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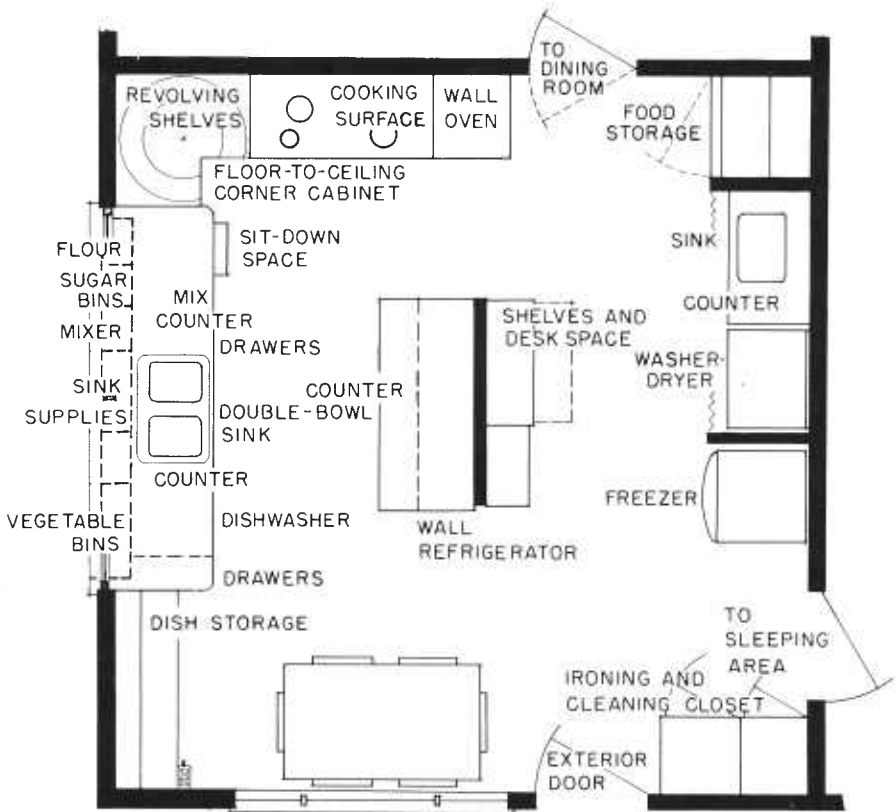
#60



# *the Beltsville Kitchen-Workroom*

**WITH ENERGY-  
SAVING FEATURES.**

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# *the Beltsville Kitchen-Workroom*

## WITH ENERGY-<sup>3</sup>SAVING FEATURES

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[ By Mildred S. Howard, Lenore Sater Thye, and Genevieve K. Tayloe //

This kitchen-workroom was designed primarily for older or physically handicapped farm women who must conserve their energy. Its many energy-saving features, however, will work equally well for any homemaker.

In planning this kitchen-workroom, the designers have applied findings of studies of the energy expended by women in performing household tasks.

They have also taken into account studies of the space required for various household activities.

Storage designs, workspace, and arrangement of equipment are planned so that work can be done with a minimum of walking and other motions.

The overall size of the kitchen-workroom is 17½ feet by 18 feet.

## TWO MAIN AREAS

The plan (at left) has two main areas—a kitchen area with dining space for family meals and a workroom area.

Kitchen and workroom are separated by a storage island. On the kitchen side, the island is made up of a wall refrigerator, counter, and base cabinets. On the workroom side of the island are a planning desk and shelves.

The broken-U arrangement used for the kitchen equipment is both efficient and convenient. The break in the U between range and refrig-

erator allows step-saving access to workroom and dining room. The dining center has eating space for six persons.

The workroom includes, in addition to the desk and shelves in the island, laundry facilities, food-storage pantry, freezer, cleaning closet, and ironing closet. Workroom floor space is adequate for the varied activities carried on in this area. Small children can play safely in the end of the workroom near the dining center, within sight and hearing of the mother as she works in either area.

## ENERGY-<sup>3</sup>SAVING FEATURES

### To save steps

- Pieces of equipment used for related jobs are placed as close together as feasible.

- Space is provided at each work center for storage of supplies, utensils, and tools used at that center.

- Serving cart is planned as part of kitchen equipment. Food can be

transferred on the cart from range to table in one trip. The cart can also be used to transfer dishes from table to sink, to move packaged food from kitchen to freezer, and to hold ironed flatwork.

### **To make reaching easier and reduce lifting of heavy objects**

- Supplies and utensils most frequently used are stored between 28 and 64 inches from the floor, where a woman of average height can reach them without stooping or stretching. Refrigerator shelves are also within these heights.

- The electric wall oven is placed so that the bottom of the interior is 32 inches from the floor; the most-used rack positions are between 35 and 40 inches. If a gas oven had been used in this kitchen it would have been placed 34 inches from the floor. With the oven at this height the broiler rack is about 28 inches from the floor and the lowest oven rack position about 37 inches.

- Placed at counter level are: Bins for flour, sugar, potatoes, and onions and compartments for sink supplies and mixer. The mixer moves readily

on a platform with ball-bearing rollers.

- Trash box under sink has ball-bearing casters so that it can be rolled out for emptying.

- Perforated hardboard at each work counter provides place to hang often used tools and utensils.

### **Other energy savers**

- Provision for sitting at work. At both mix counter and sink, under-counter knee space is provided so that the homemaker can sit comfortably. An adjustable posture chair is planned as part of the kitchen equipment.

- A minimum of pulling and pushing of doors and drawers. Dish cabinet has accordion-type door, which can be left open without being in the way. Door of the circular supply cupboard is attached to shelves and revolves with them. Drawers and sliding shelves can be pulled easily even when heavily loaded because they are on nylon rollers.

- Counters, dining table, and serving cart are covered with easy-to-clean laminated plastic.

- Electric outlets are provided at each work center and at the dish cabinet.

## **LIGHT AND AIR**

Two large windows—a broad window over the sink and the counters on either side and a picture window in the dining center—provide adequate daylight and ventilation.

All work areas are well lighted by fluorescent ceiling fixtures, which are placed so that there are no shadows on the counters. The dining table is lighted with an incandescent ceiling fixture that can be adjusted in height

to provide good light at mealtimes or for studying or sewing. The light fixture at the planning desk can be adjusted as necessary.

A ventilating fan is located in the ceiling over the range; however, a ventilating hood could well be installed here instead. There is space for a room air conditioner above the dish-storage cabinet in the dining center.



## MIX CENTER

The counter to the right of the sink is planned for mixing jobs. There is knee space under the right part of the counter so the homemaker can sit to work. The adjustable posture chair used here and at the sink is stored under this counter.

Whether the homemaker sits or stands to work she can reach all supplies, tools, and utensils needed for mixing jobs without stooping or stretching.

Bins for flour and sugar are at the back of the counter. Holders for wax paper and aluminum foil are built in above the bins.

To the left of the bins is a storage compartment for the mixer. The door to this compartment folds back out of the way when it is open. An electric outlet is located on the left wall of the compartment.

Small tools used at this counter are stored either on the perforated hardboard to the right or in drawers in the base cabinet.

All other supplies and baking pans used at this center are in the revolving corner cabinet. Shelves in this cabinet are sized and spaced so that everything stored here can be seen easily. Only large kettles that are not used often are stored on the bottom shelf.

A pullout board may be placed in one of three positions under the mix counter to provide a lower surface for some mixing jobs. With the board placed in its lowest position the homemaker can sit here to work in a comfortable straight chair. The board in the lowest position also makes a convenient working surface for children and a handy table for serving them snacks.



## SINK CENTER

The sink center consists of a double-bowl sink, counter at the left with dishwasher below, storage compartments at counter level, and trash bin beneath the right sink bowl.

This center is located so that it is convenient and energy saving for the two main activities carried on here—food preparation and dishwashing. The left counter, which is used also for serving, is convenient to the dining center; the drawers below are a part of the storage for that center.

The homemaker can sit to work at the left sink bowl. This bowl is only  $3\frac{1}{2}$  inches deep and has the drain set back of center, an arrangement that

leaves sufficient knee space underneath. The adjustable posture chair can easily be rolled to the sink from its storage space under the mix counter.

### Food Preparation

By doing at one time all food-preparation jobs that are best done at the sink, the homemaker can sit for long enough periods to justify positioning the adjustable posture chair. Onions and potatoes are stored in ventilated bins at the back of the left counter. Saucepans used for cooking vegetables are hung on perforated hardboard at the left of the counter.



Everything else needed for food-preparation jobs done at the sink are at the homemaker's fingertips as she sits at the left sink bowl. Vegetable trimmings can go immediately into the disposer in the left sink bowl. Cartons, wrappings, and other trash can be thrown into the chute under the right sink bowl. Can opener and paper towels are in a compartment at counter level back of the sink. Knives are in a rack at the right of this compartment.

The trash container, which is a deep drawer at the bottom of the base cabinet under the right sink bowl, is mounted on ball-bearing casters so that it can be rolled out for emptying. It has a removable metal liner. If the house has a basement the trash chute can connect with a container there.

### Dishwashing

The dishwasher is directly to the left of the sink, convenient to the dish-storage cabinet and the table.

Soiled dishes from the table can be stacked on the serving cart and wheeled to the sink in one trip. Utensils to be washed can be placed on the counters near the sink.

Then, with everything within easy reach, the homemaker can sit comfortably at the left sink bowl to scrape and rinse dishes, to load the dishwasher, and to wash any utensils, large platters, and electrical appliances that cannot be put into the dishwasher. Soap and other dishwashing supplies are in the sliding-door cabinet at the back of the sink.

The clean dishes can be taken from the dishwasher and put into the dish-storage cabinet with a minimum of motion.





## REFRIGERATOR CENTER

The three-door wall refrigerator-freezer is in a central location convenient to the other kitchen centers. It is placed so that the top shelf is about 62 inches from the floor. A woman of average height can use it or clean it easily.

Between the refrigerator and the base cabinet that extends the width of the refrigerator is a sliding-door cabinet 10 inches high and 12 inches deep. This cabinet stores extra serving dishes, electrical appliances, and cartons of soft drinks.

The base cabinet, 32 inches high, has storage space at the left for the drop-leaf serving cart, a center sec-

tion of drawers for refrigerator dishes and kitchen linens, and a section at the right for pullout towel rods.

The counter serves as a holding space for items that are being taken out of or put into the refrigerator.

An alternate arrangement with a conventional refrigerator has also been planned for this center. In this arrangement the refrigerator is placed at the right and a five-drawer base cabinet for kitchen linens at the left. Over the base cabinet a wall cabinet or open shelves are provided for storage of refrigerator dishes. The serving cart is stored under the surface cooking top.



## RANGE CENTER

The range center, to the right of the corner storage cabinet, is only a few steps from the mix counter.

The surface cooking top is 54 inches wide and 35 inches from the floor. Its four units are placed so that it is not necessary to reach over the front ones when using those at the back. This safety feature is particularly desirable for physically handicapped homemakers. There is ample room around each unit to allow for the use of large kettles.

Directly to the right of the surface cooking top is the wall oven. It is built in so that the most-used rack positions are at heights that a woman of average height can reach with a minimum expenditure of energy.

The lowest rack position is 35 inches from the floor, in line with the surface cooking top.

Utensils used daily are hung on the perforated hardboard at each end of the cooking top. Other utensils, pot-holders, and tools are stored in the drawers and on pullout shelves under the cooking top. Broiler pans and other oven accessories are stored in drawers under the oven. There is space in these drawers also for paper sacks and tall beverage bottles.

Serving dishes are stored in the part of the cabinet above the oven that opens from the front. The back part of this cabinet, which opens at the side, provides space for extra-large platters and trays.





## DINING CENTER

A picture window (not shown) in the dining center helps to make this a pleasant place for meals.

The combination dish-storage cabinet and serve center has an accordion-fold door that can be opened with a single motion. It can be left

open and out of the way during table setting, meal service, and cleanup.

China and glassware are stored on the adjustable shelves in the top part of the cabinet. Lightweight, easy-to-grasp packages of ready-to-eat cereal are stored on the top shelf.



The base part of the cabinet has a serving counter, drawers for silver, pullout shelves for table linen, and a pullout shelf for small table appliances. Convenience outlets for appliances are inside the cabinet.

The left sink counter, immediately to the right of the dish-storage cabinet, is used for making salads and

arranging desserts. The two metal-lined drawers beneath this counter store bread, cake, and cookies.

By using the serve center and the serving cart the homemaker can eliminate many of the steps and motions that are ordinarily needed for serving a meal. The serving cart, with its leaves up, can be loaded with hot food, salads, and desserts at the range and refrigerator—then brought to the table.

During the meal, soiled dishes can be stacked on the cart. Dessert can be served from the cart or from the serving counter. The coffeemaker, toaster, and other small appliances can be pulled out and used on the shelf on which they are stored.

A swivel chair for the hostess is a convenience, makes it easier for her to turn to the serve center and back to the table.

## LAUNDRY CENTER

The laundry center is conveniently near the kitchen work centers so that the homemaker busy with the laundry can easily keep track of kitchen activities.

A washer-dryer, sink and counter, and shelves make up this compact center. The washer-dryer is mounted on a platform that brings the opening to a height the homemaker can reach without stooping. Clothes to be drip-dried indoors can be hung from a rod on the ceiling above the sink.

The sink is also a handy place for arranging flowers or for children and men to wash their hands when they come in from out of doors.

Shelves hold laundry supplies and vases. Basswood folding doors screen the area when it is not in use.

## PLANNING CENTER

A drop-down desk, shelves, and comfortable chair make up the planning center. The adjustable shelves can be arranged to accommodate tele-

phone, radio, cookbooks, books for household records, and other similar items. Some of the lower shelves can be used for children's toys and books.





## WORKROOM STORAGE

### Food Pantry

The food pantry to the left of the laundry center provides storage for canned goods, freezing and canning supplies and equipment, and extra household supplies.

Nine rows of canned food may be stored on shelves on the closet door. Each shelf is 5 inches deep and is tilted up slightly at the front. A heavy castor helps support the weight of the loaded door.

### Freezer

The freezer is to the right of the laundry center. Foods prepared for freezing in the kitchen can be quickly and easily moved to the freezer on the serving cart.

### Cleaning and Ironing Closets

There are two closets side by side in the corner of the workroom near the outside door—one for cleaning supplies and equipment, the other for



ironing board and ironing supplies. Small items may be hung within easy reach on the closet interiors of perforated hardboard.

There is enough floor space at this end of the workroom to set up the ironing board. The board shown can

be adjusted so that the homemaker can sit down to iron. A wall bracket can be mounted nearby so that she can hang ironed clothing on it without getting up from her chair. Flatwork can be placed on the desk, on shelves of the planning center, or on the cart.

## **Working Drawings**

Detailed working drawings of this kitchen-workroom, which your local carpenter or cabinetmaker can follow easily, are available from the extension agricultural engineer at most State agricultural colleges. In some States, county extension agents will place your order. In many of the States there is a nominal charge for the drawings.

If working drawings are not available in your State, write to the Clothing and Housing Research Division, Institute of Home Economics, U. S. Department of Agriculture, Beltsville, Md. This office does not distribute drawings, but will direct you to a State that does distribute them.



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