DEVELOPMENT OF A SELF-STUDY LESSON ON KITCHEN PLANNING

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DEVELOPMENT OF A SELF-STUDY LESSON

ON KITCHEN PLANNING

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TABLE OF CONTENTS

PREFACE

The author would like to express her appreciation to those who helped with the development and follow through of this study. A special expression of appreciation is extended to her advisor, Mrs. Christine Salmon, Associate Professor of Housing and Interior Design, for constant encouragement and guidance. Other members of the committee, Dr. Florence McKinney, Head of Housing and Interior Design, and Dr. James Walters, Professor of Family Relations and Child Development are acknowledged with gratitude for support and assistance during the study.

Thanks is extended to Miss Millie Clark for her assistance, to Miss Eloise Dreessen for typing the thesis and to the five (5) homemakers, Mrs. Roger Wennman, Mrs. Jerry Polinard, Mrs. Phillip Linneman, Mrs. Charles M. Steeds, and Carma Jo Reynolds, who gave of their time so willingly to evaluate the instrument

CHAPTER I

INTRODUCTION

There is much good information about kitchen planning available. The Small Homes Council of the University of Illinois, the United States Department of Agriculture, state extension bulletins, and women's magazines have presented written or mass media information on kitchen planning, organization and decor. Extension classes and adult education classes present kitchen planning information to help those who are remodeling, planning to purchase a home, or those who want to make better use of their existing kitchen facilities.

Still some homemakers, who would like very much to participate in such classes, cannot. These homemakers do not receive the assistance they want and need because of a handicap. These handicapped homemakers do not have a physical limitation, but rather a circumstantial limitation.

1) Working homemakers have little time in the evening and this time is spent with the family or doing house work.

2) Young homemakers may have pre-school children.

3) Families find babysitting too expensive.

4) Limited education may contribute to a social hesitancy and a lack of desire to attend classes.

5) Limited energy for various physical reasons may render a homemaker unable to attend classes.

In order to reach the homemaker who cannot attend classes, independent learning programs should be developed to present them with a

means of gaining knowledge. These independent learning programs could be checked out of an extension office or borrowed from an adult education instructor on a library loan basis. The homemaker could study at a time convenient to her and in the privacy of her own home.

In 1968, a library loan program of independent study packets were initiated by the Kansas Extension Service. Any woman in the state may go to her county Extension Office and check out a packet of study information on many topics related to homemaking or personal improvement. (For a selected listing from these 113 topics, see Appendix B.) The response to the independent, or self-study packet, has been favorable. Through this method, the homemaker can avail herself of the information by using this library system rather than attending classes. In this way more families benefit from the research that has been done.

The independent study lesson developed in this thesis can be used to help bridge the gap between kitchen builders and kitchen users. Builders operate on the basis of giving the customer what they think the customer wants when a home is purchased. If prospective homeowners know what they need and want, rather than relying on the builder, this gap would diminish.

A high percentage of remodeling is done in the kitchen because families do not shop carefully or plan for homes that fit their needs. The homemaker who is not purchasing a home or remodeling her present home, may also use the packet as a means of studying kitchen planning principles. Use of this packet can lead to reorganization of present kitchen without major remodeling.

Statement of the Problem

The purpose of this study is to develop an independent learning instrument containing information that will give circumstantially limited homemakers access to information on kitchen planning without attending classes offered by the extension service or the public school adult education programs. The answers given by homemakers who use the lesson will determine if the self-study approach is an effective method of teaching kitchen planning.

Objectives of Study

1) Develop teaching materials the homemaker can use at her convenience to learn the principles of kitchen planning.

   A) These materials will be based on application of research findings from the Small Homes Council, United States Department of Agriculture and state extension bulletins, current books and magazines.

   B) The printed booklet will have places for the homemaker to evaluate her kitchen, make notes, and draw a floor plan.

2) Develop materials that give homemakers information on kitchen planning standards similar to course content of an extension class or adult education program.

Background of Study

The kitchen, as well as the whole home, should meet the needs of the family who live in it. Many families today live in homes where kitchen facilities do not meet their needs. Factors contributing to this inadequacy are a lack of information about kitchen planning and

failure to identify family needs. If a homemaker and her family know what they need in a kitchen, they can make better use of the kitchen they are presently using, or make a better selection when they purchase or rent a home.

A well-planned kitchen is important to the family for the following reasons:

1) Family living has become more complicated by changes in living patterns.

2) Roles of family members are less rigidly defined.

3) The distinction between mother role and father role is less defined.

4) Homemakers spend less time in homemaking activities because of employment outside the home or civic and social commitments.

5) Families spend less time together and more time commuting to and from living activities.

6) Couples are marrying and having children sooner.

These six family trends mean food related activities are no longer solely the homemakers job. Even with these changes in family roles, the woman is still responsible for pleasant family relations and family health through good nutrition.

A better planned kitchen can make the homemaking role more enjoyable and easier. In today's busy families, homemakers have many uses for the time they save on kitchen activities. Despite convenience foods and automatic equipment, food and food related activities still occupy a sizable portion of a homemaker's time.

A 1960 study of 190 women's homemaking activities (food work, house care, clothing care, shopping, and out-of-doors work) revealed these findings. The part-time employed homemakers in the study spent 29%, or 49 hours, a week in foods or food related activities, while the

full-time employed homemaker spent 19%, or 31 hours a week. For both groups of homemakers, slightly less than half their homemaking time was spent with foods and food activities. (1)

The problems of young homemakers, according to Genevieve Weber Schubert's (1958) study of 104 homemakers in Sturgen Bay, Wisconsin, indicates that kitchen oriented problems are prominent. The women, all under twenty-five years of age had been married from one to five years. Thirteen of the 104 were employed full-time, 60.5% indicated problems in planning family means, 54.8% expressed problems in major decisions, 52.9% said planning work schedules was a problem for them, and 49.0% indicated family budgets as a problem. (16)

The homemaking activities of 250 urban and rural homemakers studied during 1954 revealed that these homemakers spent from 1.9 hours to 3.9 hours in the kitchen each day. This yielded a total of 13.3 hours to 27.3 hours per week. (25)

The results of these three studies point up the fact that even though today's homemaker spends less time and energy in kitchen related activities, the kitchen is still an important room in her life. With the decrease in the amount of time put in kitchen related tasks, there is more sharing of these responsibilities. Other family members assume more responsibility for kitchen tasks, which makes well-planned and pleasant surroundings important to each family member.

Two reliable sources from which information on kitchen planning is available are the Small Homes Council, University of Illinois, and the United States Department of Agriculture. Both have completed and published extensive research. Until the bulk of information is presented to the homemakers who can use it, the purpose of the research is

unfulfilled. Adult education is the vehicle by which homemakers can be reached with kitchen planning information.

The purpose of the extension service is to disseminate educational information to the people in the county, regardless of age, income level, race or place of residence. The educational information comes from a three-way alliance between federal, state and county governments. The federal (The United States Department of Agriculture) and the state (Land Grant Universities) sponsor research in agriculture and home economics. The results from this research and other research in these areas are then spread to the county by the extension personnel within the counties. Part of the extension philosophy is to help adults help themselves. They can help themselves by attending demonstrations, lessons, classes, and tours, or by privately searching for answers to their questions and problems.

In these times as the extension audience grows, the extension home economist has become a valuable resource person in a county. She directs homemakers to sources of knowledge that they can tap themselves. Today's homemakers have a higher educational level than in the past. Many of these women enjoy finding their own answers after guidance from the home economist.

Definition of Terms

Self-study lesson -- an independent learning program; study materials including written and visual presentation to give information on kitchen planning.

Circumstantially limited homemaker -- a homemaker, who for reasons centered in her environment, cannot attend classes.

Hypothesis

If a homemaker uses an independent study packet on kitchen planning, she can learn to apply the principles of kitchen planning without class attendance or individual conference with a professional.

Busy homemakers will prefer independent study of kitchen planning to class attendance.

CHAPTER II

REVIEW OF LITERATURE

Learning is a life-long occurrence. As knowledge is acquired, attitudes and values change and new abilities develop. School contributes to this process, but most of it takes place outside the school by daily influences. Homemakers are influenced daily by associates, the mass media, and practice. (23)

Homemaking education today does not cease after formal education. The homemaker can continue preparing herself to meet new problems by some form of adult education. Social or economic standing, age, or race do not limit her. The limitation is her own desire for knowledge or the lack of facilities. (23) The homemaker, who checks out a self-study packet, is indicating her desire for knowledge. The packet should be designed to spark her interest and keep her motivated to finish the packet and apply what she learns.

The desire for knowledge can be strong, but if facilities are inadequate or absent, then what? Adult educators must concern themselves with the person who is the victim of a lack of facilities. Extension and adult education classes provide facilities to those who can come to classes. There are homemakers who would like very much to participate in such classes, but cannot.

The young woman may feel this limitation keenly. Young families are busy with marriage, children, occupational ambitions, and selecting

and furnishing a home. Because of the need for knowledge in all these areas, early adulthood offers the most teachable mements. (6)

Homemakers who are employed outside the home, either full or part-time, are limited in the amount of time they have to devote to structured learning experiences, social or civic affairs. (6)

As homemakers grow older, they are limited in the amount of energy they have.

> The overall loss in energy that increases with age influences the adult's ability and willingness to participate in educational programs. The energy requirement of his vocational life may be so high that there is little energy for taxing educational tasks. This necessitates adjustment in the form and nature of the educational task in order that its energy requirement is not prohibitive in terms of energy available. (19)

Past efforts in adult education have been mainly remedial in content rather than geared to adult interests and an adult level. This picture is changing because of free education and compulsory attendance. (10)

People of many professions are involved in adult education. Librarians, night school instructors, extension personnel, counselors, program directors for social agencies, managers, foremen, coaches, and trade union officials are important people in the scope of adult education. (10)

In 1961, nine million adults were engaged in either formal or informal adult education. Of this nine million, only three million were in the public school adult education program. (20)

Adults learn in two basic kinds of settings.

1) The natural societal setting

> Learning comes from daily activities and experiences such as reading, television, conversation, and participating in community activities. This setting provides many

> opportunities for learning, but they are undirected, leaving learning to chance. To be self-educated in the societal setting, an adult must take advantage of all opportunities offered and be motivated by an intense desire for knowledge. Therefore few adults are self-educated in their societal setting.

2) Formal instructional setting

> In this setting a planned program of instruction is aimed toward leaving an educational message with participants. The setting may be a formal classroom, or an informal meeting of the P.T.A., study club, or church group. Because of planning and control, the formal instructional setting limits the element of chance. (19)

For usable learning adults need a combination of both settings.

The whole of adult education is geared to teachable moments. Demand for knowledge and a place to use it immediately are motivating forces. This is in contrast to education of youth, which is learning in preparation for the future. Many times learning for the future is ineffective because there is no place to use it once it is acquired. (19) If the learner has a place to use newly acquired knowledge, it is of more value to him. Teachable moments occur when subject matter is presented at the time it is needed. Self-study packets make use of teachable moments. As the homemaker has questions, she can check out a packet and use it at her own time and her own rate of learning.

The adult student has three distinct advantages in a learning situation.

1) Experience of living
2) Learning with a purpose
3) Desire for learning that has immediate use (22)

Independent study is a method of education that makes good use of an adult's abilities. This topic has been popular but there seems to be an apparent lack of practice.

> Independent study, while still in its infancy as far as tested and proven technique and materials are concerned, is being accepted sufficiently by a variety of persons in all walks of life, not the least important of whom are teachers and other educational leaders. (13)

Some correspondence studies, much like the self-study packet of this study, have made use of learner participation. Training kits with written instructions and supplies present a problem for the student to solve. These training kits have been successfully used in areas such as, electronics, dry cleaning, drafting and art. (21)

In all learning situations visual teaching aids reinforce the information presented. Illustrations can be successfully used to explain both written or spoken word. When properly used in relation to objectives, visuals are a worthwhile tool. (17)

A review of the literature suggests the usefulness of self-study materials in assisting individuals to acquire new insights, understandings, and atttiudes. An area which needs additional materials is that concerned with helping homemakers with the process of kitchen planning. It is in this area that the present study makes its contribution.

CHAPTER III

PROCEDURE

Development of the Instrument

A self-study packet on kitchen planning should present standards from research, and give the homemaker a chance to use her own ideas and experiences to expand and adapt this information to fit her needs. The instrument should be easy to use, stimulating to the learner, attractive, inexpensive, and easy to replace when worn.

These specific ideas influenced the development of the instrument. Adults appreciate teaching attempts which give them a chance to use their knowledge and experience (7). Teaching techniques that simulate real situations give the learner a chance to practice and make decisions that can occur in a real situation.

> A successful teaching method must include more than a simple presentation of the material to be learned. To be successful a method must produce the learning sought by the teacher, but this alone is not enough; . . . What is learned must be learned in a form that can be transferred outside the classroom or to the learning of other materials. (11)

The instrument developed followed Kuethe's recommendation for a successful teaching method. The printed presentation included specific information on planning standards. Line drawings supported the printed message. This gave the learner a chance to visualize standards as applied to a given kitchen. Homemakers were given a further chance to transfer and apply learnings to their own situation by two sections of

participation at the conclusion of the lesson. The learner participation section included a set of questions, which the homemaker could use to evaluate her kitchen, and a sheet of graph paper for drawing a floor plan and elevations.

A review of literature in the areas of homemaker's kitchen problems, adult education and kitchen planning standards gave background to the study. An abundance of material is available on adult education and kitchen planning. Writings about independent study at the adult level were difficult to find.

Becoming familiar with many kinds of kitchen information was a primary goal of the review of literature. The study included research findings, professional journals, extension pamphlets, magazines and books on the consumer market.

The information on kitchen planning ranged from vague and insufficient to technical and exhaustive. The findings from research done by the University of Illinois were especially important to the development of the content of the instrument. The information from all sources was carefully analyzed and evaluated before selections were made.

Several methods of presentation were considered: flash cards, flip chart, printed booklet, tape recording, and slides. Other possibilities considered before making final decisions were: pictures or line drawings, black and white or color pictures, vertical or horizontal printing on the page, and plastic covered pages to prevent soil and wear.

Factors that influenced the decision were expense of printing black and white versus color, photographic work and expense of reproducing pictures, ease of replacement for worn or soiled pages, binding,

and number of copies needed.

In view of these limitations, the instrument was developed with the following format: black and white copy, printed vertically on an 8½ inch by 11 inch page, illustrated by line drawings, and punched pages inserted into a loose leaf binder. The table of contents gives the basic topics or learnings on the far left with the sub-topics indented. From the table of contents, the homemaker can select parts that are of interest to her or use the whole lesson.

Individual rate of speed for reading and study are important in independent learning situations. A suggested deadline was mentioned in an orientation before use of the instrument, but no pressure was exerted on the subject to stay within this deadline.

Educational level of homemakers in the sample group was not a primary concern. The material was written with a high school educational level in mind. The instrument reads much like a magazine that homemakers are accustomed to reading.

Selection of Sample

The instrument was pretested and evaluated. The findings of this pretest were to assist the researcher in developing the instrument and are not reported here.

Five different homemakers were selected as case studies. These five homemakers were selected because their time or resources were limited by one or more of the following:

1) Gainful employment outside the home
2) Preschool children
3) Financial limitation
4) Limited education
5) Limited energy

Collection of Data

An interview was scheduled with each woman when she had completed the lesson. The interview with each homemaker gave the researcher a chance to gain insight into the homemaker's learning about kitchen planning. The interview was broken into four general areas with specific questions asked in each area. A copy of the interview is in Appendix C.

Question (5) "What do you consider the problems in your kitchen?", was asked when the instrument was delivered. The remainder of the data was gathered in the interview after the homemaker had completed the lesson. Questions from the interview were written up in case study form.

Treatment of Data

The wide variety of individual needs of each member of the sample group and the wide range of topics covered in the instrument can best be recorded in terms of the individual homemakers ideas after using the instrument. Data collected yielded information about the reactions of the sample group to the content of the instrument and to the independent learning method. Information on the reactions of the sample group are described in Chapter IV.

CHAPTER IV

FINDINGS AND OBSERVATIONS

Because each family has different problems in their kitchen, each homemaker was searching for different answers to her questions. An assessment of each homemaker's knowledge about kitchen planning was impossible. More important than learning details of kitchen planning is the fact that each homemaker gained background knowledge and specifics she can apply to her kitchen.

Reaction of the homemakers to the instrument, five case studies, follows:

Case Study No. 1

This family is a young married couple, both are under 35 years of age, with three active children, aged 10, 8, and 4 years. Both parents are students and will complete degrees in the next few years. The father works part-time and attends classes while the mother is homemaker and student. Because of the length of time required to gain a degree in this manner and the activities of school-aged children, this family is a more permanent resident of Stillwater than many other college families.

The homemaker has had past training in home and kitchen planning. Because of this training, she determined the problems of her kitchen before using the lesson. She identified these problems of her corridor,

or two-wall kitchen, as traffic flow, swing of the refrigerator door, some congestion when the 8 year old girl helps with food preparation, and the need for more dining space in the kitchen area.

After the lesson she had not isolated any further trouble spots. Two of the problems she recognized are included in the family's future improvement goals. The refrigerator can be replaced with left-handed door equipment when the next refrigerator is purchased and a harvest (long, narrow, drop-leaf table) table is planned to replace the present table.

In evaluating the instrument, she thought the lesson was presented orderly and clearly, was easy to read and follow, and attractive to view. She used the whole lesson and completed the "Floor Plan" and "How Does Your Kitchen Rate." Because of her past training, there were no major changes in her thinking. She found using the instrument a reinforcement of her thinking. In further comments she suggested information on window treatment for presentation in a similar format.

Case Study No. 2

The family of this study is a full-time student and a young full-time employed homemaker. The homemaker has 2 years of college and the husband will complete his degree in 2 years. Both are under 30 years of age. Because of student mobility, they are renting.

During the food preparation activities the homemaker works alone and experiences no congestion. Before using the instrument she identified the shortcomings of her kitchen as a lack of storage space.

After using the instrument, she identified problems of the two-wall kitchen more specifically as: need for counter space at the range

and refrigerator, a refrigerator door that swings the wrong way, and the need to replan centers in the kitchen to get the best storage from the amount of space available. At this time she has started relocating supplies and equipment in the centers.

This young homemaker had no previous exposure to kitchen planning. She found the information clear and concise. The booklet was not attractive to her, but it did answer her questions. It presented a few ideas for her today in a rental situation, and ideas for the future permanent home. She used the whole instrument and had no questions about drawing the floor plan. It took between three and three and one-half hours for her to complete the lesson.

In her evaluation, she indicated that she enjoyed the lesson and has found it related to other reading in magazines. The comfort of not having to dress to go out for class and being able to work at her own speed, retracing if necessary, were her reasons for preferring independent learning to class attendance.

Case Study No. 3

The family in this case study is composed of a full-time student and a full-time employed homemaker. Both are under thirty years of age. The husband has two more years before earning his degree; the wife completed 2 years of college. They consider Stillwater a temporary home.

The homemaker is assisted in the kitchen by her husband. There is no congestion when more than one is in the kitchen. Before the lesson, she considered the lack of counter space and storage space by the range and refrigerator the main problems of her kitchen.

Enough subject matter was presented clearly for this homemaker. She considered the instrument attractive, and completed all parts of it in about four hours. She divided her time into small segments and found it convenient to match her time with parts of the instrument.

After using the instrument she further identified problems in her kitchen as improper storage and small appliances located in wrong centers.

In conclusion, she understands kitchen planning better now and has rearranged the kitchen. If given a preference about independent learning versus class attendance, she prefers independent study. She thinks what she learned will be of help to her later in a permanent home.

Case Study No. 4

The family in this case study is composed of four people, parents and two daughters, ages eight and five. The father is an assistant professor at Oklahoma State University, and the mother is a full-time employed secretary. The family occupies a rental home.

The kitchen of the home is "U" shape with an isolated refrigerator. Traffic flow between the "U" and the refrigerator and the distance to the refrigerator is the major problem of this kitchen. The homemaker has some assistance in the kitchen, but they experience no congestion during these times.

Subject matter presented was clear to the homemaker. It answered her questions and presented facts on the dining center, work triangle and drawer dividers, which were especially interesting to her. She did not draw the floor plan.

The subject had no past training in home or kitchen planning. She

understood kitchen planning better after using the instrument. Independent study was preferred to class attendance. The lesson took 30 minutes skimming time and more concentrated effort in areas of special interest to the homemaker.

In evaluation, this homemaker enjoyed using the instrument. Her plans are for some reorganization of storage and centers in the kitchen.

Case Study No. 5

The family owns their own home. The couple are both about 40 years old and have two teenage daughters. The family selected the home after it was built, and therefore had nothing to say about the kitchen plan. The family is satisfied with their two-wall kitchen. The kitchen is between the dining room and bedroom, but the family does not experience a traffic problem.

When all three women in the family work together during food preparation, they are not crowded. None of the women have had training in kitchen planning. The only problem the family identified was that the top shelves in the cabinets are too high for them.

One of the girls was interested in the lesson. Locating centers, storage and cabinet heights were of most interest to her. She had no high school home economics and is interested in keeping a copy for use in selecting an apartment or home in the future.

The time needed to complete the lesson was 1½ hours. The homemaker did rate her kitchen, but did not draw a floor plan. The homemaker prefers independent study to class attendance.

After the homemaker had used the lesson she gave it to a friend who was remodeling her kitchen. The friend used the instrument as a

guide in the remodeling project.

Summary

The instrument answered questions the sample group had about their kitchens. The lesson gave enough information and was easy for them to understand. Their statements indicate they understand kitchen planning better after having used the instrument. Three mentioned using the information for future kitchens they will use.

Each member of the sample group was asked to decide where her kitchen needed improvement. Three of the five have made the needed improvements that fit into current ownership and financial patterns. The other subjects plan changes as time and finances allow.

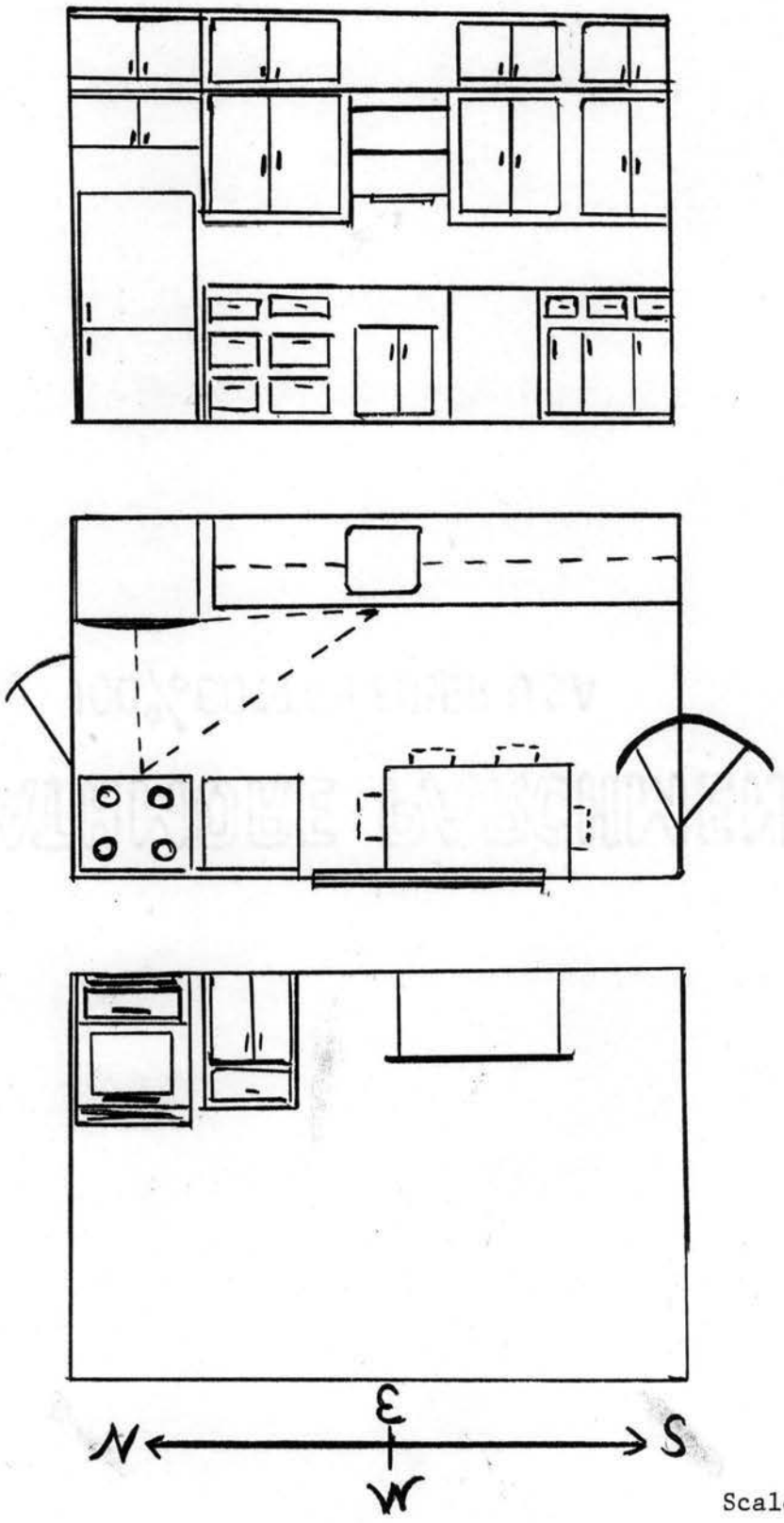
A better explanation of simple, inexpensive improvements could have been given. The information is presented, but if a better explanation were included, there would be less chance for homemakers to feel changes in their kitchens involve major expense.

All five subjects preferred the independent study method to attending classes. Their reasons included the comfort of home dress versus dressing for class, and freedom to progress at their own rate of speed, backtracking if necessary.

The time involved for independent study for this group ranged from three to four hours. This was equal to the amount of time they would spend in class. Any work on their own kitchen such as drawing floor plans and looking in cupboards would be in addition to class time, if they were in class. The amount of time involved in independent study was not much less. The major factor was convenience.

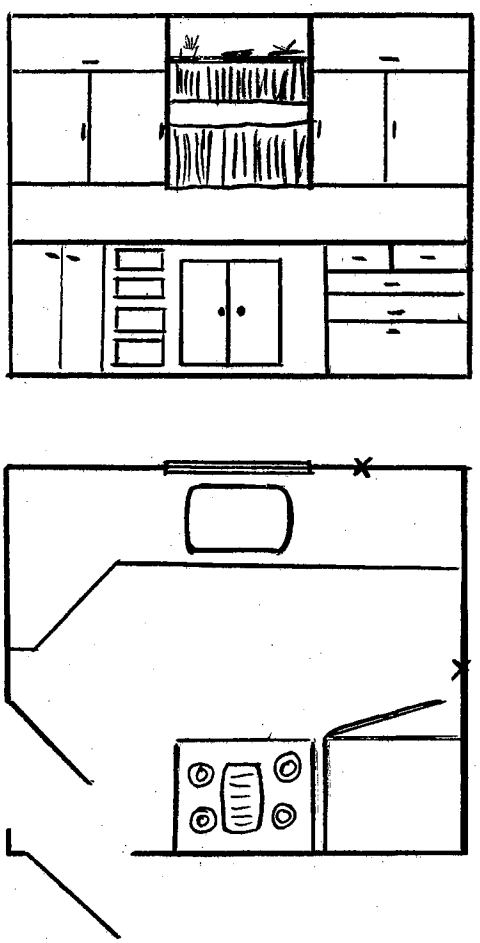
Two of the five subjects indicated interest in printed copies of the instrument. They also felt it would be of interest to many other homemakers if it were printed.

Floor Plan of Case Study 1



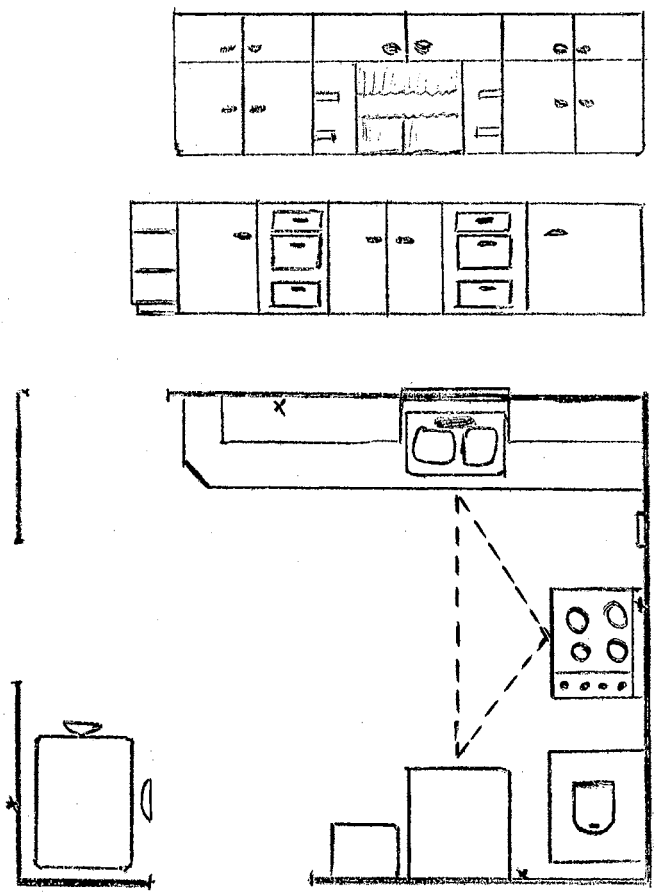
Scale ¼" = 1'

Floor Plan of Case Study 2



Scale ¼" = 1'
X = electrical outlet

Floor Plan of Case Study 3



Scale ¼" = 1'
X = electrical outlet

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

In order to gain insight into kitchen planning as a topic for independent learning this study developed and presented a method of evaluating an instrument about kitchen planning.

Goals of the instrument were as follows:

1) Make kitchen planning information available to homemakers who cannot attend classes

2) Present the complex topic of kitchen planning in enough detail and in a simple manner to answer questions and create a learning situation uncluttered with excess detail

3) Prepare an instrument that will increase awareness about good kitchens so families can select better kitchens in apartments and homes.

An instrument was developed keeping these goals in mind. The printed presentation included specific information on kitchen planning standards. Line drawings supported the printed message. Homemakers were given a chance to transfer and apply learnings to their own situations by two sections of participation at the conclusion of the lesson. The homemakers were asked to evaluate their kitchens and draw a floor plan and elevations. The instrument was used and evaluated by five homemakers who were interested in kitchen planning. Their evaluation in the form of case studys led to the following conclusions.

Conclusions

The evaluations of the instrument led the researcher to beleive that this study supports these hypotheses

> If a homemaker uses an independent study packet on kitchen planning, she can learn to apply the principles of kitchen planning without class attendance or individual conference with a professional.
>
> Busy homemakers will prefer independent study of kitchen planning to class attandance.

Recommendations

Other audience trials of the instrument could yield information about the popularity of the topic and the number of homemakers who can be reached by this method. The instrument could be placed in a state or county extension office, public library, or other place easily accessible to homemakers. Publicity on the women's page, the extension home economist's column in a local newspaper, or a radio announcement could acquaint homemakers with the idea and availability of the instrument. Then response in number of participants who would make the effort to use such an instrument could be measured.

Other housing and home furnishings topics that could be presented through an independent learning method are as follows:

1) selecting and financing a suitable dwelling,
2) improving household storage,
3) selecting home furnishings.

The number of requests for copies leads the researcher of the study to believe this booklet would be helpful if printed. The use of slides or colored pictures, including a before and after series, would make an excellent conclusion for the lesson. Other changes in the

format, such as addition of color to pages and cover, and a cover design would make the present instrument ready for printing.

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APPENDIX A

KITCHEN PLANNING CAN BE FUN!

TABLE OF CONTENTS

KITCHEN PLANNING CAN BE FUN!

I'm so glad you are interested in kitchens. The kitchen is a very important room of your home. Stop and think--how much time do you spend there? The kitchen has been called the "heart" of the home, because you, as a homemaker, spend a great amount of your waking hours in this room. When the children come in from play or school, how many times do they go straight to the kitchen? Does your husband like to come in from work and check to see what is for dinner?

You are concerned that your family is happy and properly nourished. Is the time all family members spend in the kitchen a happy time? The kitchen plays host to many family activities, such as, children's play, teen gatherings, neighborly visits, hobbies, laundry or sewing, ironing, and keeping family business records, as well as the task of feeding the family.

The information in this packet is designed to help you if:

1) Your family is planning to move to a new home. The kitchen in this house can influence your new way of life.

2) You have decided to remodel your present kitchen. It is helpful to have facts and ideas when you visit with the carpenter.

3) You would like to improve your present kitchen with inexpensive minor changes you can do yourself. Shortening the distance walked, reorganizing centers and improving storage are small changes that can make a large difference in your kitchen. In this booklet, we will analyze your kitchen needs, visit about what makes a good kitchen, and then do some kitchen planning.

Standards presented are those established by research. They are

ideal situations which you should be striving toward. Of course, this does not mean you can and should arrange your kitchen exactly as illustrated. The idea of this packet is to give you a chance to become familiar with good kitchen planning ideas. The kitchen should fit your needs. Your ability to take the information presented and work with your kitchen will determine the final results.

Why don't you take this book right to your kitchen and go through it there. It will be easier to think about the information presented if you are in the kitchen. You will be asked to make notes, measure, or check certain details. Please do so and save all notes to refer to later during your planning.

As you go through the book, I would like to suggest conferences with your husband. Family shopping trips to see what is on the market are also helpful. If you are planning to remodel or build, a conference with the contractor or builder is a must before final stages of planning. Please do not stop after you have gone over this book. Look on the news stand and in your library for more information and ideas.

ACTIVITY CENTERS IN THE KITCHEN

The kitchen, no matter what type, is divided into three major activity centers.

Mixing

Cleaning

Cooking-serving

A good activity center gives you:

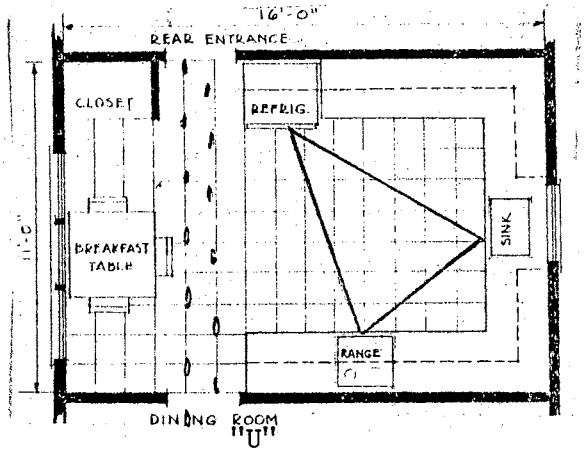
1) Sufficient uninterrupted counter space for activities of the center
2) Space for major and minor appliances used in the center
3) Enough storage space for equipment and utensils needed for activities
4) Enough storage space for supplies used in the center
5) Easy access from one center to other centers
6) Good lighting and enough electrical outlets with plenty of power

THE WORK TRIANGLE

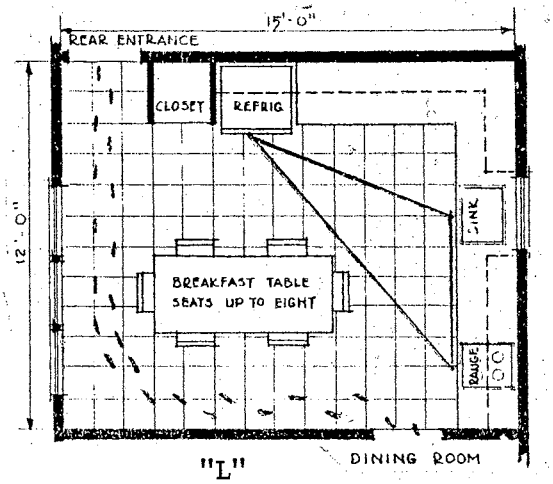
The work triangle is used as a guide to reduce the number of unnecessary steps taken while using the kitchen. Each point of the triangle should rest on the major appliance in the activity center. A good triangle avoids traffic or walking patterns through the work area. If traffic must cross the kitchen, doors can be located away from the work triangle.

The following are examples of a work triangle and traffic patterns in each of the basic types of kitchens.

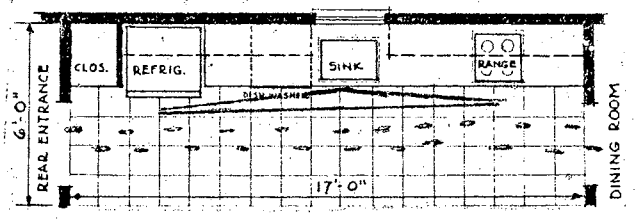
WORK TRIANGLES AND TRAFFIC PATTERNS



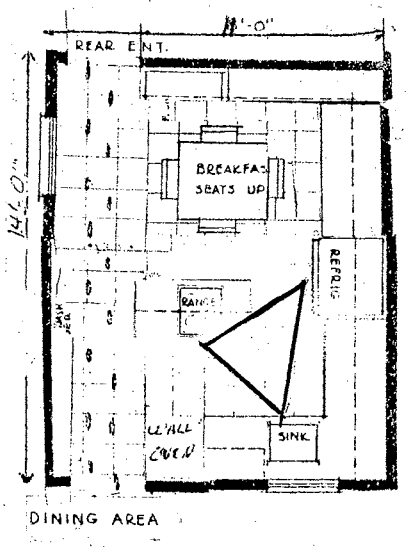
"U"
Triangle 19'0"



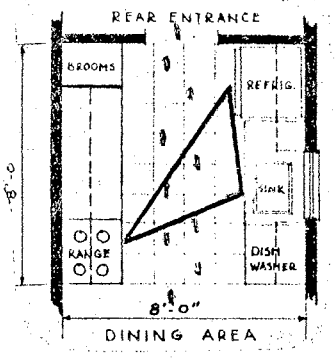
"L"
Triangle 23'0"



One Wall
Triangle 23'3"



Island
Triangle 12'0"



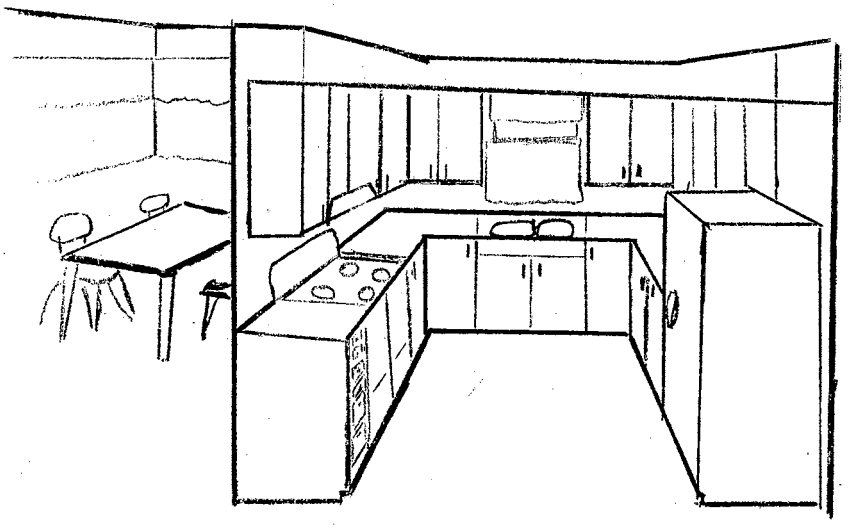
Corridor
Triangle 19'9"

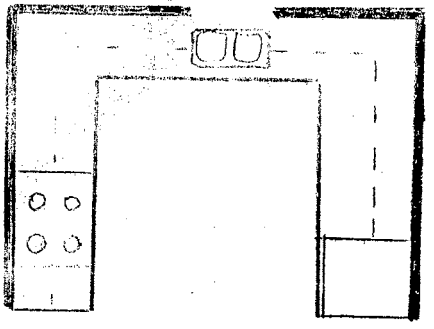
The total distance to walk from one point of the triangle to the second point and on to the third and back to the first should be not more than 22 feet. The total distance is best over 12 feet and under 20 feet.

Between sink and refrigerator -- 4-7 feet
Between sink and range -- 4-6 feet
Between range and refrigerator -- 4-9 feet

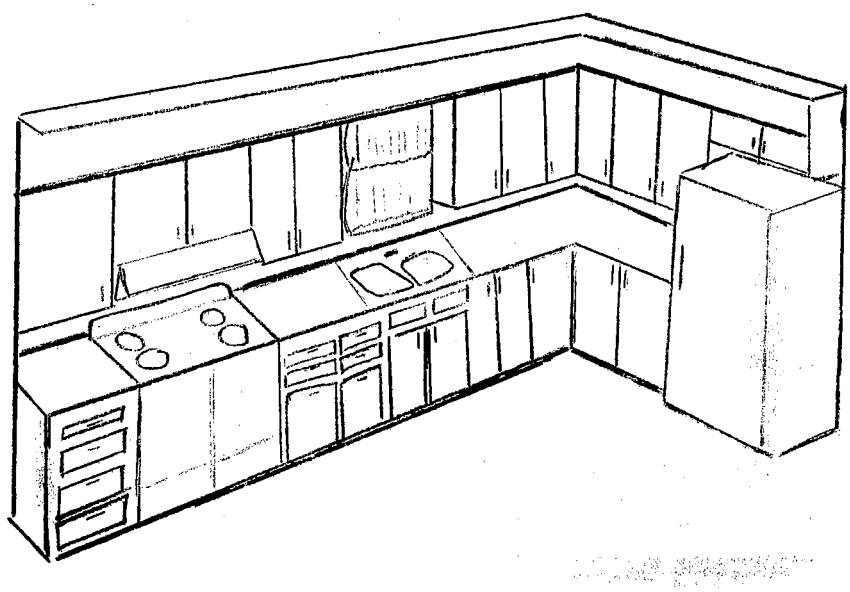
BASIC TYPES OF KITCHENS

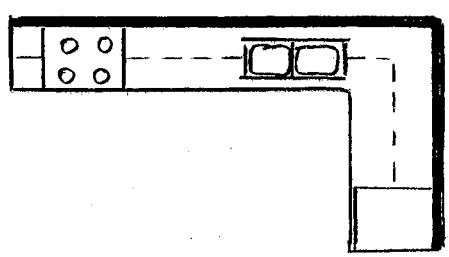
The following diagrams represent the basic types of kitchens.



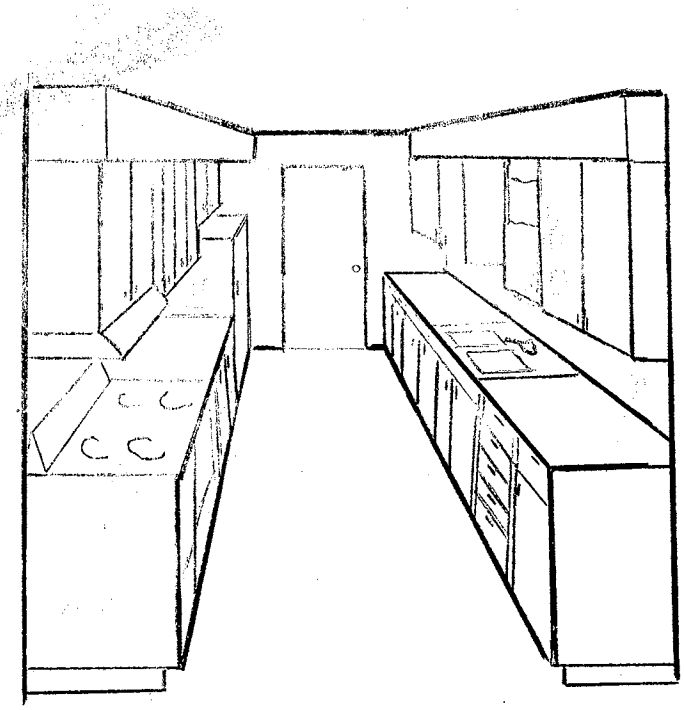


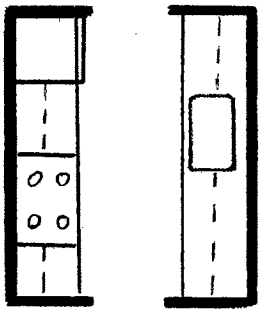
"U" Shape Kitchen



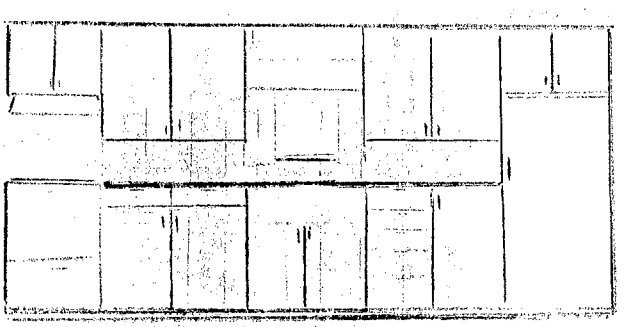


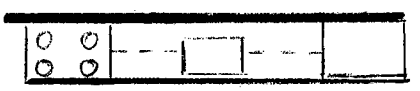
"L" Shape Kitchen



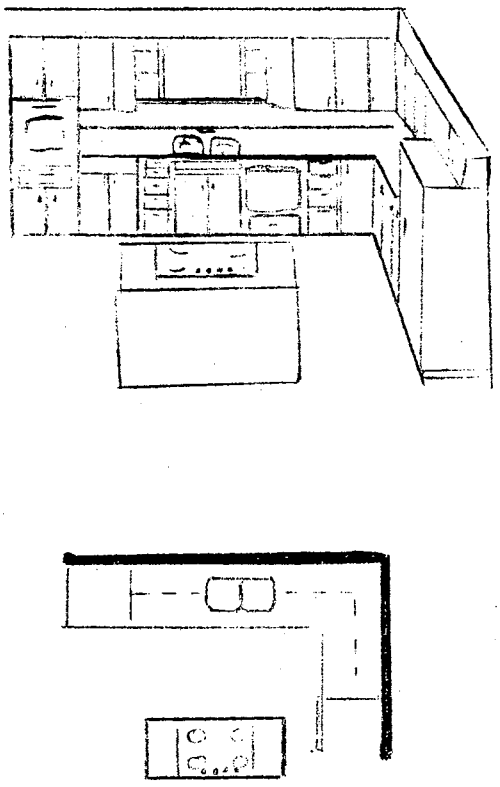


Corridor or Two Wall Kitchen





One Wall

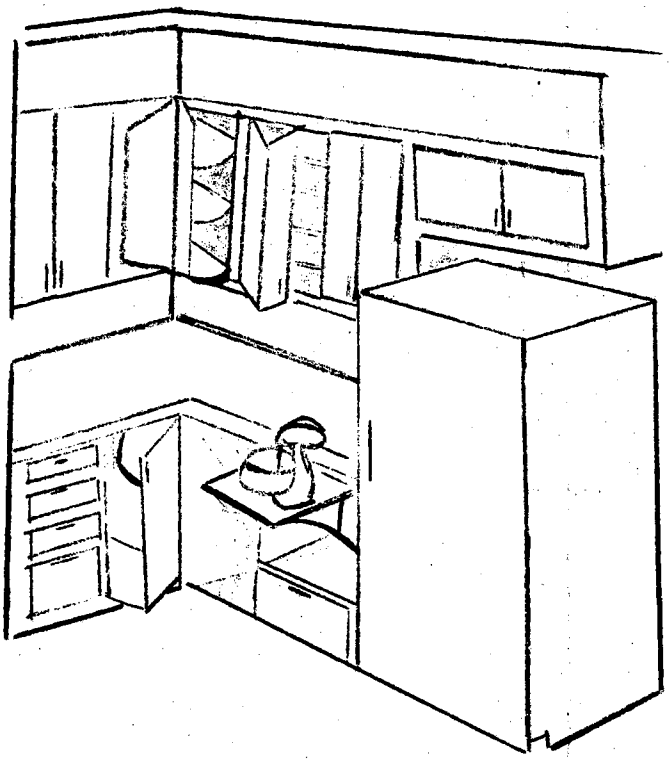


Island Arrangement

THE MIXING CENTER

The mixing center provides space for preparing food. Between the sink and refrigerator is a good location for the mixing center. This location cuts extra steps to the refrigerator for perishable supplies such as milk and eggs while preparing foods.

WHAT MAKES A GOOD MIXING CENTER?



1) Sufficient uninterrupted space for a work area.

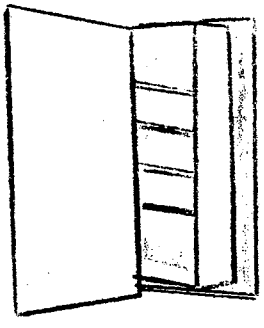
Most homemakers need from 36 inches to 42 inches of counter space for mixing. Fifteen to eighteen inches of counter space is needed on the opening side of the refrigerator. This space is useful to set food on while opening the door, or removing several items from the refrigerator at the same time.

If centers are close together, they can share the same space. The 18 inches needed by the refrigerator can also be counted as part of the 36-42 inches for mixing, if the refrigerator is located at the mixing center, as pictured.

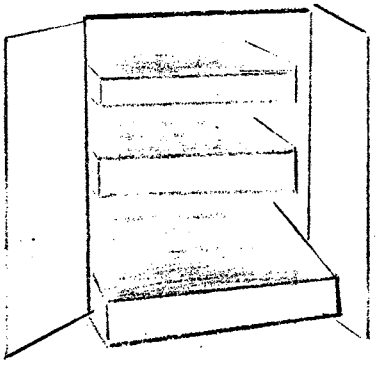
2) The major piece of equipment in the mixing center is the refrigerator. Minor electrical equipment may include a mixer or blender.

3) A good mixing center provides enough storage space for equipment and utensils, such as:

mixer	mixing bowls	baking pans
blender	measuring spoons	cookie sheets
food chopper	measuring cups	casserole dishes
grinder	sifter	roasting pans
beaters	spatulas	refrigerator dishes
rolling pin	knives	wax paper
	scissors	aluminum foil
		paper towels
		recipe file



Swing-out Shelves



Pull-out Shelves

A BASIC STORAGE PRINCIPLE--

STORE AT POINT OF FIRST USE

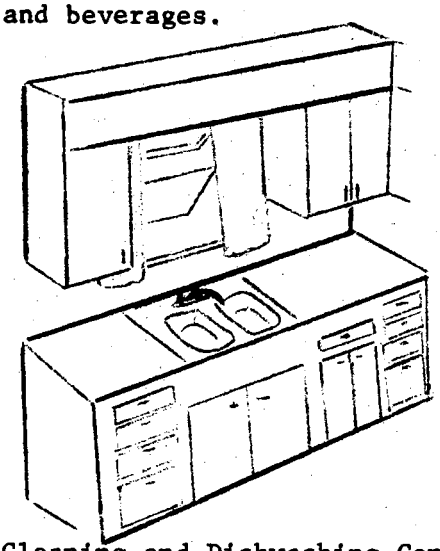
4) A good mixing center provides enough storage space for supplies needed to prepare foods. Supplies to be stored in the mixing center are those used first in this area such as:

flour	non-perishable foods	mixes
sugar	some canned foods	packaged foods
spices		
leavening agents		
flavorings		

5) A good mixing center is located within easy access to the refrigerator and sink. The best place is between the sink and refirgerator. Alternate possibilities might be between the sink and range, or the kitchen table, if it is near. Since preparing and mixing food calls for clean-up, distance to the sink is important.

THE CLEANING CENTER

The cleaning center provides a space for cleaning and washing dishes, as well as washing fruits and vegetables, and adding water to foods and beverages.



Cleaning and Dishwashing Center

WHAT MAKES A GOOD CLEANING CENTER?

1) The good cleaning center or sink center should give 36 inches of counter space on the right and 30 inches on the left.

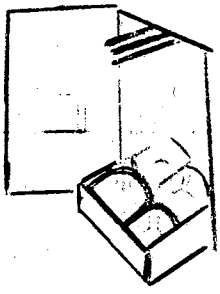
This space is for stacking dirty dishes before washing or for stacking clean dishes before returning them to the cabintes. The right-handed homemaker finds it convenient working from right to left. She will find it convenient to arrange her whole kitchen on the right-handed sequence. This is why the sink has 36 inches on the right side for dirty dishes. The left-handed woman can reverse the spaces and it will be more convenient for her. Another possibility for the left-handed person is to follow the right-handed pattern. Many "lefties" do and find it no more difficult.

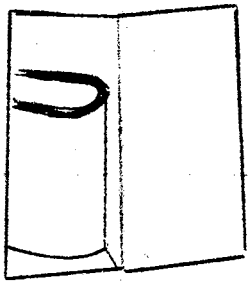
2) The major equipment in the cleaning center is the sink, the dishwasher, and the disposal. The dishwasher is generally placed on the left side of the sink. If no dishwasher is installed at present, it is wise planning to have a place for one in the future. Twenty-four

inches of cupboard space to the left of the sink can be easily converted in the future, if included in today's plan. Dishwashers are increasingly popular and more homes will have them in the future.

3) A good cleaning center provides enough storage space for equipment and utensils used there. These items are conveniently located at the sink:

knives	sauce pans	garbage container (if there is no disposal)
scissors	teapot	
strainer	coffeepot	
vegetable brushes	double boiler	
plate scrapers		





4) A good cleaning center provides enough storage space for supplies and foods used at the sink.

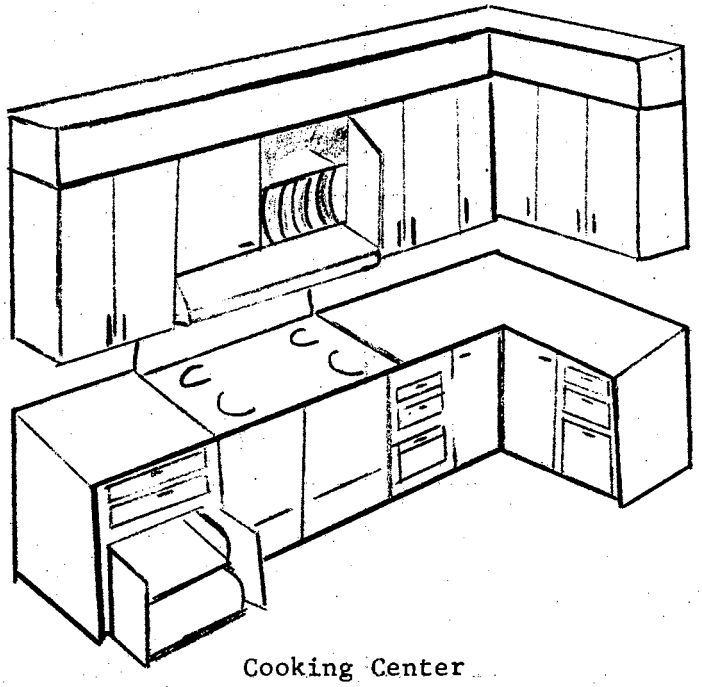
The supplies and foods used at the sink include fruits and vegetables not needing refrigeration, cleaning supplies, tea towels, a place to dry wet tea towels, etc. Dinnerware may be stored here if there is no special storage for it in the dining area. If dinnerware is stored at the sink, it should be on the side where dry dishes are placed.

5) A good cleaning center is located between the range and refrigerator. It is most convenient here at the center of the work triangle, because almost every preparation needs either water or clean-up. A favorite spot for the sink is under a window. If the view is unpleasant or if economy is an objective, it is less expensive to put the sink on an inside wall back to back with the bathroom plumbing.

THE COOKING AND SERVING CENTER

The cooking and serving center is for cooking, baking, and serving food. It is most convenient if located to the left of the sink and near the dining area. The wall oven is like the refrigerator--both break up counter work space and eliminate valuable storage when placed any place but at the end of the cabinet line.

1) A good cooking-serving center provides sufficient uninterrupted counter space for a work area. Fifteen to twenty-four inches on one side of conventional range or built in range top is enough counter space. This gives room to keep spoons used while stirring, dishes for serving, space to transfer foods from pans to plates or bowls, and a place to set hot foods removed from the oven. An isolated wall oven should have 15-18 inches of counter space to one side or the other. This gives a place to put foods as they come out of the oven. For an isolated wall oven, this 15-18 inches should be in addition to the range top counter space.



Cooking Center

2) The major equipment in the cooking-serving center is the range or the cook top and a wall oven. Portable electric equipment in this center may include:

electric skillet	toaster
corn popper	waffle baker
deep fat fryer	vent and hood

Toaster and waffle baker may be here or in the dining center. Although it is not cooking equipment, the vent and hood over the range should be included as equipment.

VENTILATION SYSTEMS

A ventilating system is effective in removing steam, heat, and odors from the range area. The wall, ceiling fan or the hood-fan are all effective. The fan should be of a size large enough to completely change the air every four minutes or 15 times an hour. Systems vented to the outside remove more heat, steam, and odors.

Hood-Fan Models

The hood-fan's ability to change air is based on the size of the hood and its placement. The hood should be as long as the cooking surface over which it is placed.

Hood Placement

A hood 17 inches or less in depth should be placed 56 inches from the floor.

A hood 18 inches more in depth should be placed 60 inches from the floor.

FORMULA FOR DETERMINING HOOD FAN CAPACITY

Before purchasing a hood, shop in order to select one that has a capacity large enough to do the job well.

Example: Ranges next to the wall.

Fan capacity--length of the hood in feet x 100 Cubic Feet per Minute

250 CFM --30 inch range or 2.5 feet x 100 C F M

(size of hood needed)

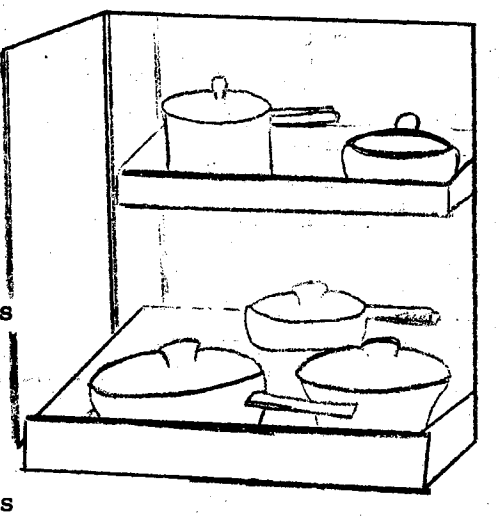
Example: Island range.

Fan capacity--length of hood in feet x 120 Cubic Feet per Minute

480 CFM --48 inch range or 4 feet x 120 C F M

3) A good cooking and serving center provides enough storage space for equipment used at or near the range area. This equipment will vary from home to home, but these basic items are needed in this center. All the portable electric cooking equipment plus the following non-electric equipment:

kettles	potato masher
pans and lids	stirring spoons
skillets and lids	pot holders
double boiler	measuring cups
forks	serving platters
ladles	serving bowls
turners	can opener
tongs	measuring spoons



The can opener is equipment that fits into several centers. If you have an electric one, decide where it is most convenient for you. If you use a manual opener consider several, one in each center where it is used.

4) A good cooking-serving center provides enough storage for supplies. Supplies used most at the range center are, canned vegetables and soups, ready-to-eat breads, cereals, cookies, and jellies, food placed in boiling water (rice, spaghetti, noodles, etc.), fats and oils not requiring refrigeration, salt and pepper, and some spices.

5) A good cooking-serving center is close to the sink and the eating center. At present the island range is popular. Before deciding if the island is for you, consider these facts.

The island can free counter space where the range would be. This space can be used for mixing or stacking dirty dishes thus providing counter space.

In a large kitchen, the island can cut the size of the work triangle.

The island can over-crowd a small kitchen.

When an island is used, more space is needed for walk ways between the island the other counter and storage space.

Foods are easier to serve if the cooking center and dining center are near each other.

SAFETY NEAR THE RANGE

Safety in the range area is important to the homemaker and her family. Common hazards to avoid:

1) Location of range below a window. Windows are difficult and dangerous to open and curtains can catch fire.

2) Not enough handle clearance for pans on the range. Pan handles need 10 inches clearance. Handles should not project into the area in front of the range where children can pull hot pans down on themselves, or where adults might bump them or knock them to the floor.

THE DINING CENTER

The eating or dining center is used for eating family meals, adult entertaining or children's entertaining. It may be a table and chairs or a snack bar arrangement. Children are very happy entertaining friends at the snack bar or their own little table and chairs in the kitchen area. Snacks can also be served from the snack bar. The major disadvantages of snack bars are overcrowding and facing the wall during meals.

Eating areas can double as family living areas, play for children while mother is in the kitchen, a study area, or extra work area for adults.

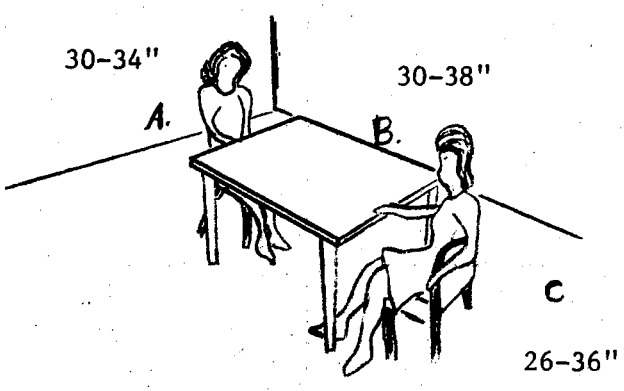
A cheerful place to eat helps make mealtime a pleasant time for all family members. Families are finding it increasingly difficult to get together at mealtime, but meals offer an excellent opportunity for a pleasant get together and a chance to share ideas and eventful happenings.

A view of the outside in the dining area is a great aid to happiness at mealtime. Let family eating habits guide your decision about the type of center for your family.

The equipment for the dining center includes the table or snack bar, chairs or stools, dish and glass storage, silver and linen storage, and some portable electrical equipment, such as toaster and waffle iron.

SIZE GUIDELINES FOR DINING AREAS

Each person needs a place 24 inches wide in front of him. Six people can be comfortably seated around a table 36 inches by 60 inches. Space is needed around the table for chairs, for serving food, and for being seated and rising. The amount depends on how much movement is done around the table and how much floor space you can afford to give it.



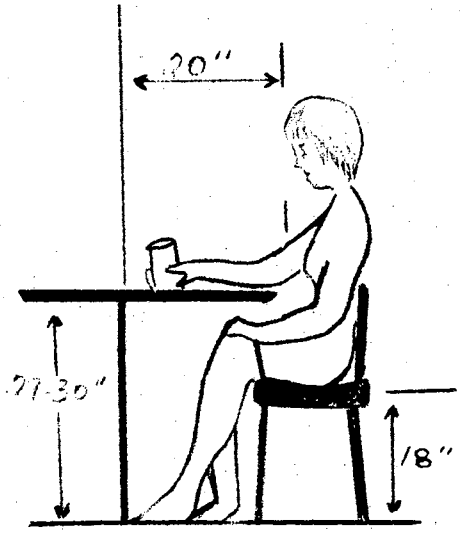
A. Space to walk, edge, or squeeze past a seated person.

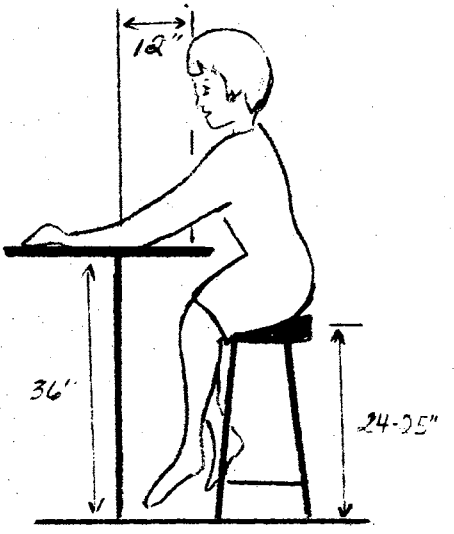
B. Space to use a storage area with a chair at the table.

C. Space to edge past a seated person or to rise from a chair.

SNACK BAR GUIDELINES

Snack bars should be planned so family does not face a wall. The examples below give height and width dimensions for a comfortable arrangement.





PLANNING CENTER

A planning center in the kitchen is a big help to the homemaker. It gives her a business office right where she does most of the important business for the family. She can make grocery lists, answer phone, keep financial records, plan menus and keep recipe books. In some new homes an intercom and radio installation is part of the planning center.

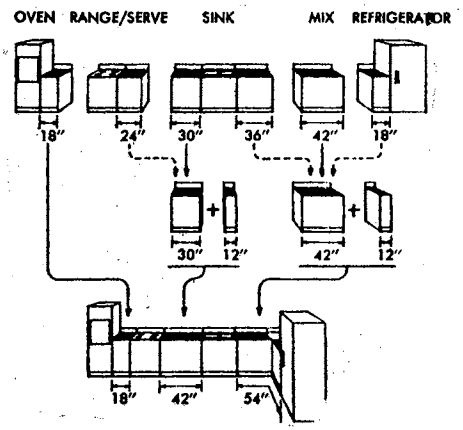
The location of this center can be any place in the kitchen or dining area, except in the work triangle.

Furnishings in the planning center depend on how active the center is. Possible items the homemaker will want to consider are, desk with counter space or a fold-down leaf, chair (perhaps a comfortable one with rollers), file cabinet, and several shelves.

ISOLATED CENTERS AND CONSOLIDATED CENTERS

If centers are together, they can actually share some of the same counter work area and storage space. Continuous cabinet storage above and below counter space recommendations provide the average kitchen with enough storage space. Good use of this storage space is discussed later.

The following chart gives the minimum amount of space needed for each center if it is an isolated center. (top row) The bottom shows combined centers.



Mixing--36-42 inches

Cleaning--36 inches on right side and 30 inches on the left side

Cooking-Serving--15-24 inches on on one side of range

Next to wall oven--15-18 inches

To consolidate centers, use only the largest amount given for a center and increase it 12 inches.

The exception to this formula is shopping for long periods of time or a large family. In these cases, additional storage cabinets are necessary. They can be put wherever needed, if the size of the work triangle and storage at point of first use are considered.

The contractor building new homes may offer a choice of kitchen arrangements, styles and quality of cabinets. It is important to a family to give careful consideration to selecting a kitchen that can fit their needs over a period of years. Careful shopping will prevent remodeling within a short time.

LET'S TALK ABOUT CABINETS

There are two kinds of cabinets--wall and base. Storage can be shelves or drawers or a combination of both. Functional storage should let items be clearly visable without rearranging and without extra reaching to find items. Adjustable shelves or carefully spaced stationary shelves can provide functional storage.

Storage needs are different in families because of family size and life cycle. Growing families need more storage space than either newlyweds or middle age families. You should have the privilege of making cabinets store supplies and equipment as you want.

Wall Cabinets

A wall cabinet should be placed 14 to 15 inches above the counter top. This gives enough head room to work under the cabinet. Higher wall cabinets mean loss of valuable space.

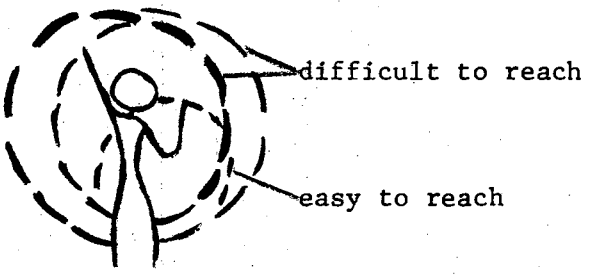
Base Cabinets

Base cabinets with drawers are most convenient. Base cabinets come with drawers, pull-out shelves, and stationary shelves. In each center drawers are the most accessible to the homemaker as she works. Next is the pull-out shelf and least desired the non-adjustable stationary shelf. The stationary shelf hides articles and the homemaker does extra reaching and stooping. A total of nine drawers is recommended in the base cabinets of a kitchen. These drawers can range from shallow for silverware and utensils, to deeper for tea towels, place mats, and to very deep (about 12 inches) for a lid and pan file and storing pans, skillets, and staples such as flour and sugar.

CABINET HEIGHTS

Are you taller or shorter than the average homemaker?

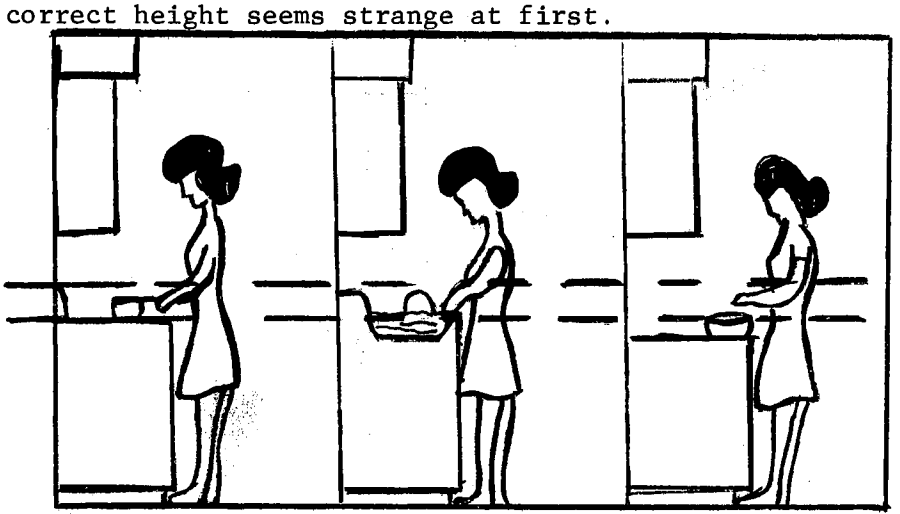
Work surfaces that are too high cause homemakers to lift their shoulders in order to work, while surfaces that are too low make a homemaker stoop. The circle below indicates how to determine a comfortable reach. The items you use most, should be stored within easy reach. If you are taller or shorter than average, your circle will be either larger or smaller.



The ideal work height for you will allow you to stand with arms and hands extended down to the work surface. The finger tips should brush the counter or the bottom of the sink. Your shoulders should feel relaxed. If the height is uncomfortable for you--think about it as you work. Also check the heel height of the shoes you are wearing. If the heel height is much different than that you generally wear, this may be the reason the height feels uncomfortable.

Check toe space at the front of base cabinets. Four inches deep and four inches high allows the toes enough space under the cabinets.

Improper height of work surface is a common problem in today's kitchen. Homemakers have become used to reaching and stooping, therefore correct height seems strange at first.



CABINET HEIGHTS TO FIT YOUR NEEDS

The following figures can help you think about your height in relationship to the height of the counter top and cabinet storage.

Standard height for built-in range tops is 32-34 inches, while 36 inches is standard height for free-standing ranges. For a separate built-in oven, the inside of the door should come three inches below the elbow when the door is open. If the position of the lowest rack is at 36 inches it makes using heavy roasters easier.

In the cleaning center, the bottom of the sink bowl should be high enough so the person washing dishes or preparing vegetables does not have to slump while working there.

Sitting to mix foods in the mixing center will require either a stool, a lower counter top, or a pull-out board.

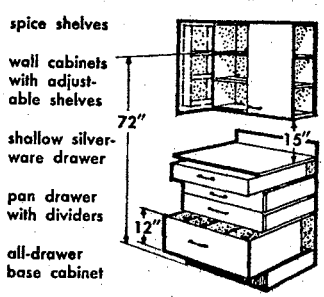
Standard height for purchased cabinets is 36 inches. If you have any control over the height of the cabinets--remember this is your

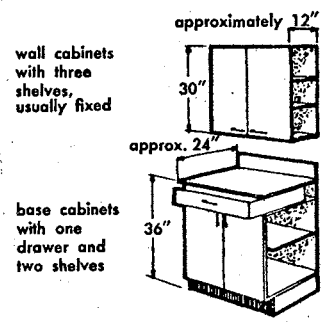
kitchen and it should be convenient for you.

Distance between wall cabinet and counter top should be 15 inches. This allows for working space under the cabinet while keeping the wall cabinet shelves within reach. Most homemakers find the highest shelf they can reach in a wall cabinet is 72 inches.

Ready-Made Cabinets

Ready-made cabinets, whether metal or wooden, are factory made. Homeowners select sections to fit their needs. Cabinets are slipped into place upon delivery. Common dimensions of ready-made cabinets are shown below.





Custom Cabinets

Custom cabinets are built to the customer's specifications. This method of selection offers many possible variations.

Custom cabinets may be wood or metal or a combination of both. Several reputable manufacturers make cabinets in this way. The custom cabinets are more expensive than ready-mades. Shop around and compare features, quality and cost before making a decision on any cabinets.

Carpenter Built Cabinets

A carpenter can make cabinets to fit specifications of the homemaker. Definite plans on paper are helpful in a discussion with the carpenter. The carpenter can give suggestions about materials and cost. Cost of carpenter-built cabinets depend on labor prices in the area. A rule of thumb to use as a guide is 1/3 labor, 1/3 cabinets, and 1/3 appliance replacement for any remodeling job.

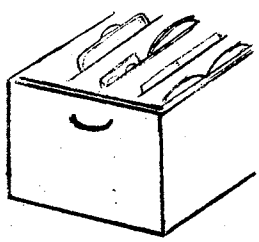
FORMULA FOR FIGURING AMOUNT OF STORAGE NEEDED IN KITCHEN

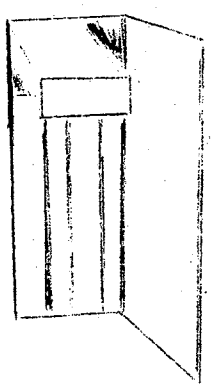
Storage Space Should Fit the Item Stored

Use figures given for counter space needs in each center and locate storage above and below it, except over sink and range. Storage space can be composed of both drawers and shelves. Wall cabinets can be movable shelves, swing out sections or stationary. Base cabinets can be drawers, pull-out shelves, or stationary shelves. Drawers in the mixing center can hold large packages of food, portable equipment, utensils, banking pans, and cookie sheets. In the cooking center they can hold pans, utensils, and packaged foods.

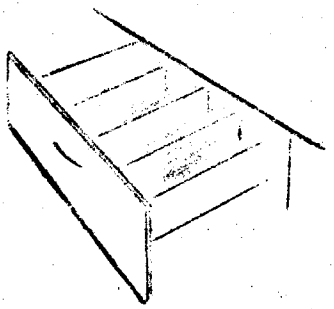
A drawer or shelf can be made into a lid file for both mixing and cooking centers. This is the ideal way to store cake pans, pie pans, cookie sheets, trays, and platters.

A drawer 24 inches wide and 12 inches deep makes a good file. If you are purchasing ready-made cabinets, ask for a lid and tin file. If you are building or making minor changes, an amateur carpenter can build this simple installation.





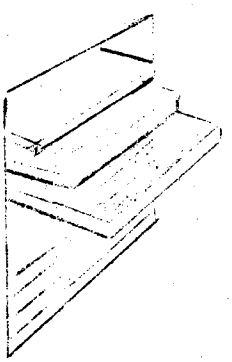
A shelf can be partitioned off with dowel rods or a solid piece of lumber.

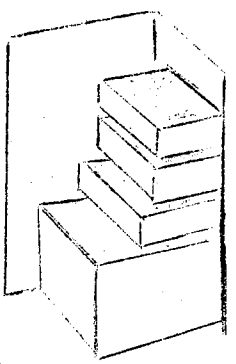


A shallow drawer with dividers is handy to store spatulas, mixing spoons, beater, etc.

EXAMPLES OF DINING STORAGE

Linens stored in shallow drawers, or pull-out shelves stay neat and flat and are convenient to reach.



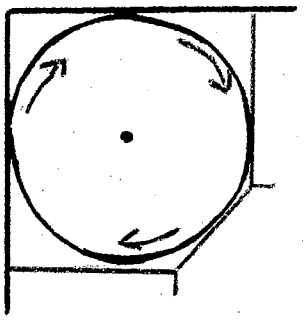


Shelves and drawers make good storage for dishes, glassware, and silverware. Adjustable shelves and different sizes of drawers make for better storage.

CORNERS CAN BE USEFUL STORAGE

Many kitchen cabinets cover a corner. This corner can be planned to give valuable counter space and usable storage. With the sink in the center of the work triangle space for people and for drawer handle clearance is necessary. Between 9 and 15 inches is needed between the corner and the edge of the sink.

A lazy susan that completely fills the wall cabinet makes good use of corner space that may go unused otherwise.



LIGHTING AND ELECTRICAL OUTLETS

Good lighting makes any job easier. Natural light, even in quantity, is not enough. Natural light and a view of the out doors can do a lot to make the family happy, but if the homemaker stands in her shadow it is difficult to read recipes and measure. The eyes see reflected light. Dark colors absorb light, while light colors and shinny surfaces reflect it. Therefore, a darker colored kitchen will require more artificial light than a lighter one. All white or shinny finishes in a kitchen will cause glare that is uncomfortable to the eyes.

General room illumination is essential. Some type ceiling fixture or near the ceiling source of light is necessary. One ceiling fixture for each 50 square foot of floor area is suggested.

One incandescent light bulb of 150-175 watts will light a 50 square foot area. A 60-80 watt florescent equals this amount of light. If florescents are chosen, the soft white light gives the most pleasing effect. In dining areas at least 150 watts incandescent light is desirable.

Under the cabinet lighting and over the sink and range lighting reduce shadow in activity centers. Installing one 20 watt florescent just under the wall cabinet will illuminate 30 inches of counter space.

Electrical outlets in the different centers are necessary for plugging in small appliances where they are used. Decide how many outlets are made and where to locate them. Electric skillets and deep fat fryers require more power to operate than do can openers, mixers and coffee pots. Distribution of power load over several circuits will reduce the annoyance of burned out fuses. If appliances are forced to operate without enough power, they do not perform as they should.

Planned places for use of electrical appliances allow for estimating the amount of power needed to use appliances in any center in the kitchen. Only planning can eliminate problems.

NOISE CONTROL

Unnecessary noise in the kitchen is annoying. It also blots out vital sounds of family living, such as children's cries, conversations, and doorbell. The dishwasher, ventilator, and any other vibrating equipment are the offenders. These three steps can help solve the noise problem.

1) Do not place hard surface of equipment directly in contact with hard surface of cabinet or wall. Use a buffer between surfaces. Good buffers are rubber strips or felt strips placed between contact areas.

2) An empty space around the equipment acts as an echo chamber. This empty space can be filled with fiberglass to absorb energy from sound waves.

3) A tight fitting enclosure around the fiberglass is a barrier to sound waves. Example: The dishwasher is surrounded on three sides by cabinet and wall. When the door is closed this completes covering the fourth side. Noise of the dishwasher is retained within this chamber.

FLOORS AND COUNTER TOPS

Selection of counter and floor coverings deserves careful attention. These two surfaces receive the most wear in the kitchen. They should be sturdy, easy to keep clean and within your budget. The following charts give helpful shopping facts.

Resilient Floor Characterictics (2)

Flooring	Approx. Cost for Sq. Ft. Installed	Where To Use	Comfort Underfoot	Grease Resistance	Alkali Resistance	Durability	Ease of Maintenance	Indentation Resistance	Quietness Underfoot
Asphalt Tile	20-45¢	Anywhere	Least Comfortable	Poor to Foir	Excellent	Excellent	Good	Good	Least Quiet
Linoleum Tile	20-45¢	Suspended	Good	Excellent	Poor	Poor	Excellent	Good	Good
Vinyl-Asbestos Tile	35-60¢	Anywhere	Fair	Excellent	Excellent	Superior	Superior	Good	Fair
Cork Tile	45-90¢	Suspended (In some cases on grade)	Most Comfortable	Fair	Fair	Good	Fair	Good	Excellent
Vinyl Cork Tile	95-1.30	Suspended (In some cases on grade)	Very Good	Excellent	Good	Good	Superior	Very Good	Very Good
Rubber	60-90¢	Anywhere	Excellent	Good	Good	Good	Good	Excellent	Excellent
Solid Vinyl Tile	70-1.30	Anywhere	Excellent	Superior	Superior	Superior	Superior	Excellent	Fair
Sheet Flooring									
Linoleum	35-60¢	Suspended	Good	Excellent	Poor	Good	Excellent	Good	Good
Vinyl-Plastic	45-60¢	Suspended (Some types may be used anywhere)	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Good
Cushioned Vinyl (inlaid)	1.35-1.60	Anywhere	Superior	Superior	Superior	Superior	Excellent	Superior	Superior
Cushioned Vinyl (Rotovinyl)	45-50¢	Suspended	Excellent	Excellent	Excellent	Good	Excellent	Very Good	Very Good to Excellent
Outdoor Resilient Flooring	1.00-1.10	Outdoor Concrete on grade indoors Below Grade On Grade Suspended	Fair	Superior	Excellent	Excellent	Superior	Excellent	Poor

CHARACTERISTICS AND CARE OF WORK SURFACE MATERIALS (2)

LAMINATED PLASTIC HIGH PRESSURE — SHEET (Melamine)

Advantages	Disadvantages	Care
Very durable Non-porous, glass like surface. Remarkable resistance to stains, alkalis, acids. Easily cleaned and cared for. Available in wide choice of colors; designs on bright or dull finish. Edges of counter may be bound with same material eliminating metal trim if desired. Non-conductor of electricity. Manufactured in three finishes: high gloss, (melamine top layer) matte and imitation wood finish.	Initial cost high. Most satisfactory when fabricated at factory (bonded to wood core). Installation except by skilled worker questionable. May warp unless well insulated. Will scratch, show knife marks, and abrasion from rough bottom utensils. It has good resistance to shock and impact, but it will dent or crack if the impact is sufficient.	Good installation is important. Easily cared for — wash with detergent and water, rinse and wipe dry. Rough abrasion damages surface finish — do not use gritty scouring powder. No wax or polishes necessary. Although it has heat resistance — use a protector under very hot utensils and appliances. Do not use for cutting or chopping as surface will retain scratches.

LAMINATED PLASTIC LOW PRESSURE — ROLL VARIETY (Polyester)

Advantages	Disadvantages	Care
Smooth, non-porous, glasslike surface finish. Very satisfactory resistance to staining. Available in good variety of colors and patterns. Non-conductor of electricity. Easily installed by the family handiman. Reasonable in price.	Thin veneer subject to blistering and cracks with heat and damage from impact. Shows cuts and scratches.	Same as Laminated Plastic High Pressure.

SEAMLESS LIQUID PLASTIC

Advantages	Disadvantages	Care
Large range of vivid color flakes gives an unlimited scope of imaginative creativeness. Can be applied over sound masonry and over plywood.	Has not been tested sufficiently to point up disadvantages.	Simply clean with plain water.

STAINLESS STEEL

Advantages	Disadvantages	Care
"Life-time" durability Hard surface, nonabsorbent, not affected by heat. Will not crack, chip, or break. Resistant to some ordinary stains. Seamless construction of molded type eliminates seams and trim. Corregated designed steel and other flat sheets may be installed by the family handiman and are more reasonable in price than the molded variety. Corregated variety does not show abrasion and stains as readily as smooth steel.	Very high initial cost beyond the reach of the average pocketbook. Not resilient, quiet, or colorful, Reflects light. Shows scratches and abrasion. Will dent with hard impact. Although considered stainless, will show some stain and discoloration from acids, alkolines and waters. Will conduct electricity.	Wash and rinse, dry well to avoid water marks. For special cleaning use very fine steel wool, a fine scouring pad, and/or special commercial cleansers for such metals. Do not use for cutting.

TILE, CERAMIC

Advantages	Disadvantages	Care
Durable, smooth, hard surface. Easily cleaned when well installed with minimum amount of joining material exposed. Resistant to practically all stains unless abrasion has affected surface glazes. Resistant to mild abrasion. Attractive selection of many colors, sizes, and shapes. Unaffected by heat.	Hard, rigid, and noisy. Glaze produces some light reflectance. May crack or break with impact. Unglazed variety susceptible to some stains. Initial cost high — installation not a job for the amateur.	Care for much as you would china. Wash with detergent, rinse and wipe dry. May be waxed if desired. Never use gritty powders or steel wool which may scratch or wear glaze or surface finish. Color of tile may be affected by certain detergents, drain cleaner, medical supplies, dyes, and disinfectants — some may be removed with a dilute chlorine bleach. Cement between tiles may occasionally need special cleaning and bleach.

VINYL (Plastic)

Advantages	Disadvantages	Care
Deadens sound in kitchen — resilient Flexibility allows for continuous cove installation. Is not deteriorated by alkolines or moisture as a linoleum. Good resistance to stains. Available in wide variety of colors — attractive and decorative. Color is little affected by direct sunlight. Adaptable for home. Easily cared for.	Affected by heat. Hot utensil or appliance may stick, blister, roughen or discolor the vinyl. Cuts, scratches, and indentations tend to be more permanent than in linoleum. Resistant to most stains, however, it is affected by dyes, some medical alkaline supplies, bluing. Subject to abrasion.	Waxing is optional but not necessary to preserve finish. Waxed surface more resistant to soil and scratching. Little special cleaning care beyond washing and wiping. Do use a protective pad under hot utensils and appliances. Do not push rough bottom utensils across surface. Avoid abrasion. Avoid the use of scouring pads that are gritty.

WHAT ARE YOUR WORK TRIANGLE AND TRAFFIC PATTERNS

Before you can establish your work triangle, you need a floor plan to work on. Floor plans are really quite simple to draw and fun to work with. Follow these step by step directions and you are on your way.

1) Use the graph paper on the following page to sketch your plan. The liquid pencil provided should be used.

2) On the graph paper, each square is equal to one foot in your room. To get 6 inches, use half a square. For 3 inches use ¼ square.

3) Measure the length and width of your room from wall to wall. Be sure to go all the way to where the back of cabinets join the walls, or to where the back of appliances touch the walls.

4) Count the squares to correspond with the measurements you have. Sketch in the outline of the room.

5) Locate the doors and windows. It is easy to do if you measure from the corner of the room to the start of the door or window and count the squares to locate them on the plan.

6) Locate cabinets and appliances as they exist now.

7) Locate table and chairs or any other furniture in the room.

Draw in your work triangle and measure its distance. How does it compare to standards? Save this floor plan, you will be using it later.

LET'S LOOK AT YOUR KITCHEN

Now that you have completed reading about kitchen planning, let's look at your kitchen and think about applying what you have learned.

The rating sheet is to help you find areas in the kitchen that may be improved. It can also be used to rate the kitchens while shopping for a new home.

Before actually starting to work, you will need a floor plan to work from. The fold-out pages can be used to draw an elevation (vertical view) of your cabinets. This will be helpful in determining the amount of storage you plan.

HOW DOES YOUR KITCHEN RATE?

Check the type kitchen you have.

__ U
__ L
__ Two wall or corridor
__ One wall
__ Island
__ Isolated centers (random placement)

Rate your kitchen on each of the following items. Circle Good, Fair, or Poor in answer to all statements.

G F P 1) The kitchen is divided into activity centers.

G F P 2) Centers are arranged in sequence so you can work to cooking center, to cleaning center without interruptions in your work triangle.

G F P 3) Arrangement of doors does not break work triangle.

G F P 4) If the kitchen is used for activities other than food preparation, these activities take place without congestion.

G F P 5) If more than one person uses the kitchen, there is enough space in activity center for their comfort.

G F P 6) The kitchen is located near door for convenience in unloading groceries.

G F P 7) All centers have at least the minimum amount of continuous counter space.
G F P Mixing center, 36-42 inches
G F P Cleaning center, 36 inches on right and 30 inches on left
G F P Cooking center, 15-18 inches on one side
Wall oven, 15-18 inches on one side
G F P Dining, 24 inches for each person
G F P Easy movement around table and chairs

G F P 8) No center exceeds the maximum amount of counter space.

G F P 9) There is continuous storage both above and below counter space in each center, except wall space above range and sink.

G F P 10) The distance between sink and refrigerator is between 4 and 7 feet.

G F P 11) The distance between sink and range is between 4 and 6 feet.

G F P 12) The distance between range and refrigerator is between 4 and 9 feet.

G F P 13) The total distance of the work triangle is more than 12 feet and not more than 20 feet.

G F P 14) A refrigerator or wall oven does not break up counter or storage space.

G F P 15) If cabinets turn a corner, storage space uses the whole corner.

G F P 16) There are a minimum of 9 drawers for storage.

G F P 17) There is storage for all electrical equipment in the center in which it is used.

G F P 18) All equipment, utensils, and food used in a center can be stored in that center.

G F P 19) The bottom of the top shelf in wall cabinets is not over 72 inches from the floor if you are of average height. (If you are taller or shorter than average, is this shelf a good height for you?)

G F P 20) The distance between counter top and wall cabinets is 15 inches.

G F P 21) Counter heights are comfortable for work.

G F P 22) Shelves and drawers are deep enough to store items within easy reach.

G F P 23) Enough space is available for dinnerware storage.

G F P 24) General ceiling illumination is adequate.

G F P 25) There is under wall-cabinets lighting in activity centers.

G F P 26) Plug-ins are spaced within easy reach in all centers.

G F P 27) There are no windows or cabinets above the range.

G F P 28) Handles of pans used on the range have enough clearance that they are not easily knocked off the range.

G F P 29) Odors, moisture and steam are easily removed from the room by ventilator fan or cross ventilation.

G F P 30) Planned changes are flexible enough to accommodate new major appliances and changes in family size that will occur in the future.

Score your kitchen's rating in this way:

2 points for each G

1 point for each F

0 point for each P

In very few kitchens can all G's be checked. All the F's and P's you have checked indicate areas of your kitchens that can use improvement.

The P's you circled can be a good starting place for your improvement.

Maximum score is 70. If your score was 60 or below there are many improvements you can make. Use the information presented in the booklet as a guide to a good kitchen.

APPENDIX B

SELECTED LISTING

INDEPENDENT STUDY PROGRAMS

1970

Available Through

Cooperative Extension Service
Kansas State University
Manahttan, Kansas

Family Health
- How the Family Can Help Alcohol Education
- The Oopsies -- Weight Control

Consumer Competence
- Selecting and Buying Food for the Young Family
- Identifying the Cuts -- Beef and Veal
- Design With Stripes
- Credit or Cash
- How to Select Fabric for Garments
- Guideposts in Buying Major Appliances
- Optical Illusions in Dress
- Making Fashion Work for You
- Dishes With Distinction

Family Stability
- Retire -- To What?
- Let's Polish Our Manners

Community Resource Development
- Nelson Art Gallery
- Kansas -- My Heritage
- Period Furniture -- Colonial America
- Music of America -- 1900 to Now

Family Housing
- Historic Kansas Architecture
- Home Sewing Centers
- Analysis of a House Plan
- Your Reupholstery Project

APPENDIX C

Case Study Outline

Description of Family

1. Number of people and ages
2. Occupation and type of life
3. Educational level

Description of kitchen, including problems

4. Number who work in the kitchen at the same time.
5. What do you consider problems in the kitchen? (asked before the lesson)
6. Part or parts that need improvement

Participants reaction to instrument

7. Presentation of subject -- clear, easy to follow, attractive to view, and enough information to answer your questions
8. Did you use "How Does Your Kitchen Rate? and the "Floor Plan?"
9. Comments on the floor plan and directions for drawing it
10. Did "How Does Your Kitchen Rate" help you decide where your kitchen can use improvements?
11. If you did not use the whole lesson, what parts did you use and why?
12. How long did it take to use the instrument?
13. Did you prefer this to class attendance?

What happened to the participant for having made the study

14. Past exposure to kitchen planning
15. After the lesson what do you consider the problems in your kitchen?
16. Do you understand kitchen planning better now?
17. Any other comments

VITA

Carol Ann Katzer

Candidate for the Degree of

Master of Science

Thesis: DEVELOPMENT OF A SELF-STUDY LESSON ON KITCHEN PLANNING

Major Field: Housing and Interior Design

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Professional Organizations: American Home Economics Association, Kansas Extension Home Economics Association, National Extension Home Economics Association.