basic list because there was no adequate substitute available for either. The processes assigned to the 2-quart sauce pan were transferred to the available 3-quart pan, and the 2-quart pan was placed on the supplementary list of utensils.

The flat 3-quart sauce pan (or the 4-quart sauce pan or the 4-quart pot was available when a second 3-quart deep sace pan was listed (Table I). The second 3-quart deep sauce pan was then transferred to the supplementary list.

The 4-quart sauce pan was needed as there was no adequate substitute available. Therefore, it was placed on the basic list.

The four-quart pot was also placed on the basic list because no adequate substitute was available. This pot was also found useful as a substitute when additional pans were eliminated from the basic list.

The writer also found by conference with students in a home management house that this was a very popular size and type of utensil.

The eight-quart kettle was placed on the basic list as it could be substituted for the six-quart kettle, and also because the six-quart kettle would be too small to care for the processes assigned to the eight-quart kettle adequately.

The use of the asparagus cooker is very seasonal. It was found in examining the raw data that an adequate substitute was available at all times. The writer, therefore, recommended that this be placed on the supplementary list of utensils, to be purchased only when the other supplementary utensils are very nearly complete.

Although the deep-fat frying kettle appeared on the list as being used only four times, it was possible that the use may have been limited because a special kettle was not provided for the purpose of deep-fat frying. However, from the frequency of use listed and because that was not an essential type of cookery, this type of kettle was placed on the supplementary list. A 3-quart kettle was recommended as being a desirable size.

The one-half pint pan was put on the basic list. The writer recommends that it be sufficiently wide to prevent tipping easily. It was used most often for melting fat.

As there was no adequate substitute available, the three-quart pan was placed on the basic list.

The processes originally assigned to the one-pint pan could be cared for by the $\frac{1}{2}$ -pint pan, alone or in combination with a small bowl, or by the one-quart sauce pan. A small frying pan could be substituted in some cases. Therefore, this pan was placed on the supplementary list of "desirable but not necessary" equipment.

The infrequent use of a one-quart double boiler did not warrant the inclusion of it on a basic list. A small pan or the double boiler provided for the preparation of food for the baby could be substituted.

By scanning the raw data, it was found that a larger double boiler or a sauce pan of comparable size was available and a suitable choice when the $1\frac{1}{2}$ -quart double boiler was listed as being used. Therefore, it was placed on the supplementary list.

It was recommended by the writer that the 2-quart double boiler be placed on the supplementary list to be purchased if possible. Although an adequate substitute was available, it seemed desirable to have two double boilers of the smaller sizes, if possible. She recommends that this be a deep double boiler especially

suited to beating food with a rotary beater or the beater from the electric mixer. This would be adapted to the cooking of such foods as seven-minute icing.

It was found that only one of the smaller double boilers was necessary. The writer therefore recommended that the larger of these (the $2\frac{1}{2}$ -quart) be chosen because it could be used partially full and a smaller one would be more difficult to use when overcrowded.

The 4-quart double boiler was included in order to provide an adequate utensil for hot chocolate, soup, etc., when large numbers of people were served or when second helpings were served.

Since lids are important to the cooking of many foods, it is assumed throughout this study that each sauce pan, pot, and kettle will have a lid that fits well.

Recommendations for basic and supplementary lists

As a result of the preceding analysis the writer has set forth the following recommendations for sauce pans, pots, kettles, pans, and double boilers.

Basic List

Sauce pans

1 quart
 3 quart -- flat
 3 quart -- deep
 4 quart

Pots

4 quart

Kettles

8 quart

Pans

$\frac{1}{2}$ -pint
 3 quart

Double Boilers

$2\frac{1}{2}$ quart
 4 quart

Supplementary List

Sauce pans

* 2 quart

Kettles

* 6 quart
 Asparagus cooker
 3 quart deep-fat
 frying

Pans

1 pint
 * $1\frac{1}{2}$ pint

Double Boilers

1 quart
 * $1\frac{1}{2}$ quart
 ** 2 quart

**Utensils of greatest importance
 *Utensils of secondary importance

Skillets and GriddlesDefinition of terms:

Skillet: A skillet is considered in this study to be a pan suitable for frying.

Griddle: A griddle is a shallow pan for baking or frying thin cakes.

Points considered when types, sizes, and numbers of skillets and griddles were assigned to the foods prepared:

1. The surface area needed to cook the sizes of chops or steaks ordinarily served to twelve people.
2. The bulk and characteristics of food (such as eggs, potatoes, etc.) to be cooked in the utensils.
3. The ease of handling foods to be cooked.
4. The need for cooking all food at once and the possibility for cooking part of it at a time.
5. Types of food best prepared in a skillet and those best prepared on a griddle.

Frequency of use

Frequencies of use for the skillets and griddles listed are given in Table II.

Table II
Frequency of Use List for Skillets and Griddle

Key: a. used only once c. desirable but not necessary
 b. washed and re-used to have an additional utensil

| Type and size | Frequency of Use | | | Total |
|---------------|------------------|---|---|-------|
| | a | b | c | |
| Skillets | | | | |
| 9" | 27 | | | 27 |
| 10" | 64 | 1 | | 65 |
| 11" | 63 | 2 | | 65 |
| 5"-7" | 5 | | | 5 |
| Griddle | | | | |
| 12" | 12 | | 8 | 20 |

Determination of possible substitutes

Skillets: Although three skillets of comparable size were listed as needed in a few cases, two skillets only were placed on the basic list because the roaster was available for substitution whenever the third skillet was needed. The two larger sized skillets (10" and 11") were chosen as they appeared with the greatest frequency in combination and also singly. There were 28 times that two or three skillets were needed for preparing the same meal. A smaller (9") skillet was placed on the desirable list. A choice here is possible because two skillets of the same size would care for the needs, and if they were selected so they would fit together as a "Dutch Oven" the use would be increased. If this is

done, the writer suggests that two 10-inch skillets be chosen. When veal and pork are cooked, lids are used and should be included as important in the list of utensils.

A small skillet (5" to 7") was placed on the supplementary list because of the infrequency of use.

Griddle: A griddle was placed on the supplementary list because two large skillets were available for substitutes. However, the griddle is desirable from the standpoint of ease of handling materials.

Recommendations for basic and supplementary lists for skillets and griddle are as follows:

| <u>Basic List</u> | <u>Supplementary List</u> |
|--------------------------------|---------------------------|
| 10" skillet with lid and | * 9" skillet |
| 11" skillet with lid or | * 5" - 7" skillet |
| Two 10" skillets, with lids | ** 12" griddle |

**Utensils of greatest importance
*Utensils of secondary importance

Baking dishes

Definition of terms

Casserole: A casserole is a baking dish which may be of heatproof glass, earthenware, or china.

Ramekin: A ramekin is an individual baking dish.

Custard cups: Custard cups are individual baking dishes. In this study it was assumed that they would be made of glass.

Bean Pot: An earthenware baking dish with wide mouth and a lid.

Points considered when types, sizes, and numbers of baking dishes were assigned to the foods prepared

1. The total amount or bulk of food to be baked.
2. The extent to which food increases in size or "creeps up" in cooking.
3. The form or container in which it seemed most desirable to prepare the food -- individually or as a group.
4. The extent to which the baking dish is filled when served.
5. The amount needed for first servings and for second servings.

Frequency of use

The frequencies with which the various types of baking dishes were needed are summarized in Table III.

Table III

Frequency of Use List for Baking Dishes

Key: a. used once only
 b. desirable but not necessary to have an additional utensil or set of utensils

| Kind of utensil | Frequency of use | | Total |
|---------------------|------------------|----|-------|
| | a | b | |
| 1½ quart casserole | 15 | | 15 |
| 2 quart casserole | 47 | | 47 |
| 12 ramekins | 15 | 3 | 18 |
| 12 custard cups | 12 | 14 | 26 |
| Bean pot -- 2 quart | | 3 | 3 |

Determination of possible substitutes for the
 baking dishes listed

Casseroles: The raw data show that two casseroles were needed because this type of food was often prepared for guest luncheons. The writer suggests that two different sizes be included on the basic list so when smaller amounts are prepared, a casserole of the correct size will be available. Experience in living in the house has shown that a larger casserole for first servings and a smaller one for seconds is more satisfactory than a large one with a total capacity equal to the two.

Ramekins: Although sets of 12 are not needed every week, ramekins were included on the basic list because they added variety and simplified food service. A set of 12 was needed when guests were served.

Custard cups: A set of 12 custard cups was included in the frequency table. An analysis of the raw data, however, showed that an adequate substitute (the ramekins) was available. Custard cups were, therefore, placed on the supplementary list.

Bean pot: For a group of eight people, a bean pot of two-quart capacity is recommended, but in this study the bean pot was found to be used infrequently. A casserole was available as a substitute whenever the bean pot was listed for use, and therefore it was placed on the supplementary list.

Recommendations

As a result of these findings, the following utensils are recommended for this group:

| <u>Basic List</u> | <u>Supplementary List</u> |
|---------------------------------------|---------------------------------------|
| Two casseroles 2 quart 1½ quart | * 12 custard cups 2 quart bean pot |
| 12 ramekins | |

*Utensils of secondary importance

Baking Pans

Definition of terms

Standard terms have been used for all the items listed here, except in the case of the "large pan." The specifications for this pan will be discussed under

the heading "Recommendations with reference to the numbers and sizes needed."

Points considered when types, sizes, and numbers of baking pans were assigned to the foods prepared

1. The type or consistency of food to be baked. The amount of material to be baked.
2. The average amount of available oven space.
3. Desirable shape after baking.
 - Desired thickness of baked product
 - Desired surface area of product
4. The number of second helpings served.
5. Allowances needed for variations in sizes of ovens.

Frequency of Use

An examination of the raw data shows that the various types of pans were used with the following frequencies (Table IV).

Table IV
Frequency of Use List for the Various Baking Pans

Key: a. used once only d. washed and re-used
b. used two utensils e. desirable but not necessary
c. used three utensils to have additional utensil

| Kind of pan* | Frequency of Use | | | | | Total |
|--------------------|------------------|----|---|---|---|-------|
| | a | b | c | d | e | |
| Baking sheets | 4 | 25 | | 2 | 4 | 60 |
| Shallow baking pan | 50 | 3 | | | | 56 |
| Muffin pans | 55 | | | | | 55 |
| Round cake pans | 13 | 24 | 3 | 1 | 3 | 74 |
| Square cake pans | 13 | 8 | | | | 29 |
| Angel cake pan | 5 | | | | | 5 |
| Loaf bread pan | 16 | 7 | | | | 30 |
| Large pan | 60 | 1 | | 4 | 1 | 67 |
| Pie pans | 2 | 36 | | | | 74 |

Determination of possible satisfactory substitutes for the utensils listed

At least one of each type of pan was included on the basic list because there was no adequate substitute. In some instances, a second pan of the same type was placed on the supplementary list because a second pan could be substituted. These will be discussed in the next section.

Recommendations

The following recommendations were made with reference to number and sizes of pans needed:

It is recommended that there should be at least two baking sheets selected according to the size of the oven used. They should fit into the oven without

loss of space, and at the same time be convenient to handle. The approximate size suggested by the writer is 12" x 16".

Shallow baking pan: At least one shallow baking pan was needed and a second one was placed on the supplementary list because a baking sheet was available as a substitute. The recommended size of this pan is about 12" x 16" and 1" to $1\frac{1}{4}$ " high. The pan should, however, be chosen to fit the oven.

Muffin pans: Pans with enough space for 24 small or medium muffins should be provided because seconds are usually served. It is suggested that there be three pans with space for eight muffins each. One or two providing space for 12 large muffins were placed on the supplementary list as these are also desirable for making individual pastry shells.

Round cake pans: Two pans that are nine inches in diameter, are about $1\frac{1}{2}$ " deep, were placed on the basic list. Usually two-layer cakes are sufficiently large, but a third pan was placed on the supplementary list so that three-layer cakes could be made when desired.

Square cake pans: Two pans (9" x 9" x $1\frac{1}{2}$ ") are recommended for the basic list.

Angel cake pan: Standards for angel cake pan sufficiently large for an angel food cake made from

one cup of egg whites is $8\frac{1}{2}$ " in diameter and $3\frac{1}{2}$ " deep. Even though the angel cake pan was used infrequently, it was included on the basic list because there was no adequate substitute. The girls are required to make one cake each week. In the menus for 21 weeks which were analyzed, an angel food cake was made a total of but five times.

Loaf bread pan: Two pans were included on the basic list as there was no adequate substitute. It was recommended that a standard sized pan be purchased (about $8\frac{1}{2}$ " x 5" x 4"). (6, p. 92)

Large pan: At least one large pan should be provided. A second one was placed on the supplementary list. This pan should be about 12" x 16" x 3" deep, so that casseroles and ring molds can be placed in it when baking food in them. The writer suggests that this pan be chosen to fit those baking utensils.

Pie pans: Two nine-inch pie pans are necessary. It seemed desirable to have an additional one, so it was placed on the supplementary list.

Recommendations

As a result of the preceding analysis, the following general recommendations have been made. Attention is called here to the advisability of fitting the pans to the specific size of the oven used.

Basic List

- 2 baking sheets
(about 12" x 16")
- Shallow baking pan
(about 1 $\frac{1}{4}$ " x 12" x 16")
- Muffin pans
3 pans with 8 small
or medium cups
- Two 9" round cake pans
(about 1 $\frac{1}{2}$ " deep)
- Two square cake pans
(1 $\frac{1}{2}$ " x 9" x 9")
- Angel cake pan
(8 $\frac{1}{2}$ " diameter x
3 $\frac{1}{2}$ " deep)
- Two loaf bread pans
(about 8 $\frac{1}{2}$ " x 5" x 4")
- One large pan
(about 12" x 16" x 4")
- Two 9" pie pans

Supplementary List

- 1 baking sheet
(about 12" x 16")
- *Shallow baking pan
(about 1 $\frac{1}{4}$ " x 12" x 16")
- **Muffin pan or pans
(12 large cups)
- *One 9" round cake pan
(about 1 $\frac{1}{2}$ " deep)
- *One large pan
(about 12" x 16" x 4")
- *One 9" pie pan

**Utensils of greatest importance
*Utensils of secondary importance

Other Cookers, Coffee Makers, and Tea Pots

Definition of terms

Other cookers, as used in this study, included the following:

Insulated cooker: An "insulated cooker which consists of an insulated well, equipped with a metal inset pan and a tightly fitted insulated lid" (10, p. 89). This cooker is available only with an electric stove.

Steamer: A steamer is a utensil with two compartments, the lower one holding water and the upper having a perforated bottom through which the steam rises and cooks the food placed in the top.

Dutch Oven is a term used to describe a heavy roaster with a heavy lid.

Roaster is a term used to describe an oblong or oval covered pan which could be used either uncovered for dry roasting or covered for self-basting.

Broiler pan: A broiler pan is a pan with a rack which is used under the oven broiler.

Teakettle: Teakettle is a standard term.

Coffee Makers: A standard term.

Tea pot and ball: A standard term. A tea ball is a container specifically used for holding tea leaves when making tea.

Points considered when the types, sizes, and numbers of utensils were assigned to the preparation of these foods

1. The amount of food bulk to be cooked.
2. The most desirable method of preparation for that kind of food.

Frequency of use

Frequencies for using these cookers are as follows:

Table V
Frequency of Use List for Cookers, Coffee Makers, and Tea Pots

Key: a. used once only c. desirable but not necessary
 b. washed and re-used to have additional utensil

| Capacity and Kind of Utensil | a | b | c | Total |
|---------------------------------|-----|----|---|-------|
| Insulated cooker | 14 | | | 14 |
| Steamer | 4 | | 3 | 7 |
| Dutch oven | 11 | | 3 | 14 |
| Roaster | 31 | | 1 | 32 |
| Broiler Pan | 102 | 1 | 4 | 107 |
| Teakettle | 311 | 34 | | 345 |
| Coffee makers | 251 | | | 251 |
| Teapot and ball | 62 | | | 62 |
| Electric toaster | 40 | | | 40 |
| Electric waffle iron | 7 | | | 7 |

Determination of possible satisfactory substitutes
for the cookers listed

The insulated cooker, which may be purchased with an electric stove, was listed as needed comparatively few times and for this reason was not included on the basic list.

From the experience of the writer, it would seem advisable to have an electric range with at least four elements rather than one with three elements and an insulated cooker. At least two elements should be large and at least one small to care for the cooking processes which require stove burners.

Although the steamer was listed as used but four times, it was included on the basic list because none of the Home Management Houses from which the menus were chosen had a steamer. For this reason steamed foods did not appear on the menus to any appreciable extent. The baby's bottle sterilizer or the insulated cooker was used when steamed puddings were prepared. However, steaming has been recommended as one of the best ways to preserve the nutritive value of fresh and frozen vegetables. The writer, therefore, recommended that the 8-quart kettle which has been placed on the basic list be equipped with a steamer inset.

In this study it was found that in most cases a Dutch Oven and a roaster were satisfactory for the same purposes. Since the roaster is larger and would care for all needs, the roaster was included on the basic list and a Dutch Oven was placed on the supplementary list.

The broiler pan was found to be a necessary utensil which was used many times. There was no adequate substitute available.

The teakettle was also used many times and there was no adequate substitute available for it. Therefore, it was placed on the basic list. The capacity of the teakettle as recommended by Wilson and McCulough is six quarts (6). This has been found through experience to be satisfactory for the Home Management House.

Coffee makers were needed slightly more than 50 per cent of the meals. Second servings are offered at both regular and guest meals. Therefore, utensil capacity should be provided for at least 24 cups of coffee, or 16 measuring cups of water.

Providing for two coffee makers, one of which contains 10 and one of which contains 6 measuring cups of water, would probably be the most practical way of providing for this need. It is suggested that the six-

cup coffee maker could be of a light weight material as this would be used less often. Both sizes of coffee makers are included in the basic list.

Tea pot and ball -- Since there are usually some students living in the Home Management House who do not drink tea, it was felt that a 2-quart tea pot would provide 12 cups of tea and be sufficiently large. Tea is not served often when guests are present. Also, the time required for making fresh tea is small. Therefore it was recommended that if more were needed, a second pot could be made.

An electric toaster was placed on the basic list as it was needed frequently. Although toast can be made under the broiler, it is many times more desirable to use an electric toaster so that the toast may be made as needed.

An electric waffle iron was included on the basic list because there was no substitute.

Recommendations are as follows:

| <u>Basic List</u> | <u>Supplementary List</u> |
|--|---|
| Steamer inset for 8-quart kettle | *Insulated cooker (size according to stove purchased) |
| Roaster (about 16") | Dutch oven (12") |
| Broiler pan (according to stove) | |
| Teakettle 6-quart capacity | <u>Basic List (cont.)</u> |
| Coffee makers 10 cup capacity 6 cup capacity | Electric toaster Electric waffle iron |
| Tea pot and tea ball 2-quart capacity pot | |

*Utensils of secondary importance.

Food Preparation BowlsDefinition of terms:

The bowls used were considered as individual units rather than in nested sets as they are often sold.

As used in this study, the term "bowl with beater" was used to describe a small bowl which has a lid with a beater attached.

The salad bowl included in this study is a wooden bowl used for mixing salads.

Points considered when sizes and numbers of bowls were assigned to the foods prepared

1. The amount of food to be mixed or beaten was considered.
2. Margin for ease of beating and for lessening the danger of spilling was included and Wilson and McCullough's standards were used as a guide. "Bowls should not be more than one-half full for beating and mixing." (6, p. 85).
3. Margins allowed for expansion when beating eggs were also considered and Wilson and McCullough's findings were used. These are as follows:

| | | |
|---------------------|----|-------------------|
| 1 beaten egg white | -- | 1 cup |
| 1 beaten egg yolk | -- | $\frac{1}{2}$ cup |
| 1 beaten egg, whole | - | 1 cup |
4. Consideration was given to bowls needed for storing foods during the preparation of a "dish" or a meal when no mixing was necessary. When no mixing or beating was necessary, bowls could be filled nearly full.

Frequency of use:

The frequency of use table for mixing bowls is given on the following page.

Table VI
 Frequency of Use List for Mixing Bowls
 Used in the Preparation of 450 Meals
 in the Home Management Houses

Key: a. used once only c. desirable but necessary
 b. used two utensils to have an additional
 c. washed and re-used utensil

| Kind and Capacity | Frequency of Use | | | | Total |
|-------------------|------------------|----|----|----|-------|
| | a | b | c | d | |
| Mixing Bowls: | | | | | |
| 1 pint | 200 | 6 | 49 | 3 | 264 |
| 1½ pint | 144 | 3 | 5 | | 155 |
| 1 quart | 193 | 9 | 45 | | 256 |
| 1½ quart | 171 | 7 | 16 | | 201 |
| 2 quart | 213 | 17 | 67 | | 314 |
| 3 quart | 228 | 1 | 96 | | 326 |
| 4 quart | 98 | | 14 | | 112 |
| 7 quart | 21 | | | | 21 |
| Bowl with beater: | 4 | | | 72 | 76 |
| Salad Bowl | 91 | | | 1 | 92 |

Determination of possible substitutes for
the bowls listed

There were but few adequate available substitutes for the bowls listed. Frequency of use for all bowls was high. However, a 2-quart bowl was substituted for a 1½-quart bowl for the following reasons:

1. Analysis of data shows it was an adequate substitute in all cases.
2. There were several times that 2-quart bowls were listed as necessary.

Therefore, the 1½-quart bowl was placed in the supple-

mentary list of desirable utensils.

The bowl with beater was placed on the supplementary list because there was an adequate substitute available whenever needed. The bowl with beater would, in many instances, care for the second 1-pint, $1\frac{1}{2}$ -pint, and 1-quart bowls listed as needed. At other times, a bowl of comparable capacity was available. The raw data show that an additional 3-quart bowl, one rather deep and narrow, would aid in the ease of manipulation when mixing various types of things. Another additional bowl, one rather flat and wide, would also be of use. The wide flat bowl could be used when mixing with a spoon, and the narrow deep bowl for used when mixing with a beater.

Recommendations for bowls are as follows:

Basic List

1 pint bowl
 $1\frac{1}{2}$ pint bowl
 1 quart bowl
 2 2-quart bowls
 3 quart bowl
 4 quart bowl
 7 quart bowl
 Salad bowl

Supplementary List

* $1\frac{1}{2}$ quart bowl
 * 3 quart bowl
 ** Bowl with beater

*Utensils of secondary importance.

**Utensils of greatest importance.

Measuring Cups, Spoons, and Other Measuring Devices

Definition of terms

Measuring spoon set: A set of standard measuring spoons which includes teaspoon, half teaspoon, and fourth teaspoon measures, and tablespoon.

Measuring cup set: A measuring cup set includes separate measures for a cup, half cup, one-third cup, and one-fourth cup.

Measuring cup: A standard measuring cup includes markings which designate not only one cup, but also halves, thirds, and fourths of a cup. The cup may be of metal or of glass.

Quart measure: A quart measure hold one standard quart and is marked to indicate fractions of a quart.

One cup: For ease in handling the food, a regular cup was included in this group. It is to be used as a utility container, not as a measure.

Points considered when types, sizes, and numbers of measuring devices and of the cup were assigned for use in the preparation of foods

1. Amounts to be measured
2. Type of food to be measured
3. Amount of material to be stored while food preparation processes are in progress.

Frequency of use

Table VII summarizes frequency of use lists for the various measuring devices needed in preparing foods.

Table VII
Frequency of Use List for Measuring Cups, Spoons,
and Other Measuring Devices Needed in the
Preparation of Meals

Key: a. used once only d. washed and re-used
b. used two utensils e. desirable but not necessary
c. used three utensils to have additional utensil

| Kind | Frequency of Use | | | | | Total |
|---------------------|------------------|----|---|-----|-----|-------|
| | a | b | c | d | e | |
| Measuring spoon set | 237 | 96 | 2 | 172 | | 607 |
| Measuring cup set | 196 | 12 | | 41 | | 261 |
| Measuring cup | 241 | 75 | 3 | 124 | | 524 |
| Quart measure | 7 | | | | 164 | 171 |
| One cup (utility) | 54 | 1 | | 9 | | 65 |

Determination of possible satisfactory substitutes
for the utensils listed

There was no adequate available substitute for the measuring devices listed, except in the case of the quart measure. However, the quart measure is a time-saver in measuring large quantities of liquid. Since the quart measure was needed many times as a desirable utensil, it was placed on the basic list.

One measuring cup set and one measuring cup were placed on the basic list. It was found by scanning the raw data that when a second measuring cup was needed, it was possible to substitute either the other type of cup or the quart measure. However, a second set of measuring cups and a second measuring cup were placed on the supplementary list because of the added convenience.

In a few instances when a third measuring device was listed as being desirable, it was found that a substitution could be made. The writer suggests that if the kitchen is planned in units, it would be desirable to have a set of measuring spoons and a measuring cup or set of cups in each of the several centers, such as mixing, stove, salad making, etc.

As it seemed desirable for convenience to have a utility cup in the sugar container, it was assumed that

a cup be kept there for ease in adding sugar to foods or in filling measuring utensils.¹

A utility cup was included on the list to provide storage for small amounts of food during food preparation processes.

The writer therefore recommends the following

| <u>Basic List</u> | <u>Supplementary List</u> |
|---------------------------|---------------------------|
| 2 measuring spoon sets | ** measuring cup set |
| 1 measuring cup set | ** measuring cup |
| 1 measuring cup | |
| 1 quart measure | |
| 1 utility cup | |
| 1 utility cup (for sugar) | |

**Utensils of greatest importance.

Cutting Knives

Definition of terms

Paring knife: A paring knife has a blade about $2\frac{1}{2}$ inches long.

Short blade knife: In this study this term means a knife with a four- to five-inch blade. This knife is suited to halving fruits, paring and chopping small amounts of food, etc.

1. Frequencies not listed.

Chopping knife: A chopping knife is a knife with a straight edge suited to chopping (French Cook's knife). (10, p. 192)

Slicing knife: A slicing knife is a knife which has a long flexible blade tapering slightly at the point. (10, p. 192)

Utility knife: A medium size knife which has a straight or curved cutting edge. (10, p. 191)

Carving knife: A carving knife has a fairly long, sturdy blade, not too pliable. (10, p. 192)

Grapefruit knife: A knife which is curved and double edged, used to cut the sections of the fruit from the rind and the enclosing membranes. (10, p. 192)

Special knives for preparing foods such as potatoes, apples, etc., were also listed. They will be discussed in the descriptive material.

Points considered when types, sizes, and numbers of cutting knives were assigned to the foods prepared

1. The kind and size and consistency of materials to be cut.
 2. The manner in which the material is to be cut.
 3. The special use of the knife in question.
- The possibility of damaging the knife by using it for

Determination of Possible Satisfactory Substitutes
for the Cutting Knives Listed

Two paring knives were placed on the basic list for the following reasons:

1. Frequency of use was great.
2. There was no adequate substitute.
3. The knives are so inexpensive it seemed desirable to provide an ample number to care for the needs.

The writer recommends that one be of the spear-point kind and one be a sharp-point paring knife.¹

A short blade knife which has a short, fairly sturdy blade was placed on the basic list because it was used frequently and also because its use, in many cases, eliminated the need for two different knives. The second knife of this type was placed on the supplementary list because a combination of the paring knife and the chopping knife could be substituted when the second one was needed.

A chopping knife in this study was assumed to be a French Cook's knife and was placed on the basic list because the frequency of use was high. Also, it was definitely a better utensil than any other available knife for the purpose assigned.

1. For illustrations see 10, p. 191.

An 8-inch blade is recommended because of ease of handling and because it is adequate for chopping various foods.

Although the frequency of the use for the slicing knife was not as high as for some other kinds of knives, the slicing knife was placed on the basic list because there was no satisfactory substitute available.

The utility knife with its straight or curved cutting edge was placed on the basic list because there was no satisfactory substitute available. It is recommended that the blade be about 7 inches long.

Even though the carving knife is used infrequently in the kitchen, it was placed on the basic list of kitchen utensils. It may also be used in the dining room.

Because the grapefruit knife was listed for use more than once a week and it is especially made for a purpose, it was included on the basic list of utensils. In a limited amount of time it is difficult to prepare grapefruit halves without the use of a grapefruit knife.

A knife which is suited to paring potatoes and to making carrot curls is also recommended for the basic list. Carrot curls were not served often according to

the menus analyzed. Therefore, it did not seem either necessary or desirable to provide a special knife for the purpose.

An apple parer and corer was placed on the basic list. The frequency of use was high and there is no adequate substitute available.

The writer recommends that good-quality knives made by reliable firms be purchased so that they will give satisfactory service for a long period of time. Care should be exercised in storing and using knives.

Recommendations

On the basis of the above analysis, the following recommendations are made.

Basic List

2 paring knives
(about 2½")

Short blade knife

Chopping knife
(about 8" blade)

Slicing knife
(about 8" blade)

Utility knife
(about 7" blade)

Carving knife

Grapefruit knife

Apple parer and corer
Potato parer

Supplementary List

4"- or 5"-blade knife

Knife for carrot curls

Case Knives, Forks, Spoons, and Spatulas

Definition of terms:

With the possible exception of the terms defined below, standard terms apply to the utensils used in the part of the study. Recommendations for specific sizes are mentioned in the descriptive material.

Rubber spatula: In this study, the term "rubber spatula" means a flexible rubber scraper that is especially adapted to scraping bowls and other mixing dishes.

Salad spoon and fork: This term is interpreted to mean a pair of utensils made especially for tossing salads in a salad bowl.

Points considered when types, sizes, and numbers of utensils were assigned to the foods prepared

1. The method used in preparing the food.
2. Combinations of food prepared.
3. The most convenient size of a particular utensil for the process involved.
4. Safety, as in lengths of knives and forks.
5. The size of the utensil with which it is used.
6. The number of people working simultaneously in a preparation process.

Frequency of use

In the table below, the frequency of use for these utensils are tabulated.

Table IX

Frequency with which Case Knives, Forks, Spoons, and Spatulas
Were Used in the Preparation of 450 Meals
Served in the Home Management Houses

Key: a. used once only d. used four times
 b. used twice e. washed and re-used
 c. used three times f. desirable but not necessary
 to use additional utensil

| Type and size | Frequency of use | | | | | | Total |
|-----------------------------|------------------|-----|----|---|-----|-----|-------|
| | a | b | c | d | e | f | |
| Case knife | 194 | 46 | | | 7 | | 293 |
| Case fork | 180 | 57 | | | 18 | | 312 |
| 10" fork | 192 | 22 | | | 9 | | 245 |
| 1 1/4" fork | 91 | | | | | | 91 |
| 18" fork | 40 | | | | 1 | | 41 |
| Case teaspoon | 134 | 21 | | | 6 | | 182 |
| Case tablespoon | 165 | 170 | 66 | 5 | 165 | | 888 |
| 12" perforated spoon | 85 | | | | 7 | | 92 |
| 1 1/4" non-perforated spoon | 40 | | | | 1 | | 40 |
| 10" wooden spoon | 162 | 7 | | | 16 | | 192 |
| 1 1/4" wooden spoon | 163 | 4 | | | 18 | | 189 |
| 4" spatula | 228 | 4 | | | 68 | | 304 |
| 6" spatula | 43 | | | | | 4 | 47 |
| 10" spatula | 69 | | | | 4 | | 73 |
| Broad spatula | 71 | | | | 7 | 3 | 81 |
| Turner | 37 | | | | | | 37 |
| Rubber spatula | 2 | | | | | 104 | 106 |
| Salad spoon and fork | 19 | | | | | 59 | 78 |

Determination of possible satisfactory substitutes
for the utensils listed

After a careful survey of the raw data sheet to determine when adequate substitutes were available for the utensils listed in the above table, it was decided that the following substitutions could be made.

A case fork could be used when the second 10"-fork was listed. Therefore, the second 10"-fork was placed on the supplementary list.

Either the 10" or 18" fork was always available and adequate when the 14" fork was listed for use. Therefore, the 14" fork was placed on the supplementary list.

Also the second 10" wooden spoon listed was placed on the supplementary list because the second 14" wooden spoon was available for use when two 10" wooden spoons were listed as being needed.

The broad spatula was placed on the supplementary list because the turner was always available when it was listed and the turner was an adequate substitute. The turner was placed on the basic list rather than the broad spatula because it is less expensive.

The salad spoon and fork set was placed on the supplementary list because two forks or a fork and table-spoon could be substituted for it.

Two four-inch spatulas were placed on the basic list because it was recommended that a spatula be placed in each center where food is likely to be measured.

Recommendations were, therefore, made as follows:

| <u>Basic List</u> | <u>Supplementary List</u> |
|---------------------------------------|--------------------------------------|
| 2 case knives | |
| 2 case forks | |
| 1 10" fork | * 1 10" fork |
| 1 18" fork | ** 1 14" fork |
| 2 case teaspoons | |
| 4 case tablespoons | |
| 1 perforated spoon (about 12") | |
| 1 non-perforated spoon (about 14") | |
| 1 10" wooden spoon | * 1 10" wooden spoon |
| 2 14" wooden spoons | |
| 2 4" spatulas | |
| 1 6" spatula | |
| 1 10" spatula | |
| 1 14" turner | *1 broad spatula (about 2½" x 5") |
| 1 rubber spatula | ** Salad spoon and fork |

**Utensils of greatest importance

*Utensils of secondary importance

Pastry Utensils

Definition of terms:

Most of the utensils in this study that are grouped under the heading "pastry utensils" are standard equipment. Therefore, no definition is necessary. Specifications and recommendations will be given in the descriptive material which follows.

A pastry brush is considered to mean a small brush used for greasing pans, and other surfaces.

Points considered when types, sizes, and numbers of pastry utensils were assigned to the foods prepared

1. Type and amount of food prepared.
2. Process used in food preparation.
3. Effect of utensil on the ease of preparation and on the time involved for the process.

Frequency of use:

Table X shows the frequency with which the pastry utensils were needed in the preparation of home management house meals.

A pastry board was placed on the basic list as it was necessary and there was no adequate substitute available. Minimum size that would be recommended is a 22-inch board (6, p. 93).

A 12-inch rolling pin was recommended as the best size with which to roll the crust for a 9-inch pie with the minimum number of strokes (6, p. 39).

Two cutters were considered necessary because it is often desirable to have small biscuits and cookies and also to have medium-sized biscuits and cookies. Cutters are inexpensive utensils and therefore two were placed on the basic list. The suggested sizes are $1\frac{1}{2}$ -inch and $2\frac{1}{4}$ -inch.

Two cake racks were included on the basic list as there were no adequate substitutes available. When used, two were found necessary. The suggested size is 11" x 11". This is sufficiently large to cool products baked in the pans recommended in this study.

A cooky press was placed on the supplementary list of equipment because it was seldom used. Another type of cooky could be substituted for the ones which require a cooky press, or for special occasions a cooky press could be borrowed from the College stockroom.

A pastry brush was placed on the supplementary list because waxed paper could be used as an adequate

substitute. However, unless the minimum cost for utensils needs to be considered, it was suggested that a pastry brush be included and purchased.

As a result of the foregoing analysis, the following recommendations were made:

Basic List

1 quart flour sifter

Pastry blender

Pastry board
(at least 22")

12" rolling pin

Cutters
(about $1\frac{1}{2}$ " and $2\frac{1}{4}$ ")

Two cake racks
(11" x 11")

Supplementary List

* Cooky press

** Pastry brush

**Utensils of greatest importance
*Utensils of secondary importance

Beaters

Definition of terms:

Rotary beater, wire whisk, and electric mixer are all standard utensils found in any utensil store. The term "small beater" as used in this study means a beater of a size suitable for beating one egg only.

Determination of possible satisfactory substitutes
for the beaters listed in Table XI

A rotary beater was placed on the basic list as there was no adequate substitute. The writer recommends that a very good beater be purchased because it is used often and by many different people.

A small beater was found useful in many cases. Since it is an inexpensive utensil and a means of preventing waste, the small beater was placed on the basic list. By conferences with students residing in the home management house at the time this study was made, it was found that this beater was considered desirable.

Although a wire whisk was not listed as being used very frequently, it was placed on the basic list because of its importance for certain processes in cooking. To a great extent, the beater or other utensil used for combining mixtures depends on the individual preference of the student. Therefore, it seemed advisable to keep the whisk on the basic list.

The electric mixer was placed on the supplementary list because an adequate substitute was always available. An electric mixer is an expensive utensil and should be reinforced with great frequency of use to merit placing it on the basic list. One student, however, stated that she would not make seven-minute icing again

unless she had an electric mixer available.

On the basis of the above analysis the following Recommendations are made

Basic List

Rotary beater

Small beater

Wire whisk

Supplementary List

* Electric mixer

*Utensils of secondary importance

Molds

Definition of terms

Molds are standard utensils. Suggestions as to the size and shape desired will be made in the descriptive material.

Points considered when types, sizes, and numbers of molds were assigned to the foods prepared

1. The kind and amount of food to be prepared.
2. The way in which it was desirable to prepare and serve the food.

Frequency of use

A table showing the frequency with which the various kinds of molds were used is found on the following page.

Because it was used so infrequently, the ring mold was placed on the supplementary list. However, it is a desirable piece of equipment. It is possible that it was used more often than the frequencies show. The use of this utensil was tabulated only when the menu stated specifically that a ring mold had been made.

Recommendations are, therefore, as follows:

Basic List

12 gelatin molds
3 cans for steaming

Supplementary List

** 12 gelatin molds
1 quart mold
* $1\frac{1}{2}$ quart mold
**Ring mold
(about 12" in diameter)

**Utensils of greatest importance
*Utensils of secondary importance

Miscellaneous Utensils

Definition of terms:

Most of the terms applied to the utensils included in this group are standard terms which, therefore, need no defining. Specifications for some of the utensils are included in the descriptive material.

Points considered when the foods prepared were assigned to the various miscellaneous utensils

1. The kind and amount of food prepared
2. The method of preparation used.

Frequency of use:

Miscellaneous utensils are listed in Table XIII with the frequencies of use for each.

Table XIII

Frequency of Use for Miscellaneous Utensils

Key: a. used once only d. desirable but not necessary
 b. used two utensils to have additional utensil
 c. washed and re-used

| Type and Kind | Frequency of use | | | | Total |
|-----------------------------|------------------|---|----|----|-------|
| | a | b | c | d | |
| Hand-type can opener | 1 | | | | 1 |
| Wall-type can opener | 200 | | 34 | | 234 |
| Juice extractor | | | | | |
| Hand-type | 15 | | 1 | | 16 |
| Wall-type | 44 | | | | 44 |
| Bottle opener | 7 | | | | 7 |
| Strainer (3" and 6") | 37 | | 1 | | 38 |
| Colander | 4 | | | 9 | 13 |
| Sieve (with roller) | 40 | | | | 40 |
| Dipping basket | 26 | | | 2 | 28 |
| Grater | 54 | | 4 | 2 | 60 |
| Masher | 40 | | | | 40 |
| Ricer | 5 | | | | 5 |
| Chopping board | 254 | 7 | 95 | | 364 |
| Grinder | 11 | | | 25 | 36 |
| Meat thermometer | | | | 17 | 17 |
| Deep fat frying thermometer | | | | 4 | 4 |
| Mallet | 2 | | | 8 | 10 |
| Ladle ($\frac{1}{2}$ cup) | 53 | 1 | 1 | | 55 |
| Nut cracker | 1 | | | 27 | 28 |
| Nut chopper | | | 1 | 28 | 29 |
| Ice cream freezer | 17 | | | | 17 |
| Skimmer | 4 | | | 2 | 6 |
| Shredder | 49 | | 1 | 3 | 53 |
| Ice cream dipper | 12 | | | 5 | 17 |
| 12 skewers | 8 | | | | 8 |
| Egg poacher | | | | 2 | 2 |
| Strawberry huller | | | | 4 | 4 |

Determination of possible satisfactory substitutes
for the miscellaneous utensils listed

A can opener was used often. The time and safety elements are important. Therefore, it would appear that the wall-type opener should be purchased. An inexpensive opener of the hand-type should be available to use for picnics or for making small openings in cans containing juice or milk. Therefore, one of each type of can opener was placed on the basic list.

Because a juice extractor was used often and a large amount is needed to serve 12 people, a wall-type extractor was placed on the basic list. It is suggested, however, that an inexpensive hand-type extractor be purchased, also, for extracting small amounts of juice, such as lemon juice for a pie or for sauces.

The ricer was placed on the supplementary list of utensils because it was used infrequently. Grating and shredding can be cared for by one utensil, a grater and shredder which has surfaces which care for both processes. This utensil is placed on the basic list.

The writer suggests that two chopping boards be provided if there is available space. The pastry board is not adequate for this purpose because chopping would mar its surface. One board would be used for cutting and pounding meat and one for chopping fruits,

vegetables, and other foods.

The meat thermometer was placed on the basic list because it was considered a money saver from the standpoint of cooking roasts. It also has an educational value. Each girl is required to prepare a roast, and the majority of the roasts are cooked by dry heat.

A thermometer for use in deep fat frying was placed on the supplementary list because it was used infrequently and was not essential to the cooking process.

The writer recommends that one of the three Home Management House at Oregon State College be equipped with a one-gallon ice cream freezer. Frequency of use was not great enough to warrant one being purchased by each house. However, a more desirable product may be obtained in some cases by the use of a freezer rather than a mechanical refrigerator freezing tray. Also, larger amounts may be made at one time in the hand freezer.

The skimmer was placed on the supplementary list because the perforated spoon was available for use when the skimmer was listed for use.

The ice cream dipper was placed on the supplementary list because it was used infrequently and either a tablespoon or the long-handled metal spoon were available as a substitute.

An egg poacher was placed on the supplementary list because eggs were not poached often. However, that may have been because a poacher was not available for use. It is recommended that one be purchased if possible.

A strawberry huller was placed on the supplementary list because there was an adequate substitute available at all times. Also, it was used infrequently.

There are several miscellaneous utensils which have a definite use and for which there is no adequate substitute. Most of them are inexpensive and were considered necessary for their specific purposes.

The following utensils were placed on the basic list of utensils: bottle opener; 3" and 6" strainer; 12" colander; 6" sieve with roller; dipping basket (to fit 3-quart sauce pan); masher; grinder; mallet; ladle; nut cracker; nut chopper; and 12 skewers.

Recommendations based on the foregoing analysis are:

Basic list

Supplementary list

Grinder

Meat thermometer

Mallet

Ladle

Nut cracker

Nut chopper

Strawberry huller

Ice cream freezer (1 gal.)
(one for the 3 houses)

Basic List (Cont.)Supplementary List (Cont.)

| | |
|--|-------------------|
| 12 skewers | Skimmer |
| Hand-type can opener | *Ice cream dipper |
| Wall-type can opener | **Egg poacher |
| Hand-type juice extractor | |
| Wall-type juice extractor | |
| Bottle opener | |
| 3" strainer | |
| 6" strainer | |
| 12" colander | |
| 6" sieve with roller | |
| Dipping basket (to fit 3-quart sauce pan) | |
| Grater and shredder (combination) | |
| Masher | *Ricer |
| Chopping Board | **Chopping board |

**Utensils of primary importance
 *Utensils of secondary importance

There are utensils that are needed in the Home Management House Kitchen for meal preparation for which it would be difficult to determine the number of times used. These include the following that were placed on the basic list because they were used often and there was no adequate substitute; a steel for sharpening knives; a set of salt and pepper shakers; kitchen scissors; a device for removing cream from the top of a milk bottle, the kind needed depends upon the type of bottles used by the dairy; a pan for preparing vegetables when sitting down; a sink strainer; and a device for cutting butter into cubes. Butter molds were placed on the supplementary list.

As a result of her experience in the Home Management House, the writer recommends that butter paddles and also another type of mold be provided if possible. Molded butter is usually prepared for guest meals, so that it would be prepared about once a week.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

The problem undertaken in this study was that of determining a basic list of necessary kitchen utensils and, also, a supplementary list of desirable kitchen utensils for a home management house at Oregon State College.

The method of procedure used in making the study was as follows:

1. A sample of menus from two home management houses was selected for analysis. These were equivalent to a full school year's menus and included seasonal variations.

2. Cards were then prepared for each food or type of food served. On these cards was listed the processes necessary to prepare each food. Utensils which were necessary and, also, those which were desirable to carry out the processes listed were included. Amounts of food necessary to serve 12 people were used as a basis for calculating sizes of utensils.

3. The group of utensils needed to prepare each meal was tabulated as a unit. Care was taken that

the identity of each meal was maintained so that later adjustments in determining substitute utensils could be made.

When it was discovered that frequencies fell in definite patterns, the menus from 150 days of the original 224 days were selected for final analysis.

Frequency summaries were made to show the total number of times (a) each utensil was needed once only, (b) two or more utensils of the same kind or size were needed, (c) a utensil was used, washed, and then re-used, and (d) the number of times it was desirable but not essential to use a utensil.

The data for each group of utensils were analyzed with reference to the following:

1. Points considered when types, sizes, and numbers of utensils were assigned to the food processes.
2. Frequency of use for utensils.
3. Determination of possible adequate substitutes for all utensils needed.
4. The determination of basic and supplementary lists for each group of utensils.

Utensils placed on the supplementary list were further analyzed from the standpoint of their relative importance. This list was then divided into the

supplementary utensils of greatest importance, those of secondary importance, and those of least importance.

As a result of this analysis, the following utensils have been included on the recommended basic and supplementary lists of kitchen utensils needed for a home management house at Oregon State College:

Basic and Supplementary lists of Utensils

Basic list:

Sauce pans

1 quart
3 quart -- flat
3 quart -- deep
4 quart

Pots

4 quart

Kettles

8 quart

Pans

$\frac{1}{2}$ -pint
3 quart

Double Boilers

$2\frac{1}{2}$ quart
4 quart

Supplementary list:

Sauce pans

* 2 quart

Kettles

* 6 quart
Asparagus cooker
3 quart deep-fat
frying

Pans

1 pint
* $1\frac{1}{2}$ pint

Double Boilers

1 quart
* $1\frac{1}{2}$ quart
** 2 quart

**Utensils of greatest importance
*Utensils of secondary importance

Basic listSkillets

10" skillet with lid
and
11" skillet with lid
or

Two 10" skillets
with lids

Baking Dishes

Two casseroles
2 quart
1 $\frac{1}{2}$ quart

12 ramekins

Baking Pans

2 baking sheets
(about 12" x 16")

Shallow baking pan
(about 1 $\frac{1}{2}$ " x 12" x 16")

Muffin pans
3 pans with 8 small
or medium cups

Two 9" round cake pans
(about 1 $\frac{1}{2}$ " deep)

Two square cake pans
(1 $\frac{1}{2}$ " x 9" x 9")

Angel cake pan
(8 $\frac{1}{2}$ " diameter x
3 $\frac{1}{2}$ " deep)

Supplementary listSkillets

* 9" skillet

* 5" - 7" skillet

** 12" griddle

Baking Dishes

* 12 custard cups

2 quart bean pot

Baking Pans

1 baking sheet
(about 12" x 16")

*Shallow baking pan
(about 1 $\frac{1}{4}$ " x 12" x 16")

**Muffin pan or pans
(12 large cups)

*One 9" round cake pan
(about 1 $\frac{1}{2}$ " deep)

**Utensils of greatest importance
*Utensils of secondary importance

Basic listSupplementary listBaking Pans (cont.)Baking Pans (cont.)

Two loaf bread pans
(about 8 $\frac{1}{2}$ " x 5" x 4")

One large pan
(about 12" x 16" x 4")

Two 9" pie pans

*One large pan
(about 12" x 16" x 4")

*One 9" pie pan

"Other Cookers", Coffee Makers and Tea Pots"Other Cookers""Other Cookers"

Steamer inset for
8-quart kettle

Roaster (about 16")

Broiler pan
(according to stove)

*Insulated cooker
(size according to
stove purchased)

Dutch Oven (12")

Teakettle
6-quart capacity

Coffee makers
10 cup capacity
6 cup capacity

Tea pot and tea ball
2-quart capacity pot

Electric Toaster

Waffle Iron

Mixing BowlsMixing Bowls

1 pint bowl
1 $\frac{1}{2}$ pint bowl
1 quart bowl
2 2-quart bowls
3 quart bowl

*1 $\frac{1}{2}$ quart bowl
* 3 quart bowl
** Bowl with beater

**Utensils of greatest importance
*Utensils of secondary importance

Basic listSupplementary listMixing Bowls (cont.)Mixing Bowls (cont.)

4 quart bowl
 7 quart bowl
 Salad bowl
 (Wooden chopping bowl)

Measuring UtensilsMeasuring Utensils

2 measuring spoon sets
 1 measuring cup set
 1 measuring cup
 1 quart measure
 1 utility cup
 1 utility cup (for sugar)

** measuring cup set
 ** measuring cup

Cutting KnivesCutting Knives

2 paring knives
 (about 2 $\frac{1}{2}$ ")

4"- or 5"- blade knife

Short blade knife

Chopping knife
 (about 8" blade)

Slicing knife
 (about 8" blade)

Utility knife
 (about 7" blade)

Carving knife
 Grapefruit knife
 Apple parer and corer
 Potato parer

Knife for carrot curls

Case Knives, Forks, Spoons, and Spatulas

2 case knives
 2 case forks
 1 10" fork
 1 18" fork
 2 case teaspoons

* 1 10" fork
 ** 1 14" fork

**Utensils of greatest importance
 , *Utensils of secondary importance

Basic ListSupplementary ListCase Knives, Forks, Spoons, and Spatulas (cont.)

| | |
|---------------------------------------|--------------------------------|
| 4 case tablespoons | |
| 1 perforated spoon (about 12") | |
| 1 non-perforated spoon (about 14") | |
| 1 10" wooden spoon | * 1 10" wooden spoon |
| 2 14" wooden spoons | |
| 2 4" spatulas | |
| 1 14" turner | * 1 broad spatula |
| 1 rubber spatula | (about 2 $\frac{1}{2}$ " x 5") |

Pastry UtensilsPastry Utensils

| | |
|--|-----------------|
| 1 quart flour sifter | * Cooky press |
| Pastry blender | ** Pastry brush |
| Pastry board (at least 22") | |
| 12" rolling pin | |
| Cutters (about 1 $\frac{1}{2}$ " and 2 $\frac{1}{4}$ ") | |
| Two cake racks (11" x 11") | |

BeatersBeaters

| | |
|---------------|------------------|
| Rotary beater | * Electric mixer |
| Small beater | |
| Wire whisk | |

MoldsMolds

| | |
|---------------------|-----------------------------|
| 12 gelatin molds | **12 gelatin molds |
| 3 cans for steaming | 1 quart mold |
| | *1 $\frac{1}{2}$ quart mold |
| | **Ring mold |
| | (about 12" in diameter) |

**Utensils of greatest importance
*Utensils of secondary importance

Basic listSupplementary listMiscellaneous UtensilsMiscellaneous Utensils

| | |
|----------------------------|-------------------|
| Grinder | |
| Meat thermometer | |
| Mallet | |
| Ladle | |
| Nut cracker | |
| Nut chopper | Strawberry huller |
| Ice cream freezer (1 gal.) | Skimmer |
| (one for the 3 houses) | *Ice cream dipper |
| 12 skewers | **Egg poacher |
| Hand-type can opener | |
| Wall-type can opener | |
| Hand-type juice extractor | |
| Wall-type juice extractor | |
| Bottle opener | |
| 3" strainer | |
| 6" strainer | |
| 12" colander | |
| 6" sieve with roller | |
| Dipping basket | |
| (to fit 3-qt. sauce pan) | |
| Grater and shredder | |
| (combination) | |
| Masher | *Ricer |
| Chopping Board | **Chopping Board |

**Utensils of primary importance

*Utensils of secondary importance

Basic list

Steel (for sharpening
knives)

Salt and pepper shakers

Kitchen scissors

Cream separator (for
removing cream from
top of milk bottle)

Pan for preparing
vegetables

Sink strainer

Butter cutter (for
cutting butter into
cubes)

Supplementary list

Butter molds

RECOMMENDATIONS FOR FURTHER STUDIES

1. Recommendations for home management house dining room equipment.
2. Storage arrangements for the kitchen utensils suggested by this study.
3. Study of size and special features desirable for the equipment which this study has assumed -- such as stoves, refrigerators, etc.
4. Recommendations for utensils other than those used in food preparation for the home management house.

REFERENCE LIST

Theses

1. Cameron, Elizabeth Alice. Recommendations for planning a home management house for Oregon State College, based on a study of needs. Oregon State College, Thesis, 1939.
2. Carter, Myrtle Miller. A study of household management practices of married graduates, school of Home Economics, Oregon State College: 1925-1929 and 1935-1939. Oregon State College, Thesis, 1942.
3. Dougherty, Ardythe Wilson. Determining a standard set of utensils for a high school homemaking laboratory. (Study in progress).
4. Horning, Pearl. An analysis of the time spent by home management house students. Oregon State College, Thesis, 1940.
5. Sinnard, Harriet King. Factors in designing a home management house for the Oregon State College Campus. Oregon State College, Thesis, 1942.

Studies

6. Wilson, Maud and McCullough, Helen. A set of utensils for the farm kitchen. A preliminary study of Purnell Project 57, part 7, storage requirements. 1939-1940.

Files

7. Child, Alice M. and Niles, Kathryn B. Food Preparation Recipes. New York, John Wiley & Sons, Inc.

Books

8. "America's Cook Book," compiled by The Home Institute of The New York Herald Tribune. New York, Charles Scribner's Sons. 1938.

Reference List (cont.)

10. Peet, Louise J. and Sater, Lenore E. Household Equipment.
New York, John Wiley & Sons, Inc. 1940, Second Edition.

Conferences

11. Kolshorn, Agnes M., M. A., Associate Professor, Foods and
Nutrition, Oregon State College.
12. Wilson, Maud M., M. A., Home Economist, Agricultural Exper-
iment Station; Professor in Charge Home Economics Research,
Oregon State College.

A P P E N D I X

PART I

EXHIBIT A -- Frequencies for Serving Various
Types of Food.

PART II

EXHIBIT A -- Samples of Cards Showing Processes
Involved and Necessary and Desirable
Utensils for the Preparation of Foods.

EXHIBIT B -- Some Typical Processes Which Were
Assigned to the Various Utensils Listed.

PART I

EXHIBIT A

FREQUENCY OF SERVING VARIOUS TYPES OF FOODS

PART I
EXHIBIT A

FREQUENCIES FOR SERVING VARIOUS TYPES OF FOOD

Beverages

| | |
|---------------|-----|
| Coffee | 251 |
| Milk | 175 |
| Tea | 62 |
| Hot Chocolate | 41 |
| Iced tea | 6 |
| Fruit punch | 3 |
| Iced coffee | 1 |

Breadstuff (cont.)

| | |
|------------------|---|
| Homemade bread | 1 |
| Nut bread | 1 |
| Orange toast | 1 |
| Sally Lunn | 1 |
| Scones | 1 |
| Swedish tea ring | 1 |

Breadstuff

| | |
|----------------|------|
| Bread | 104 |
| Toast | 96 |
| Sandwiches | (44) |
| Meat | 14 |
| Cheese | 9 |
| Peanut butter | 6 |
| Nut | 3 |
| Jam | 2 |
| Loaf | 2 |
| Open faced | 2 |
| Beef dinner | 1 |
| Egg | 1 |
| Raw vegetable | 1 |
| Golden West | 1 |
| Tomato Bacon | 1 |
| Yeast Rolls | 34 |
| Muffins | 29 |
| Biscuits | 20 |
| Crackers | 17 |
| French bread | 11 |
| French toast | 10 |
| Waffles | 7 |
| Butter horns | 6 |
| Cinnamon toast | 6 |
| Griddle cakes | 6 |
| Corn bread | 5 |
| Brown bread | 3 |
| Coffee cake | 3 |
| Pop Overs | 3 |
| Cinnamon Rolls | 2 |
| Toast timables | 2 |

Cakes

| | |
|----------------------|----|
| Chocolate | 10 |
| Gingerbread | 7 |
| Cup cakes | 6 |
| Cake | 6 |
| Upside-down cake | 6 |
| Angel food cake | 5 |
| White cake | 5 |
| Spice cake | 2 |
| Cocoanut top cake | 1 |
| Mahogany cake | 1 |
| Potato cake | 1 |
| Eclairs | 1 |
| Orange cake dessert | 1 |
| Strawberry shortcake | 1 |

Casserole Dishes

| | |
|---------------------|---|
| Macaroni and cheese | 8 |
| Macaroni and meat | 2 |
| Macaroni and tuna | 1 |
| Rice | |
| Spanish rice | 3 |
| Rice casserole | 2 |
| Italian rice | 1 |
| Noodles | |
| with tuna | 4 |
| and chicken | 1 |
| Fondue | 2 |
| Celery-nut-potato | 1 |
| Corn and meat | 1 |
| Dinner-in-a-dish | 1 |
| Seafood | 1 |

Casserole Dishes (cont.)

| | |
|----------------------|---|
| Shrimp-egg, mushroom | 1 |
| Souffle | 1 |
| Spinach, potato | 1 |
| Tamale pie | 1 |
| Veal breast | 1 |

Cereal

| | |
|-----------------|----|
| Prepared cereal | 39 |
| Cooked cereal | 37 |
| Boiled rice | 8 |
| Scrapple | 1 |

Cocktails

| | |
|----------------------------------|----|
| Fruit juice and tomato juice | 13 |
| Crab | 1 |
| Fruit | 1 |
| Lime sherbet with Lime Rickey | 1 |
| Orange and grapefruit | 1 |
| Spiced orangeade | 1 |
| Tart avocado | 1 |
| Canapes | 9 |

Cookies

| | |
|-------------------------------|----|
| Cookies | 34 |
| Wafers | 10 |
| Ice box | 4 |
| Toil House | 4 |
| Oatmeal | 3 |
| Peanut butter | 3 |
| Brownies | 2 |
| Gingersnaps | 2 |
| Macaroons | 2 |
| Swedish | 2 |
| Applesauce | 2 |
| Butter cookies | 1 |
| Cocoanut | 1 |
| Chocolate | 1 |
| Chocolate pin wheel | 1 |
| Graham crackers with icing | 1 |

| | |
|-----------------------|---|
| <u>Cottage Cheese</u> | 5 |
|-----------------------|---|

Desserts

| | |
|--------------------|----|
| Frozen | 21 |
| Ice cream | 21 |
| Sherbet | 7 |
| Ices | 4 |
| Frozen fruit salad | 1 |
| Marlow | 1 |

Custards

| | |
|------------------|---|
| Baked | 7 |
| Soft | 4 |
| Gelatin desserts | |
| Whipped Jello | 6 |
| Fruit Jello | 6 |
| Bavarian cream | 3 |
| Sponge | 3 |
| Jello parfait | 1 |

Puddings

| | |
|----------------|---|
| Tapioca cream | 8 |
| Chocolate | 4 |
| Bread | 3 |
| Butterscotch | 2 |
| Apple | 1 |
| Carrot | 1 |
| Chocolate rice | 1 |
| Cocoanut | 1 |
| Cornstarch | 1 |
| Gingersnap | 1 |
| Graham cracker | 1 |
| Grapenut | 1 |
| Lemon meringue | 1 |

Miscellaneous

| | |
|-----------------------------|---|
| Whip | 7 |
| Apple Betty and Crisp | 4 |
| Peanut Butter Trifle | 2 |
| Chocolate Half- and-half | 1 |
| Date loaf | 1 |
| Lemon crunch | 1 |

| | |
|-------------------------------|---|
| <u>Dressing</u> -- breadcrumb | 5 |
|-------------------------------|---|

Eggs

| | |
|------------------|----|
| Scrambled | 14 |
| Deviled | 6 |
| Fried | 6 |
| Cooked in shell | 4 |
| Goldenrod | 4 |
| Creamed on toast | 3 |

Eggs (cont.)

| | |
|---------------|---|
| In Bacon ring | 3 |
| Omelet | 3 |
| Egg nog | 2 |
| Poached | 2 |
| Shirred | 1 |

Fruit

| | |
|--------------------|----|
| Canned juice | 46 |
| Canned fruit | 38 |
| Apple sauce | 26 |
| Grapefruit halves | 19 |
| Sliced oranges | 16 |
| Sliced bananas | 15 |
| Orange juice | 13 |
| Stewed dried fruit | 13 |
| Baked apple | 8 |
| Fruit cup | 8 |
| Canned berries | 4 |
| Cinnamon apples | 4 |
| Raspberries | 4 |
| Rhubarb sauce | 4 |
| Strawberries | 4 |
| Watermelon | 4 |
| Apple rings | 2 |
| Baked banana | 2 |
| Black berries | 2 |
| Grilled pineapple | 2 |
| Apple with honey | 1 |
| Baked pears | 1 |
| Broiled grapefruit | 1 |
| Cantaloupe | 1 |
| Orange halves | 1 |
| Orange sections | 1 |

Gravies

| | |
|----------------|----|
| Meat gravy | 30 |
| Mushroom gravy | 2 |

Meat

| | |
|--------------|---|
| Steaks | |
| Pork chops | 9 |
| Stuffed | 5 |
| Salmon | 7 |
| Breaded veal | 6 |

Meat (cont.)

| | |
|-----------------------|----|
| Steaks | |
| Swiss | 6 |
| Hamburger | 3 |
| Cube | 2 |
| Beef | 1 |
| Roasts | |
| Beef | 9 |
| Pork | 6 |
| Veal | 5 |
| Baked heart | 2 |
| Lamb | 2 |
| Baked ham | 1 |
| Pot roast | 1 |
| Bacon | 21 |
| Left-over dishes | |
| Cold meat | 6 |
| Meat pie | 6 |
| Croquettes | 3 |
| Hash | 2 |
| Stew | 2 |
| Chop suey | 1 |
| Loaf | |
| Meat loaf | 9 |
| Ham | 5 |
| Salmon | 5 |
| Veal and chicken | 1 |
| Creamed meats | |
| Dried beef | 5 |
| Salmon | 3 |
| Tuna | 3 |
| Ham | 2 |
| Salmon a la king | 1 |
| Shrimp | 1 |
| Tuna fish rarebit | 1 |
| Patties | |
| Meat | 5 |
| Liver | 1 |
| Salmon and bacon | 1 |
| Tuna | 1 |
| Link sausages | 6 |
| Liver | 5 |
| Meat balls | 5 |
| Mock chicken legs | 4 |
| Hamburgers and buns | 3 |
| Chicken fricasse | 2 |
| Veal birds | 2 |
| Weiners and saurkraut | 2 |

Meats (cont.)

| | |
|-------------------------|---|
| Apple stuffed | |
| with sausage | 1 |
| Corned beef and cabbage | 1 |
| Filet of sole | 1 |
| New England boiled | |
| dinner | 1 |
| Sweet sour spare ribs | 1 |
| Weiner, bacon, | |
| cheese roll | 1 |

Pastes

| | |
|-----------------------|---|
| Baked spaghetti | 2 |
| Spaghetti and sausage | 1 |

Pie

| | |
|-----------------|----|
| Apple | 10 |
| Lemon | 6 |
| Cherry | 5 |
| Berry | 2 |
| Butterscotch | 2 |
| Pumpkin | 2 |
| Banana cream | 1 |
| Bavarian cream | 1 |
| Cherry chiffon | 1 |
| Cherry tarts | 1 |
| Chess | 1 |
| Chocolate cream | 1 |
| Cupid | 1 |
| Jello cream | 1 |
| Lemon chiffon | 1 |
| Mince | 1 |
| Peach | 1 |
| Rhubarb | 1 |

Relishes

| | |
|----------|----|
| Jam | 70 |
| Celery | 38 |
| Jelly | 37 |
| Olives | 21 |
| Syrup | 16 |
| Radishes | 13 |
| Pickles | 12 |
| Carrots | 10 |
| Honey | 9 |

Relishes (cont.)

| | |
|-----------------------|---|
| Relish | 6 |
| Marmalade | 5 |
| Apple and pear butter | 4 |
| Pickled beets | 3 |
| Mints | 2 |
| Stuffed celery | 2 |
| Turnip | 2 |
| Lechee nuts | 1 |
| Peanut butter | 1 |

Salad Dressing

| | |
|------------|----|
| French | 14 |
| Mayonnaise | 7 |
| Cooked | 1 |
| Russian | 1 |

Salads

| | |
|--------------------|----|
| Fruit | |
| Fruit salad | 30 |
| Waldorf | 11 |
| Orange, grapefruit | |
| and avocado | 9 |
| Fruit and cottage | |
| cheese | 5 |
| Pineapple | 5 |
| Molded fruit | 4 |
| Banana | 3 |
| Pear and cheese | 3 |
| Molded fruit and | |
| ginger ale | 2 |
| Orange | 1 |
| Pineapple, banana, | |
| and nuts | 1 |
| Prune | 1 |
| Stuffed peach | 1 |

Meat

| | |
|-----------|---|
| Tuna fish | 6 |
| Meat | 2 |

Miscellaneous

| | |
|----------------|----|
| Jello | 10 |
| Club House | 2 |
| Macaroni | 2 |
| Tomato, peach, | |
| prune, cheese | 1 |

Salads (cont.)

| | |
|---------------------------------|----|
| Vegetable | |
| Lettuce | 26 |
| Fresh vegetable | 21 |
| Cabbage | 19 |
| Lettuce and tomato | 13 |
| Vegetable | 11 |
| Tomato aspic and artichoke | 7 |
| Tomato, sliced | 7 |
| Potato | 6 |
| Carrot | |
| and raisin | 5 |
| and pineapple | 3 |
| shredded | 3 |
| Cucumber | 4 |
| Molded Perfection | 4 |
| Molded vegetable | 4 |
| Raw cauliflower | |
| and cabbage | 3 |
| Sliced cucumbers | 2 |
| String bean | 2 |
| Tomato-cheese | 2 |
| Asparagus | 1 |
| Avocado | 1 |
| Cabbage, pickle, cedery, egg | 1 |
| Lettuce, bean | 1 |
| Molded mint | 1 |
| Stuffed green peppers | 1 |
| Stuffed tomatoes | 1 |

Sauces for Desserts

| | |
|--------------|---|
| Chocolate | 3 |
| Vanilla | 2 |
| Butterscotch | 1 |
| Caramel | 1 |
| Lemon | 1 |
| Orange | 1 |

Sauces for Main Dishes

| | |
|----------|----|
| Tomato | 11 |
| Cheese | 8 |
| White | 7 |
| Mushroom | 3 |
| Tartar | 3 |

Sauces for Main Dishes (cont.)

| | |
|---------|---|
| Catsup | 2 |
| Fruit | 2 |
| Mustard | 1 |

Soups and Chowders

| | |
|----------------------|---|
| Vegetable soup | 8 |
| Potato soup | 5 |
| Cream of tomato | 4 |
| Chicken-vegetable | 3 |
| Clam chowder | 3 |
| Split pea soup | 3 |
| Abalone soup | 1 |
| Cream of Asparagus | 1 |
| Cream of corn | 1 |
| Hot chicken boullion | 1 |
| Lima bean chowder | 1 |
| Oyster stew | 1 |
| Rice soup | 1 |

Vegetables

| | |
|------------------|----|
| White Potatoes | |
| Mashed | 38 |
| Baked | 23 |
| Boiled | 12 |
| Chips | 8 |
| Browned | 7 |
| Scalloped | 7 |
| Parslied | 6 |
| Hash brown | 3 |
| Riced | 2 |
| Au gratin | 1 |
| Casserole | 1 |
| Patties | 1 |
| Shoe string | 1 |
| Sweet potatoes | |
| Boiled and baked | 6 |
| Candied | 3 |
| Green vegetables | |
| Peas | 9 |
| Frozen | 10 |
| Spinach | 17 |
| String beans | 16 |
| Asparagus style | 1 |
| Asparagus | 15 |
| Brussel sprouts | 6 |

Vegetables (cont.)Welsh Rarebit

1

| | |
|----------------------|----|
| Green vegetables | |
| Brussel sprouts | 6 |
| Broccoli | 4 |
| Beet greens | 1 |
| Wilted lettuce | 1 |
| Creamed vegetables | |
| Peas | 4 |
| Carrots | 3 |
| Asparagus and egg- | 1 |
| Cabbage | 1 |
| Celery | 1 |
| Onion | 1 |
| Carrots | |
| Buttered | 16 |
| Glazed | 4 |
| and peas | 2 |
| Browned | 1 |
| Beets | |
| Buttered | 8 |
| Harvard | 8 |
| Squash | 5 |
| Baked | 3 |
| Zucchini | 3 |
| Whipped | 1 |
| Cabbage | 8 |
| Cauliflower | 5 |
| Stewed tomatoes | 5 |
| Stuffed peppers | 4 |
| Corn | |
| Whole kernel | 2 |
| Scalloped | 1 |
| Egg plant | 1 |
| Sauted parsnips | 1 |
| Timbale peas | 1 |
| Vegetable plate | 1 |
| Beans | |
| Chili | 4 |
| Boston baked | 3 |
| Baby limas | 2 |
| Aztec bean casserole | 1 |
| Boiled | 1 |
| Pork and beans | 1 |

PART II

EXHIBIT A

CARDS SHOWING PROCESSES INVOLVED AND NECESSARY
AND DESIRABLE UTENSILS FOR THE PREPARATION OF THE MEALS

Cards were prepared for each food or type of food served in the menus analyzed. These shows: (a) the processes necessary to prepare the food, (b) the utensils "necessary" for each process, (c) the utensils "desirable but not necessary" that might be used in place of the utensils listed as "necessary" (Key: o), and the utensils "desirable but not necessary" that would be used in addition to the utensils listed as "necessary": (Key: /)

The material from these cards appears on the following pages for the foods or types of foods that were served more than five times. The same procedure was followed for the foods or types of foods served five times or less.

Utensils that were used, washed, and re-used were placed in parenthesis when re-used. No frequency of the use was tabulated for those utensils that were placed in parenthesis with an asterisk following because these utensils were assumed to be in the kitchen.

Utensils Needed in the Preparation of Food for the Home Management Houses
at Oregon State College

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------|------------------------------------|---|----------|-----------|
| Coffee | Heat water | 6-qt. tea kettle | | |
| | Measure water and coffee | Measuring cup and spoon | | |
| | Cook coffee | 6-cup and 10-cup coffee makers | | |
| Hot Chocolate | Measure sugar, cocoa, and water | Measuring spoon Measuring cup | | |
| | Cook above | 4-quart double boiler 14" wooden spoon | | |
| | Measure milk | (measuring cup) | | |
| | Cook | (double boiler) | | |
| | Beat | Rotary beater | | |
| Tea | Heat water | 6-qt. tea kettle | | |
| | Measure tea | Measuring spoon | | |
| | Steep | 2-qt. pot Tea ball | | |

| Food or "dish" | Processes | Utensils | |
|---|----------------------------------|---|---------------------------|
| | | Necessary | Desirable |
| Biscuits Scones Short cake | Measure and sift dry ingredients | Measuring cup Measuring spoons 4" spatula Quart sifter 3-quart bowl | |
| | Measure fat | (measuring spoons) | |
| | Cut in fat | Pastry blender | |
| | Combine | Case tablespoon | Perforated spoon |
| | Knead, roll | 22" pastry board 12" rolling pin | |
| | Cut and transfer to pan | Cutter (1 $\frac{1}{2}$ ", 2 $\frac{1}{4}$ ") 10" spatula | |
| | Bake (Biscuits) | Shallow baking pan | |
| | (Scones) | Two 9" cake pans | |
| | (Short cake) | Two 9" pie pans | |
| | Take up | (10" spatula) | |
| Muffins Griddle cakes Waffles Corn bread | Measure and sift dry ingredients | 1-qt. sifter Measuring cup set Measuring spoons 4" spatula 3-qt. bowl | |
| | Measure and melt fat | (measuring spoons) (cup) | o $\frac{1}{2}$ -pint pan |
| | Beat eggs | 1 $\frac{1}{2}$ -pint bowl Rotary beater | o Bowl with beater |

| Food or "dish" | Processes | Utensils | |
|-----------------|-----------------------------|-----------------------------|------------------|
| | | Necessary | Desirable |
| Muffins (cont.) | Measure liquid | (measuring cup set) | |
| | Combine ingredients | 1 1/4" wooden spoon | |
| Muffins | Transfer batter and bake | (wooden spoon) | / Rubber spatula |
| | | Three 8-cup muffin pans | / Pastry brush |
| Waffles | Separate and beat eggs | 1-qt. bowl (yolks) | |
| | | 2-qt. bowl (whites) | |
| | | 4-qt. bowl for mixing | |
| | Transfer batter and bake | 1 1/4" non-perforated spoon | (Pitcher)* |
| | Removing from iron | Electric waffle iron | |
| | | Case knife and fork | |
| Griddle cakes | Transfer batter and bake | 1 1/4" non-perforated spoon | |
| | | 11" frying pan | / Pastry brush |
| | | 1 1/4" turner | o 12" griddle |
| Corn bread | Bake | Shallow baking pan | |

| Food or "dish" | Processes | Utensils | |
|----------------|--------------------------|--|---------------|
| | | Necessary | Desirable |
| Toast | Oven toast | 10" fork | |
| | Toaster | Electric toaster | |
| | Butter toast | Case knife | |
| Cinnamon toast | Measuring | Measuring cup Case tablespoon | |
| | Mixing ingredients | 1 $\frac{1}{2}$ -pint bowl (tablespoon) | |
| French toast | Measuring | Measuring cup | |
| | | Measuring spoons | |
| | | 1-qt. bowl | |
| | 4" spatula | | |
| Mixing | Rotary beater | | |
| Frying | 10" fork | | |
| | 11" skillet | o 12" griddle | |
| | 1 $\frac{1}{4}$ " turner | o bread spatula / pastry brush | |
| Sandwiches | Spreading butter | Butter dish | |
| | | Case tablespoon Case knife | o 1-pint bowl |
| Meat | Sliced meat | Slicing knife | |
| | Ground meat | Grinder | |
| | | | 1-qt. bowl |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|------------------------------|--|---|--------------------|-----------|
| Sandwiches (cont.) | | | | |
| Cheese Peanut butter | Creaming and spreading | 1½-pint bowl (tablespoon) (case knife) | | |
| Yeast Rolls (for 2 meals) | Measure liquid and dry ingredients | Measuring cup set Measuring spoons ¼" spatula | | |
| | Scald milk | 1-qt. sauce pan | | |
| | Soften yeast in water | Utility cup | | |
| | Measure and soften fat | (tablespoon) ½-pint pan | | |
| | Measure, sift flour into liquid in bowl | Measuring cup 1-qt. sifter 7-qt. bowl | | |
| | Beat eggs | 1-pint bowl Rotary beater | o Bowl with beater | |
| | Beat, adding flour | 1¼" wooden spoon | | |
| | Knead and bake | 22" pastry board 12" rolling pin | | |
| | Parker House rolls | Biscuit cutter Case knife Two shallow pans | | |

| Food or "dish" | Processes | Necessary | Utensil | Desirable |
|--------------------------------|----------------------------------|---------------------|---------|--------------------|
| Yeast Rolls (cont.) | Clover-leaf rolls | Muffin pan | | |
| | Taking up | 10" spatula | | |
| | Storing dough | 4-qt. bowl | | |
| Cakes | | | | |
| Butter cakes | Measure and sift dry ingredients | 1-qt. sifter | | |
| | | Measuring cup set | | |
| | | Measuring spoons | | |
| | | 4" spatula | | |
| | | (wax paper)* | | |
| | Measure sugar, fat | (measuring cup set) | | |
| | | (measuring spoons) | | |
| | Cream fat and sugar | 4-qt. bowl | | o Electric mixer |
| | 1 1/4" wooden spoon | | | |
| Separate eggs, beat whites | 1-qt. bowl (yolks) | | | |
| | 2-qt. bowl | | | |
| Combine and mix | Rotary beater | | | o (electric mixer) |
| | (utensils above) | | | / Rubber spatula |
| Prepare pan, bake, and cool | (scissors)* | | | |
| | Two 9" round pans | | | |
| | or | | | |
| | Two 9" square pans | | | / Pastry brush |
| | Two 11" racks | | | |
| Cup cakes | Bake | Two muffin pans | | |

| Food or "dish" | Processes | Utensil | |
|--------------------------------------|--|--------------------|------------------|
| | | Necessary | Desirable |
| Gingerbread | Measure ingredients | 1-qt. sifter | |
| | | Measuring cup set | |
| | | Measuring spoons | |
| | | 4" spatula | |
| | | 3-qt. bowl | |
| | Beat eggs and combine liquids | 1-qt. bowl | |
| | | Rotary beater | |
| | | 1-pint pan | |
| | Combine ingredients | 10" wooden spoon | / Rubber spatula |
| | Bake and cool | Two 9" square pans | |
| | | Two 11" racks | |
| Upside-down cake (cake batter) | Measure and sift dry ingredients | 1-qt. sifter | |
| | | Measuring cup set | |
| | | Measuring spoons | |
| | | 3-qt. bowl (flat) | |
| | Beat egg and combine liquids and other ingredients | 1-qt. bowl | |
| | | Rotary beater | 6 Electric mixer |
| | | 10" wooden spoon | / Rubber spatula |
| (Fruit mixture) | Measure and prepare | Measuring cup set | |
| | | Measuring spoons | |
| | | Paring knife | |
| | | 1½-qt. bowl | |
| | Baking | 9" skillet | |

| Food or "dish" | Processes | Utensils | |
|------------------------|-------------------------------------|--|------------------|
| | | Necessary | Desirable |
| Angel cake | Measure and sift flour and sugar | Measuring cup set 1-qt. sifter 4" spatula | |
| | Separate eggs and beat whites | (storage container)* 4-qt. bowl (whites) Rotary beater Measuring spoons | o Electric mixer |
| | Folding dry ingredients into whites | Tablespoon Wire whisk or 10" spatula | / Rubber spatula |
| | Baking | Tube pan 11" rack | |
| Icings Seven-Minute | Measure ingredients | Measuring cup Measuring spoons | |
| | Cook and beat | 2-qt. double boiler (deep) Rotary beater 10" wooden spoon | o Electric mixer |
| | Store egg yolk | Utility cup | |
| | Spread icing | 6" spatula Case tablespoon | |

| Food or "dish" | Processes | Utensils | |
|------------------------|---|--|--------------------|
| | | Necessary | Desirable |
| Icings Uncooked | Measure and sift | Measuring cup Measuring spoons 1-qt. sifter 1-qt. bowl | |
| | Measure and melt butter or chocolate | (measuring spoons) (measuring cup) | |
| | Measure liquid | (measuring cup) | |
| | Combine and spread | Case tablespoon 6" spatula | |
| Whipped cream | Measure cream, sugar, and flavoring | Measuring cup Measuring spoons | |
| | Whip | 1-qt. bowl (varies with the amount whipped) Rotary beater | o Bowl with beater |
| | Spread or serve | Case tablespoon 6" spatula | |
| Macaroni and Cheese | Measure water, salt and macaroni | Measuring cup Measuring spoons | o Quart measure |
| | Cook, stir, and drain | 4-qt. kettle 14" fork 12" colander | |

| Food or "dish" | Processes | Utensils | |
|-----------------------------------|------------------------------------|--|------------------------|
| | | Necessary | Desirable |
| Macaroni and cheese (cont.) | Grate cheese | Grater 1-pint bowl | |
| | Prepare bread crumbs | Grinder 1½-qt. pan Case tablespoon | |
| | Prepare white sauce | (measuring cup) (measuring spoons) 10" wooden spoon 2-qt. sauce pan | o 1½-qt. double boiler |
| | Bake | Casserole 2- and 1½-qt. | |
| Cooked cereal | Measure water, cereal, and salt | Measuring cup Measuring spoons | / Quart measure |
| | Cook | 2-qt. double boiler | |
| | Stir | 10" wooden spoon | |
| | Take up | Case tablespoon | |
| | Rice | Drain | 6" strainer |
| Juice cock- tails | Extract juice | Wall-type juice extractor Short blade knife Chopping board | |
| | Mix ingredients, add sugar | (Pitcher)* 10" wooden spoon (Utility cup)* | |

| Food of "dish" | Processes | Utensils | |
|-------------------|-------------------------------------|---|--------------------|
| | | Necessary | Desirable |
| Cookies | Sift and measure dry ingredients | 1-qt. sifter | |
| | | Measuring cup set | |
| | | Measuring spoons | |
| | | ¼" spatula | |
| | Measure sugar and fat | (measuring cup set) | |
| | Cream sugar and fat | ¼-qt. bowl 10" wooden spoon | / Rubber spatula |
| | Beat eggs | 1-qt. bowl Rotary beater | o Bowl with beater |
| Rolled cookies | Roll | (flour sifter) 22" pastry board 12" rolling pin | |
| | Cut and put in pan | Cutter (1½" or 2¼") 10" spatula | o Broad spatula |
| | Bake | Two baking sheets (size convenient for oven) | / Pastry brush |
| | | | |
| Drop cookies | Drop | Case tablespoon ¼" spatula | |

| Food or "dish" | Processes | Necessary Utensils | Desirable |
|----------------|---|--|-----------|
| Ice Cream | Scald milk | 1 $\frac{1}{2}$ -qt. double boiler | |
| | Measure ingredients and combine | Measuring cup set Measuring spoons 4" spatula | |
| | Mechanical refrigerator Hand Freezer | 2-qt. bowl (2 $\frac{1}{2}$ -qt. double boiler and 3-qt. bowl) Rotary beater | |
| Sherbet | Measure ingredients | Measuring cup set 4" spatula | |
| | Prepare fruit and juice | Hand-type reamer Grater 1-pint bowl Short blade knife Chopping board | |
| | Combine ingredients | 2-qt. bowl Case tablespoon | |
| Refrigerator | Freezing and stirring | Freezing tray 3-qt. bowl (rotary beater) | |
| Hand freezer | Freezing | 1-gal. hand freezer (dish pan)* | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|-----------------|---------------------|---|---------------------------------|-----------------|
| Baked custard | Measure ingredients | Measuring cup Measuring spoons | | |
| | Scald milk | 2-qt. double boiler | | |
| | Beat eggs, combine | 3-qt. bowl Rotary beater 10" wooden spoon | | |
| | Bake | 2-qt. casserole Large pan for water | o 12 individual custard cups | |
| | Test | Case knife | | |
| Whipped gelatin | Measure ingredients | Measuring cup Measuring spoons | | o Quart measure |
| | Heat water | 6-qt. teakettle | | |
| | Combine ingredients | 3-qt. bowl 10" wooden spoon | | |
| | Beat | Rotary beater | | |
| Gelatin fruit | Prepare gelatin | Above utensils except beater | | |
| | Prepare fruit | (Utensils listed for preparation of the individual fruit) | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|--------------------|-----------------------------------|---|----------|-----------------|
| Tapioca cream | Measure ingredients | Measuring cup Measuring spoons | | |
| | Scald milk and cook tapioca | 2-qt. double boiler 10" wooden spoon | | |
| | Beat eggs and combine ingredients | 3-qt. bowl (wooden spoon) | / | Rubber spatula |
| | Cook | (double boiler) | | |
| | Beat egg whites | 2-qt. bowl (rotary beater) | | |
| Cornstarch pudding | Measure ingredients | Measuring cup Measuring spoons 4" spatula | | |
| | Mix ingredients | $\frac{1}{2}$ -pint bowl 10" wooden spoon | | |
| | Scald milk and cook | $2\frac{1}{2}$ -qt. double boiler (wooden spoon) | | |
| | Cool | (double boiler) | o | 12 custard cups |

| Food and "dish" | Processes | Necessary | Utensils | Desirable |
|-------------------------|----------------------------------|---|----------|--------------------|
| Fruit Whip (unbaked) | Measure ingredients | Measuring cup Measuring spoons 1/4" spatula | | |
| | Prepare fruit and lemon juice | Short blade knife Chopping board Hand-type reamer | | |
| | Beat egg whites | 1-qt. bowl Rotary beater | | o Bowl with beater |
| | Store egg yolks | Utility cup | | |
| | Combine ingredients | 2-qt. bowl 10" wooden spoon | | |
| Breadcrumb dressing | Measure ingredients | Measuring cup Measuring spoons 1/4" spatula | | |
| | Melt butter | 1/2-pint pan | | |
| | Mix ingredients | 1 1/2-qt. bowl Case tablespoon | | |
| Eggs Scrambled | Mix ingredients | 2-qt. bowl Case fork (salt and pepper shakers)* | | |
| | Cook and dish-up | 10" skillet Case tablespoon | | |

| Food or "dish" | Processes | Necessary Utensils | Desirable |
|---------------------|-------------------------------|---|-----------|
| Eggs (cont.) | | | |
| Cooked in the shell | Cook | 3-qt. sauce pan, flat Perforated spoon | |
| | Cool | 1-qt. bowl | |
| Deviled | Measure and mix ingredients | Measuring spoons Case fork Case tablespoon Case knife Short blade knife Chopping board | |
| | Stuff eggs | Case teaspoon | |
| Fried eggs | Break eggs and slip into pan | (sauce dish)* 10" skillet | |
| | Put fat in pan and baste eggs | Case tablespoon | |
| | Take up, turn | 1/4" turner | |
| Fruit Juice | | | |
| Canned | Punch hole in can | Hand-type can opener | |
| Orange | Halve and juice oranges | Short blade knife | |
| | | Chopping board | |
| | | Wall-type juice extractor | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|-------------------------------|--|---|----------|----------------------------|
| Fruit | | | | |
| Canned | Opening can | Wall-type opener | | |
| | Dishing fruit | Case tablespoon | | |
| Grapefruit | Halve and section | Short blade knife | | |
| | | Chopping board | | |
| | | Paring knife | | o Grapefruit knife |
| Sliced oranges and bananas | Peel and slice | Short blade knife | | |
| | | Chopping board | | |
| Apple sauce | Pare and wash | (dish pan)* | | |
| | | Paring knife | | o Apple parer and corer |
| | Holding pared fruit | 2-qt. bowl | | |
| | Cook | 4-qt. sauce pan | | |
| | | 10" wooden spoon | | |
| Sieve and add sugar | 6" sieve with roller (utility cup)* | | | |
| Baked Apple | Wash and core | (Utensils above) | | |
| | Bake and season | Large pan | | |
| | | Case tablespoon $\frac{1}{2}$ -pint bowl | | |
| Test and remove from pan | Perforated spoon 18" fork | | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|--|---|--|-----------------------------------|-----------|
| Fruit (cont.) | | | | |
| Stewed, dried | Wash and soak | 3-qt pan | | |
| | Cook | 3-qt. sauce pan Case tablespoon (Utility cup)* | | |
| Fruit cup | Open canned fruits | Wall-type opener | | |
| | Dice and mix fruit | Short blade knife Chopping board 3-qt. bowl Case tablespoon | | |
| | Store small amounts of fruit | 1-qt. bowl 1-pint bowl | | |
| Gravy, meat | Measure flour | Case tablespoon | | |
| | Stir flour in fat, add liquid and stir | 1 $\frac{1}{4}$ " perforated spoon Measuring cup | | |
| | Take up | Ladle | | |
| Meats | | | | |
| Pan fried Chops Bacon Link Sausages | Slice meat | 8" knife Chopping board | | |
| | Cook | 10" and 11" skillet 10" fork | ✓ With cover for pork and veal | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------|--|---|-----------|---------------------|
| Meats (cont.) | | | | |
| Broiled | Cook | Broiler pan 10" fork | | |
| Breaded | Beat egg | 1-pint bowl Rotary beater | | |
| | Grind bread | Grinder 9" round pan | | |
| | Bread chops | (9" cake pan) $\frac{1}{2}$ -pint pan | | |
| | Cook | 11" skillet, lid 10" skillet, lid 10" fork | / Roaster | |
| Swiss steak | Add flour, pound | Utility cup Case tablespoon Saucer | | o Mallet |
| | Slice onions | Chopping board Paring knife | | o Short blade knife |
| | Cook | 11" skillet, lid 1 $\frac{1}{4}$ " fork 1 $\frac{1}{4}$ " metal spoon | | o Roaster |
| Roasts | Cook and slice (if done in kitchen) | Roaster 10" fork Carving knife | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------|-----------------------------------|---|---------------|-----------|
| Meats (cont.) | | | | |
| Cold, sliced | Slice | 10" fork Chopping board Slicing knife | | |
| Meat Pie | Cut meat and onion | Chopping board Utility knife Short blade knife | | |
| | Saute onion and brown meat | 11" skillet 1 $\frac{1}{4}$ " fork Case tablespoon | o Dutch Oven | |
| | Measure, add water and seasonings | Measuring cup Measuring spoons (tablespoon) | | |
| | Mix flour and water | 1-pint bowl (tablespoon) | | |
| | Pastry | 2-qt. bowl Measuring cup set Measuring spoons 4" spatula 1-qt. sifter Pastry blender Case fork 22" Pastry board 12" rolling pin | / 10" spatula | |
| | Bake | Casseroles (2qt. and 1 $\frac{1}{2}$ -qt.) | | |

| Food or "dish" | Processes | Necessary | Utensil | Desirable |
|----------------------|--|---|---------|-----------------|
| Meats (cont.) | | | | |
| Meat Loaf | Measure and mix ingredients | Measuring cup set Measuring spoons 2-qt. bowl Perforated spoon | | |
| | Cook | Two one-loaf bread pans | | |
| | Dish up | Broad spatula Slicing knife | | |
| Creamed | (Sliced or chopped meat and white sauce combined) | | | |
| Patties | Grind and mix ingredients | Grinder 3-qt. bowl Measuring spoons Perforated spoon | | |
| | Cook | 9" and 10" skillet Turner 10" fork | | o Broad spatula |
| Pastry | Measure and sift dry ingredients | Measuring cup set Measuring spoons 1/4" spatula 1-qt. sifter | | |
| | Mix | 1/4-qt. bowl Pastry blender Case fork | | |

| Food or "dish" | Processes | Necessary | Utensil | Desirable |
|-------------------|-----------------------------|--|---------|-------------------------|
| Pastry (cont.) | Roll | 22" pastry board 12" rolling pin | | / 10" spatula |
| | Prick crust, moisten edge | (case fork) (measuring cups) | | |
| | Bake | Two 9" pie pans | | |
| Apple pie | Wash, pare, and slice | (dish pan)* Paring knife 3-qt. bowl | | / Apple parer and corer |
| | Measure and mix | Measuring cup 1-pint bowl Measuring spoons Tablespoon | | o Quart measure |
| Cream Pie filling | Measure ingredients | Measuring cup Measuring spoons 4" spatula | | |
| | Mix dry ingredients | 2-qt. bowl | | |
| | Separate and beat eggs | 3-qt. bowl 1-qt. bowl Rotary beater | | |
| | Scald milk and cook mixture | 2 $\frac{1}{2}$ -qt. double boiler 10" wooden spoon | | |

| Food or "dish" | Processes | Necessary Utensils | Desirable |
|---|-------------------------------|---|-----------|
| Cream pie (cont.) | Beat egg whites, add sugar | 3-qt. bowl Rotary beater (measuring spoons) | |
| | Spread meringue | 6" spatula | |
| | Take up | Broad spatula | |
| Syrup | Measure and cook | Measuring cup 1-qt. sauce pan Case tablespoon | |
| Relishes Celery, radishes, carrot sticks | Wash, scrape, cut | (Dish pan)* (Vegetable brush)* | |
| | Soak in ice water | 3-qt. pan | |
| Salad dressing | | | |
| Mayonnaise | (Purchased at the store) | | |
| French | Measure ingredients | Measuring cup Measuring spoons 4" spatula | |
| | Prepare onion or garlic | Paring knife | |
| | Mix | (Glass fruit jar)* | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------|---------------------|----------------------|----------|------------------------|
| Salads | | | | |
| Fruit | Prepare fruit | (Dish pan)* | | |
| | Apples | Paring knife | | o Short blade knife |
| | | Chopping knife | | |
| | | Chopping board | | |
| | | 1½-qt. bowl | | |
| | Grapefruit, oranges | Short blade knife | | / Grapefruit knife |
| | | 2-qt. bowl | | |
| | | Case fork | | |
| | | Short blade knife | | |
| | Canned fruit | Wall-type opener | | |
| | | 2-qt. bowl | | |
| | | Case fork | | |
| | | Short blade knife | | |
| | Drain fruit | Strainer or colander | | |
| | Mix salad | 4-qt. bowl | | |
| | | 1¼" wooden spoon | | o Salad spoon and fork |
| | | (case fork) | | |
| | Mix salad dressing | 1-qt. bowl | | |
| | | Case tablespoon | | |
| | | Rotary beater | | |
| | Prepare lemon juice | (short blade knife) | | |
| | | Hand-type reamer | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|---------------------------|----------------------------|---|----------|-----------------|
| Salads (cont.) Gelatin | Measure ingredients | Measuring cup Measuring spoons | | o Quart measure |
| | Soften gelatin | Utility cup | | |
| | Dissolve gelatin | 3-qt. bowl Case tablespoon | | |
| | Prepare fruit or vegetable | (Listed under separate items) | | |
| | Mold | 12 gelatin molds | | / Pastry brush |
| Tuna | Prepare tuna for salad | Wall-type opener Case fork Case tablespoon 1-qt. bowl | | |
| Nuts | Crack and chop nuts | Nut cracker Chopping knife Chopping board $\frac{1}{2}$ -pint bowl | | o Nut chopper |
| Fresh vegetables | Wash and chop vegetables | (Dish pan)* Paring knife Chopping knife Chopping board | | |
| | Cabbage, carrots | Shredder | | |
| | Store during preparation | 1-qt. to 2-qt. bowls | | |
| | Tomatoes | 3-qt. sauce pan Dipping basket | | |

| Foods or "dish" | Processes | Necessary | Utensils | Desirable |
|-----------------------|--|---|----------|-----------|
| Salads (cont.) | | | | |
| Canned vegetables | Open can, prepare | Wall-type opener 2-qt. bowl Short blade knife Chopping board | | |
| Potato | Boiled potatoes | (See under potatoes) | | |
| | Cook eggs | 3-qt. sauce pan, flat Perforated spoon | | |
| | Slice vegetables, combine with dressing | Short blade knife 4-qt. bowl Case tablespoon Case fork Perforated spoon | | |
| Sauces | | | | |
| Tomato | (Canned hot sauce used) | | | |
| White | Measure ingredients | Measuring cup Measuring spoons | | |
| | Mix and cook | 2-qt. double boiler 10" wooden spoon | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------|---------------------|--|-----------------|-----------|
| Sauces (cont.) | Prepare white sauce | (Utensils listed) | | |
| Cheese | Prepare cheese | Short blade knife Grater 1-qt. bowl | | |
| Soup | Prepare meat, brown | Butcher knife Chopping board 11" skillet 10" fork | | |
| Vegetable | Simmer meat | 8-qt. kettle | | |
| | Prepare vegetables | (Dish pans)* (Vegetable brush)* Short blade knife | | |
| | Hold vegetables | 1 $\frac{1}{2}$ -qt. bowl 2-qt. bowl | | |
| | Cook and dip | (kettle) 1 $\frac{1}{4}$ " wooden spoon Ladle | | |
| Cream | Measure ingredients | Measuring cup Measuring spoons | o Quart measure | |
| | Mix and cook | 4-qt. double boiler 1 $\frac{1}{4}$ " wooden spoon $\frac{1}{2}$ -pint bowl Ladle | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|-----------------|---------------------------------------|--|----------|----------------|
| Vegetables | | | | |
| Potatoes, white | Wash | (Dish pan)* (Vegetable brush)* | | |
| | Bake | 18" fork | | |
| | Pare and store for cooking | Paring knife 2-qt. bowl | | o Potato parer |
| | Boil | 4-qt. pot 10" fork | | |
| | Mash, heat milk | Masher 1 $\frac{1}{2}$ -pint pan Case tablespoon | | |
| | Browned | (Utensils for boiled) Utility knife 10" skillet Case tablespoon | | |
| | Parslied | (Utensils for boiled) | | |
| | Wash, chop parsley | 3-qt. pan (Kitchen scissors)* | | |
| | Add butter, parsley | Case tablespoon | | |
| | Scalloped (boiled and white sauce) | | | |
| | Bake | 2-qt. casserole | | / Pastry brush |

| Food or "dish" | Processes | Necessary Utensils | Desirable |
|-----------------------------|--------------------------|---|-----------|
| Vegetables | | | |
| Sweet potatoes | Wash | (Dish pan)* (Vegetable brush)* | |
| | Bake | 18" fork | |
| | Boil | Paring knife 2-qt. bowl 4-qt. sauce pan 10" fork | |
| Frozen peas | Cook and season | 3-qt. sauce pan Case tablespoon Case fork | |
| Green, leafy | Wash | (Dish pan)* Paring knife | |
| Spinach, Brussel sprouts | Spinach Store | 4-qt. bowl | |
| | Cook | 8-qt. kettle 14" fork Case tablespoon | |
| | Brussel sprouts Store | 3-qt. bowl | |
| | Cook | 4-qt. sauce pan 10" fork Case tablespoon | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|----------------------|--------------------|--|----------|--------------------|
| Vegetables (cont.) | | | | |
| Asparagus | Prepare and tore | (Dish pan)* (Vegetable brush)* Short blade knife Chopping board | | |
| | Cook | 3-qt. flat pan 4-qt. sauce pan | | o Asparagus cooker |
| | Season and test | Case tablespoon 10" fork | | |
| Canned vegetables | Open and heat | Wall-type opener 3-qt. sauce pan Case tablespoon Case fork | | |
| Carrots | Prepare and store | (Dish pan)* (Vegetable brush)* Paring knife 2-qt. bowl | | |
| | Cook, season, test | 3-qt. sauce pan Case tablespoon 10" fork | | |
| | Glazed | 10" skillet Utility cup | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|---------------------|-------------------------|--|----------|------------------------|
| Vegetables, (cont.) | | | | |
| Beets | Prepare | (Dish pan)* (Vegetable brush)* Short blade knife Chopping board | | |
| | Cook | 6-qt. kettle 14" fork | | |
| | Drain and peel | Colander | | |
| | Slice or dice and store | Chopping knife Chopping board 2-qt. bowl | | |
| | Buttered | 3-qt. sauce pan Case tablespoon 10" fork | | |
| | Harvard Making sauce | 2-qt. sauce pan Measuring cup Measuring spoons 4" spatula | | o 1½-qt. double boiler |
| | Heat and mix | 10" wooden spoon 3-qt. sauce pan Case tablespoon | | |

| Food or "dish" | Processes | Necessary | Utensils | Desirable |
|--------------------|---------------------------|--|----------|-----------|
| Vegetables (cont.) | | | | |
| Squash | Baked | | | |
| | Prepare and cut | (Dish pan)* Utility knife or (axe)* Case tablespoon | | o Kleaver |
| | Bake | Large pan 18" fork | | |
| | Test and remove from oven | Turner | | |
| | Boiled | | | |
| | Prepare | (above utensils) | | |
| | Cook | 4-qt. sauce pan 10" fork | | |
| Cabbage | Prepare | (Dish pan)* Short blade knife | | |
| | Cook | 6-qt. kettle | | |
| | Season, test | Case tablespoon 14" fork | | |

PART II

EXHIBIT B

SOME TYPICAL PROCESSES WHICH WERE ASSIGNED
TO THE VARIOUS UTENSILS LISTED

EXHIBIT B

SOME TYPICAL PROCESSES WHICH WERE ASSIGNED
TO THE VARIOUS UTENSILS LISTED

Sauce Pans, Pots, Kettles, Pans, and Double Boilers assigned for use
in such processes as cooking or warming unless otherwise indicated.

1 quart sauce pan

1. Small amounts, such as sauces
2. Syrup

2 quart sauce pan

1. Sauces for vegetables and meats
2. Cinnamon apples when small amounts of syrup were used.
3. Cream puff mixture for shells

3 quart flat bottom sauce pan

1. Canned asparagus or other foods which are easily crushed.
2. Eggs
3. "Asparagus pack" string beans
4. Frozen peas

3 quart deep sauce pan

1. Most canned vegetables served to the number of people regularly residing in the home management house
2. Vegetables, such as zucchini squash
3. Stewed fruits

4 quart sauce pan

1. Clam chowder
2. Soup--cream or vegetable
3. Macaroni, spaghetti, etc.
4. Vegetables such as broccoli, brussel sprouts, etc.
5. Apple sauce, rhubarb sauce, etc. when cooked for more than one meal

4 quart pot

1. Mashed potatoes
2. Chicken for salad, loaf, or creaming
3. Stewed dried fruit when prepared for more than one meal.
4. Cabbage

6 quart kettle

1. Chicken fricasse
2. Saurkraut and weiners or spareribs
3. Cabbage

8 quart kettle

1. Spinach
2. Hot chocolate for large groups
3. Hot water for teas

1/2 pint pan

1. Melting fat or chocolate
2. Softening butter for sandwich making

1 pint pan

1. Melting fat
2. Mixing materials with melted fat

1 1/2 pint pan

1. Eggs for salad
2. Milk to be added to mashed potatoes

3 quart pan

1. Soak carrot and celery curls
2. Soak dried fruit

Asparagus cooker

1. Asparagus

Deep-fat frying kettle

1. Croquettes
2. Shoe string potatoes

1 quart double boiler

1. Small amounts of sauce

1 1/2 quart double boiler

1. Custard for Floating Island, etc.
2. Scald milk when small amounts needed

2 quart double boiler

1. Scald milk

2 quart double boiler-Continued.

2. Seven-minute icing
3. Cooked cereal

2 1/2 quart double boiler

1. White sauce
2. Cream or lemon pie filling

4 quart double boiler

1. Hot chocolate when seconds are served
2. Cream soups

Mixing Bowls assigned for the following processes:

1 pint bowl

1. Storing small amounts of food during food preparation.
2. Beating 1 egg

1 1/2 pint bowl

1. Combining liquids for muffins, griddle cakes, etc.
2. Beating 2 eggs
3. Mixing filling for sandwiches
4. Storing small amounts of food prepared ahead of time

1 quart bowl

1. Combining liquids for pop-overs
2. Mixing sandwich filling
3. Mixing sauces (tartar)
4. Storing fruits or vegetables for salads

1 1/2 quart bowl

1. Storing fruits or vegetables for salads
2. Mixing small amounts of food

2 quart bowl

1. Mixing foods when volume of mixture not over one quart
2. Beating egg whites for waffles, souffle, etc.
3. Preparing scrambled eggs
4. Holding vegetables after paring

3 quart bowl

1. Mixing biscuits, brown bread, griddle cakes, muffins, etc.
2. Combining materials for baked custard
3. Combining materials for left-over meat dishes

4 quart bowl

1. Mixing waffle batter
2. Storing extra dough from yeast rolls
3. Holding spinach after washing
4. Mixing cookies
5. Mixing angel food cakes

7 quart bowl

1. Yeast rolls
2. Large cooky recipes

Other Cookers

Insulated cooker

1. Chili con carne
2. Stew
3. Chicken fricasse
4. Simmered chicken

Steamer

1. Steamed puddings

Dutch oven

1. Pork or veal chops
2. Swiss steak
3. Pot roast

Roaster

1. Pork or veal chops
2. Swiss steak
3. Pot roast
4. Roast

Broiler pan

1. Oven-made toast
2. Broiled steaks, bacon, and liver
3. Toasted sandwiches

Teakettle

1. Heat water for coffee and tea
2. Heat water for gelatin

Baking Pans assigned for baking unless otherwise indicated.

Baking sheets

1. Cookies
2. Cream puff shells

Shallow baking pan

1. Biscuits and yeast rolls
2. Heating rolls and French bread
3. Heating stuffed baked potatoes
4. Cornbread

Muffin pans

1. Muffins
2. Clover leaf (yeast) rolls
3. Individual pastry shells and bread timbales
4. Cup cakes

Round cake pans

1. Cakes
2. Scones
3. Breadding chops, etc.

Square cake pans

1. Cakes
2. Brownies
3. Gingerbread
4. Coffee cake

Angel cake pan

1. Angel food cake

Loaf bread pan

1. Bread
2. Molding cooked cereal to be fried
3. Molding salads
4. Meat loaf--hot or cold

Large pan

1. Water for custard, etc. while baking.
2. Hold ring mold while baking

Pie pans (9")

1. Pies
2. Use with meat grinder

Baking Dishes assigned to the following foods:

Casseroles (2 sizes used simultaneously)

1. Souffle and fondue
2. Baked puddings and custards
3. Baked beans
4. Tamale pie

Ramekins

1. Individual meat pies
2. Individual meat loaf
3. Noodle, spaghetti, etc. baked dishes

Custard cups

1. Custard
2. Individual baked pudding

Bean pot (1 1/2 quart)

1. Baked beans

Measuring Spoons, Cups, etc. with processes assigned to them.

Measuring spoon set

1. Whenever it was desirable to measure one tablespoon, teaspoon, half-teaspoon, or fourth-teaspoon of material.

Measuring cup set

1. Used whenever a fraction of a cup of non-liquid material was listed.

Measuring cup

1. Listed for liquid measure unless more convenient to use part of measuring cup set already in use.

Quart measure

1. Large quantities of milk or water
2. Filling for pies

Cup

1. Hydrating gelatin
2. Mixing junket with water
3. Holding egg yolk while carrying out other preparation

Case Knife, Forks, Spoons, Spatulas used in preparing the following foods:

Case knife

1. Spreading butter and filling on sandwiches
2. Testing custards and custard-like mixtures

Case fork

1. Testing vegetables
2. Adding water when making pie crust

10" fork

1. Removing toast from boiler
2. Pan broiling meat
3. French toast
4. Testing vegetables

14" fork

1. Stew, chicken fricasse, etc.
2. Stirring noodles, spaghetti, etc.

18" fork

1. Remove baked potatoes from oven
2. Aid in handling large roast

Case teaspoon

1. Tasting
2. Drop cookies

Case tablespoon

1. Mixing sandwich filling and other small amounts of food.
2. Dishing up fruits and vegetables
3. Cooked custard

Perforated spoon

1. Removing cooked eggs from water
2. Stirring gravy

Non-perforated spoon

1. Waffles
2. Pot roast

10" wooden spoon

1. Mixing batters
2. Stirring sauces
3. Stirring pie filling

14" wooden spoon

1. Mixing large amounts of batter
2. Chili con carne and rice

4" spatula

1. Levelling goods measured in measuring cups and spoons

6" spatula

1. Spreading icing on cake
2. Spreading meringue on pie

10" spatula

1. Transfer cookies, biscuits, etc. from board to pan
2. Omelet

Rubber spatula

1. Scraping bowl and spoons when batters were made

Broad spatula

1. Dishing up pie
2. French toast
3. Use with pan fried meat

Turner

1. Griddle cakes
2. Fried eggs

Salad spoon and fork

1. Tossing fruit or vegetable salad

Cutting Knives assigned to the following uses:

2 1/2" blade paring knife

1. Paring fruits and vegetables

4"-5" knife

1. Halving oranges and grapefruit
2. Paring and chopping peaches, apples, etc.

Chopping knife

1. Chopping fruits, nuts, vegetables, etc.

Slicing knife

1. Slicing cold meat
2. Slicing ham, etc.

Utility knife

1. Cutting meat and chicken
2. All-purpose knife

Carving knife

1. Carving roasts, and chicken
2. Carving steaks

Grapefruit knife

1. Sectioning grapefruit and orange halves

Special knife for making carrot curls

1. Carrot curls
2. Radish roses

Potato parer

1. Paring potatoes
2. Paring other vegetables and fruits

Potato slicer

1. Scalloped potatoes

Apple parer and corer

1. Paring apples
2. Coring apples
3. Paring other fruits and vegetables

Kleaver

1. Cutting squash
2. Cutting meat

Beaters used in preparing the following foods:

Rotary beater

1. Eggs and cream
2. Seven minute icing
3. Batters and sauces

One cup beater

1. Anything in small enough amount to be beaten in one cup

Wire whisk

1. Egg whites
2. Folding egg whites into mixtures

Beater from electric mixer

1. Cakes
2. Mayonnaise
3. Eggs
4. Seven minute icing

Pastry Utensils assigned to the following uses:

Flour sifter

1. Sifting flour, sugar, and other dry ingredients

Pastry blender

1. Cutting fat into flour

Pastry board

1. Rolling cookies, pastry, and doughs
2. Kneading dough

Rolling pin

1. Rolling cookies and pastry
2. Rolling dough--biscuits, yeast rolls

Cutters

1. Cutting biscuits, cookies, and other dough

Cake racks

1. Cooling cakes and breads

Cooky press

1. Making fancy cookies

Pastry brush

1. Greasing baking pans and griddle
2. Buttering top of rolls

Miscellaneous Openers and their uses.

Hand-type can opener

1. Opening canned foods when not in the kitchen

Wall-type can opener

1. Opening all cans of food in the kitchen

Bottle opener

1. Opening bottles

Juice Extractors and their uses.

Hand-type

1. When small amount of juice was needed

Wall-type

1. When larger amount of juice was extracted

Strainers, Colandar, Sieve, and Baskets and their uses.

Strainer

1. Straining rice, macaroni, etc.
2. Straining fruits and vegetables

Colandar

1. Washing and draining fresh berries

Sieve with wooden roller

1. Sieving fruit for whips
2. Pureeing vegetables

Dipping basket

1. Dipping tomatoes in hot water
2. Deep fat frying

Miscellaneous Molds assigned to the following foods:

1 quart mold

1. Spanish cream
2. Bavarian

1 1/2 quart mold

1. Carrot pudding

Gelatin molds

1. Gelatin salads
2. Gelatin desserts

Cans for steaming

1. Making brown bread
2. (Could have been used for carrot pudding)

Ring molds

1. Salads and meats

Miscellaneous Utensils and their uses.

Masher

1. Mashing potatoes, squash, and other vegetables

Ricer

1. Ricing potatoes

Chopping board

1. Cutting meat
2. Chopping fruits and vegetables

Grinder

1. Grinding meat
2. Grinding bread crumbs

Mallet

1. Pounding steaks

Skewers

1. Used in the preparation of stuffed chops, veal birds, and rolled roast.

Ladle

1. Dishing soups and stew